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ABSTRACT

A new elementary retention policy was implemented in the Austin Independent School District (AISD) in 1981-82. The AISD Board of Trustees requested a three-year study of the impact and effectiveness of the policy. This report describes results from the second year of the study, including the effect of the change in policy on staff development, retention rates, student achievement, and staff and parent attitudes. A summary provides a description of the policy, evaluation focus, results, and implications, focusing on the most important findings of interest to a general audience. Extensive appendices provide technical information on specific questions addressed, methods utilized, and results. These are designed to provide more detailed information and documentation for research and evaluation staff as well as those school district administrators and Board of Trustees members particularly interested in the retention study. (Author)

FINAL TECHNICAL REPORT:
Retention and Promotion 1982-83

July 1983

Abstract

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A new elementary retention policy was implemented in the Austin Independent School District (AISD) in 1981-82. The AISD Board of Trustees requested a three-year study of the impact and effectiveness of the policy. This report describes results from the second year of the study, including the effect of the change in policy on staff development, retention rates, student achievement, and staff and parent attitudes were investigated.

A summary provides a description of the policy, evaluation focus, results, and implications. The summary is designed to focus on the most important findings of interest to a general audience and is available as a separate report. Appendices provide technical information on specific questions addressed, methods utilized, and results. These are designed to provide more detailed information and documentation for research and evaluation staff as well as those school district administrators and Board of Trustees members particularly interested in the retention study.

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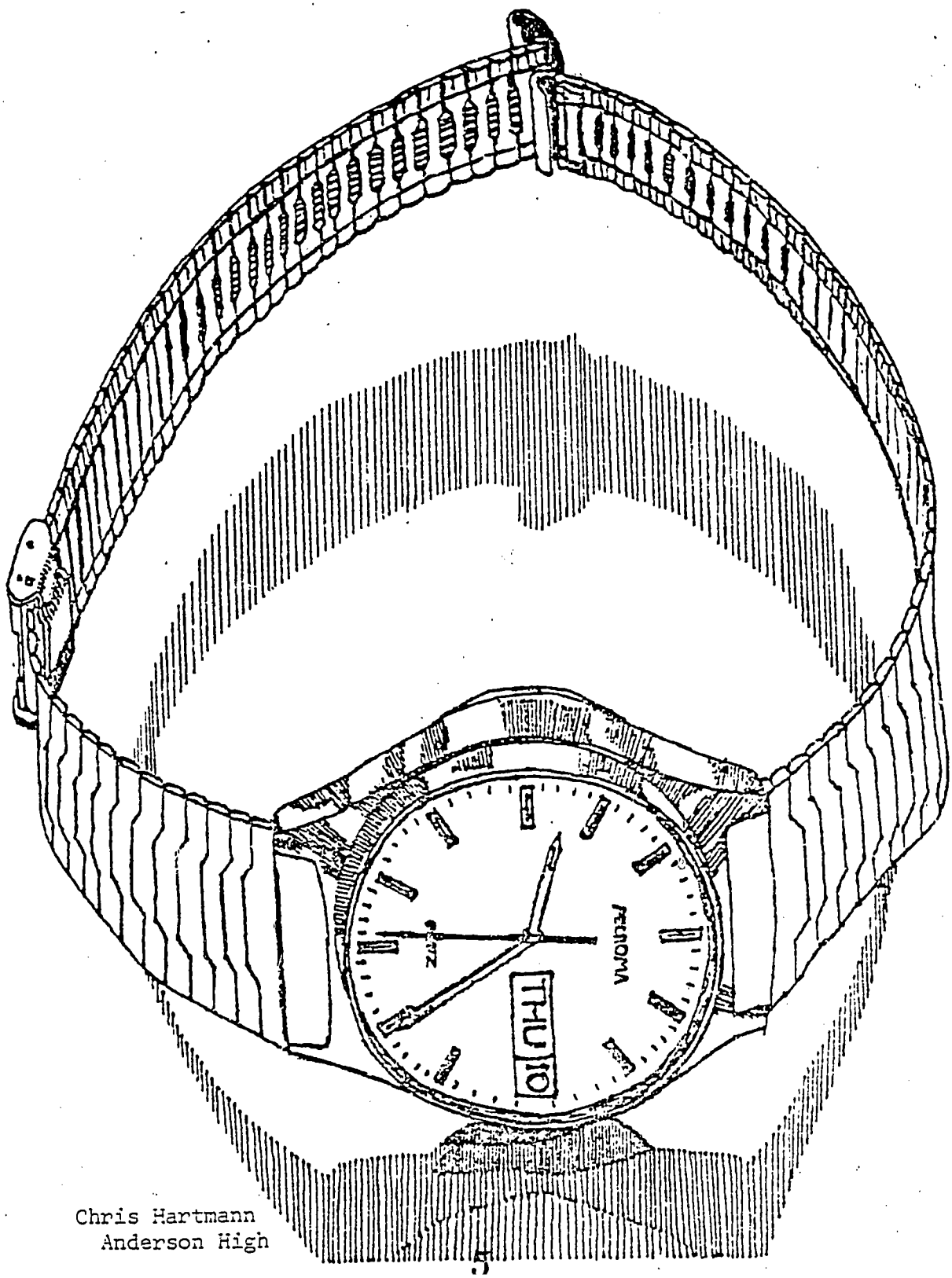
A Matter of Time:

Retention and Promotion

AISD

1983



Chris Hartmann
Anderson High

A MATTER OF TIME: *Retention and Promotion*

Major Positive Findings:

1. The 1981-82 retainees gained an average of .85 of a year in reading while retained. This represents an increase over the year leading up to retention and is about average for low achievers nationwide.

2. The percentage of retainees gaining .8 of a year or more in math and reading has increased slightly over the last three years. This may reflect the increased emphasis on helping retainees.

3. Parents of retainees are positive about their children's educational experiences and teachers this year.

4. Most administrators believe they have received adequate staff development to implement the retention and promotion policy (79%) and adequate support from central staff to carry out the policy (72%).

5. Staff development and other intervention efforts designed to help schools deal with the needs of retainees were regarded as useful by most teachers and administrators.

Major Findings Requiring Action:

1. Math gains decrease between the year leading to retention and the retention year, and then increase again once students are promoted. This suggests that efforts must be made to challenge the students with more new material in math during the retention year.

2. Retainees come closer to the District averages for their grade after retention, but still score below average. Differences are smaller at the primary grades than at the intermediate level.

3. Retainees gain less in both reading and math than a comparison group of similar low achievers not retained. Differences are consistent across grade levels over three years in math; differences are smaller but significant at most grade levels over three years in reading.

4. Only 40% of the elementary teachers surveyed feel adequately prepared to deal with the needs of retainees. Administrators believe more direct assistance from coordinators, more training in working with parents, special transitional classes at the primary level, and summer school for retainees have the most potential to help teachers and retainees.

5. The 1982 summer school for retainees was viewed positively by staff and parents. Mastery results revealed short-term achievement gains. However, long-term comparisons of ITBS results reveal that retainees who attended summer school gained no more in reading than those who did not, and gained significantly more in math in only 2 of 16 cases (those were in Math Concepts).

HOW CAN LOW ACHIEVERS BE HELPED BEST?

Education has always had to deal with the question of how to best help students who, for one reason or another, have not learned at an acceptable rate and are far behind their classmates. Is it better to have the students repeat a grade or to promote them? Retention is an important matter of time--from the length of time students will be spending in the school system to how their achievement will change over the years before and after retention.

The pendulum of educational policy nationwide has swung back from the days when social promotion was the norm and few students were retained towards stricter, more formalized standards and more retentions. New policies which employ a wide variety of criteria in making retention decisions have been set in districts across the country. Various combinations of achievement test scores; social, emotional, and physical growth; daily performance in basals and on classroom tests have all been used. Some policies are very stringent and allow little room for teacher judgement while others rely almost totally on it.

Austin's Retention Policy

In the Austin Independent School District (AISD), a new policy for elementary retentions was adopted in April 1981 and officially put into effect during the 1981-82 school year. The new policy is more specific than the old in several ways:

- It specifies that students who are at least one year behind in their reading basals at grades one through six and/or one year behind in mastering math competencies at grades four through six should be considered for retention. Other factors such as age, language, physical development, social maturity, behavior, and absence rate should then also be considered in making retention decisions.

- It indicates that students should generally only be retained once in grades K-3 and once in 4-6.

- It specifies that teachers and principals have the final responsibility for retention decisions and details steps to be taken in the process. Parents are to be notified as early as possible (at least two months before the end of the school year) that retention is a possibility. Teachers must confer with the parents and help them see the positive aspects of retention. Teachers are also to prepare instructional information for the new fall teachers. The fall teachers then must make sure students' learning needs are considered and that they do not simply repeat the same material in the same way again.

Implementation of the Policy

Although the new policy was not officially in effect until the 1981-82 school year, it was published in April of 1981 and played at least some part (based on survey results and retention rates) in increased retention rates during the 1980-81 school year as well.

Elementary Education was still in the planning stages for interventions to help retainees during the 1981-82 school year, so those retained at the end of 1980-81 had only the special help offered at the school level. During the summer of 1982 and during the 1982-83 school year, several efforts were initiated to help retainees:

- A five-week summer school including reading and math instruction open to all elementary students in grades 1-6 who had ever been retained,
- Videotapes for teachers on diagnosis, self-concept, and direct instruction with retainees,
- A pilot project in which instructional coordinators offered assistance to a sample of teachers of first-grade retainees,
- A videotape for spring 1982-83 on difficult parent-teacher conferences, and
- Individual efforts by the schools which were shared in list form with other schools.

Project PASS was also begun in 1982-83 in selected paired schools with a focus on helping Black students' achievement. As part of this effort, trainers tried to make sure teachers considered alternate learning strategies for retainees.

In a more general way, principals and teachers were encouraged to consider retention as a positive instructional option which simply provides students with another chance and a little more time to master the material. Schools were also given more support from the central administration in upholding retention decisions.

Retention Evaluation

Austin ISD's Board of Trustees, Superintendent, and Cabinet asked that the effects of these changes in the elementary policy be studied on a limited basis over a three-year period. This is the second year of the study. The effects of retention on the achievement of these students was to be and has been a major focus of the study.

Research conducted thus far nationwide has not been conclusive about whether it is better to promote or retain students who are achieving below expectations. There seem to be more studies at present to support the view that retention is not more beneficial than grade promotion for these students, but results are mixed and most studies are fraught with methodological problems. The research conducted by the Office of Research and Evaluation (ORE) has attempted to look at retainee achievement both in terms of retainees' achievement growth patterns and the achievement patterns of students with similar characteristics (within the limits of computerized information) who were not retained. An effort was also made to determine how successful staff development and other efforts designed to help retainees have been and what parents of retainees think about the experience.

The achievement patterns of retainees over the last three years have been studied. Retainees will always be discussed in terms of the year they were recommended for retention in this report.

- The 1979-80 retainees actually repeated a grade during the 1980-81 school year and were retained based on the old general policy. A total of 652 students were retained at the end of 1979-80.

- Students retained at the end of the 1980-81 school year represent a transition group in that the new policy influenced decisions but had not yet been implemented. While 1,224 students were recommended for retention, schools had little additional assistance in meeting student needs during the 1981-82 school year.

- The 1,443 students retained at the end of 1981-82 were the first to be officially retained under the new policy. New efforts were also implemented to help schools better deal with the needs of retainees.

The rest of this report will be organized around important questions considered in evaluating the success of the new policy.

HOW DO SCHOOL PERSONNEL VIEW THE NEW POLICY AND ASSISTANCE EFFORTS?

Samples of teachers and administrators were asked in February of 1983 whether they believed retention of students with serious achievement problems is beneficial. *About two thirds of the administrators and three fourths of the teachers thought retention was beneficial.* About 8-10% of those surveyed said retention was not a good idea, with the rest neutral or unsure. Retention rates did vary considerably at the end of 1981-82, with one or two students retained at a few schools and 100 retained at another. Thus, while most school personnel agree that retention can be beneficial for those with serious achievement problems, the definition of "serious" and the philosophy on retention still seem to vary considerably across schools.

The teacher and administrator surveys also addressed the usefulness of the videotapes on diagnosis, self-concept, and direct instruction. These were previewed by principals in August and made available through the Learning Resources Center (LRC). LRC records indicate 27 schools checked out the tapes during the fall and winter of the 1982-83 school year (a few others may have copied the tapes). Survey results indicated that 68% of the elementary teachers had not seen the tapes. Since use of the tapes was optional, this suggests that a number of principals did not feel they were useful enough to fit into their schools' busy staff development schedules.

Of those who did see the tapes, close to 90% thought they had at least some value, with 50-60% giving the tapes high ratings. Administrators indicated a slight preference for the direct instruction tape.

About 97% of the administrators also believed the lists of intervention efforts shared across schools and the videotape on difficult parent-teacher conferences were useful.

Approximately three fourths of the administrators believed they had received adequate staff development to implement the policy (79%) and adequate support from central staff in carrying out the policy (72%).

While all of these efforts were considered helpful, survey results also provided some ideas on possible future efforts. The fact that only 40% of the teachers felt adequately prepared to foster learning in students who had been retained provides evidence that efforts cannot stop now. Administrators rated the potential usefulness of a variety of options. Those rated most highly (supported by 70%) were more direct assistance from coordinators, more training in working with parents, special transitional classes at the primary level, and summer school for current retainees. Summer school for 5-6-7-year old potential retainees and special supplemental materials and activities also received considerable support (from 65% of respondents) with training in individualizing instruction supported by 57%.

Another major intervention effort this past year was the 1982 summer school for anyone ever retained in grades 1-6. The summer school directors, teachers, central staff, and parents all had positive feelings about the five-week program. The fall teachers of the 1981-82 retainees who attended believed the students had better skills than those who did not attend (this was not true of 1980-81 retainees who attended summer school). Mastery results in math showed an average mastery level of 87%, while 36 of 37 reading units were mastered at an 80% level. Unfortunately, long-term achievement comparisons of Iowa Tests of Basic Skills (ITBS) scores between spring 1982 and spring 1983 reveal that retainees who attended summer school did not show greater gains in reading skills emphasized than those who did not. In math, the 1981-32 retainees who attended summer school did show significantly better gains in Math Concepts at two grade levels (grades 2 and 5/6), but no significant differences were found in Math Problem Solving (the other skill area emphasized)

for either the 1980-81 or 1981-82 retainees. The most likely explanation seems to be that five weeks is not long enough to impact these students' long-term achievement gains. It could also be that the new 1982-83 teachers were unable to capitalize on the extra skills these students came in with in the fall.

Between December and May of this year, coordinators provided a sample of first-grade teachers with lists of retainees and former pre-K students in their classes and the offer of help with the students. Although coordinators generally believed this did serve to focus attention on the students, no impact was evident on the achievement of classes which were and were not provided the lists. A more structured approach started earlier in the year was suggested.

WHAT DO PARENTS THINK ABOUT RETENTION?

The parents of about one third of the students retained last spring were randomly selected to be surveyed about their attitudes towards retention. Approximately 41% responded.

- About two thirds (61%) of the parents said that their child's teacher last spring made them feel comfortable about retention. However, a substantial group (27%) did not feel the teacher helped them feel comfortable with the decision.

- Almost all (90%) of the parents felt good about their child's teacher this year. Most (86-87%) thought the child was working harder this year than last and was having a good learning experience.

- About two thirds (69%) thought it was a good idea to keep their child in the same grade this year. About 60% believed retention decisions were made in a reasonable way in AISD.

Thus, parents seemed more positive about their children's educational experience this year than about the notification process last spring.

HOW MUCH DO RETAINEES GAIN DURING THE GRADE REPEATED?

Retainees gain more in reading than in math during the year a grade is repeated.

Students retained at the end of 1981-82 gained .85 of a grade equivalent (GE) year in reading and .65 of a GE year in math. The average rate of gain varied from .5 of a GE year in math at grade 4 to 1.02 GE years in reading at grade 2. (See Figure 1.)

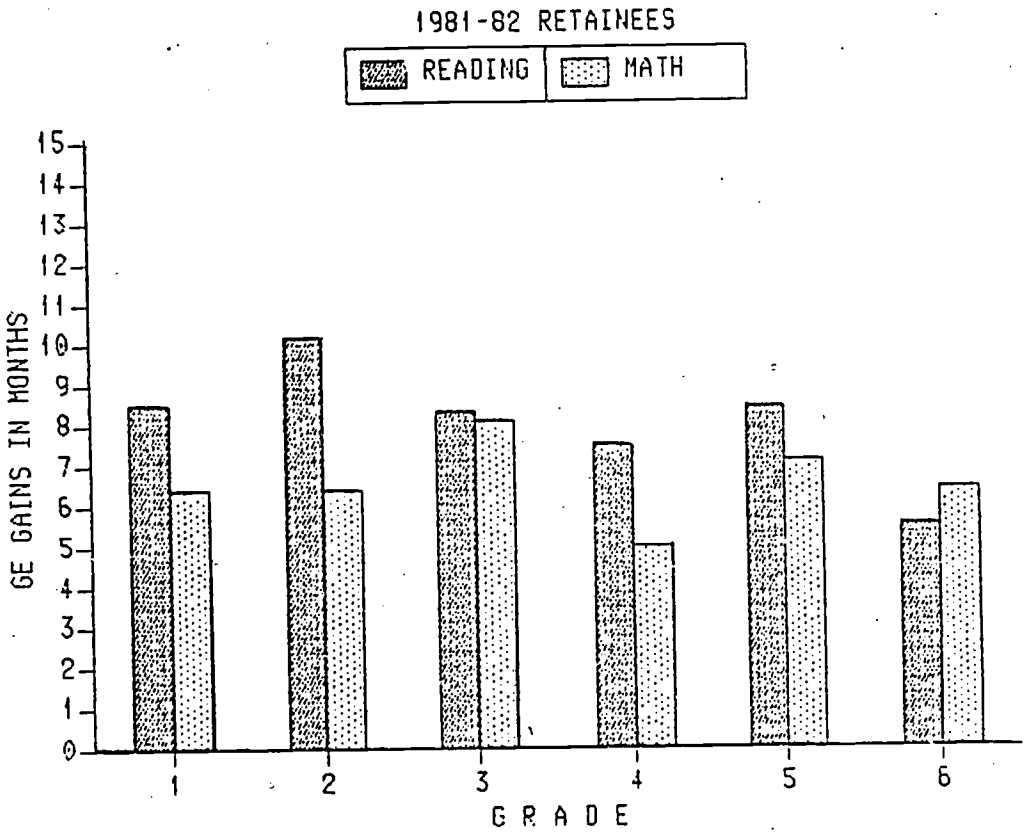


Figure 1. GAINS OF 1981-82 RETAINEES IN READING AND MATH ON THE ITBS BETWEEN SPRING 1982 and 1983.

The range of gains also varies widely for individual students--1981-82 retainees showed losses of up to .6 of a GE year and gains of up to 2.8 GE years. The extreme cases probably represent cases of invalid scores in either 1982 or 1983, but the pattern does illustrate that *some students do show good gains after retention while others clearly do not.*

Figure 2 reveals that the percentage of retainees gaining at least .8 of a GE year after one year of instruction (the average growth for low achievers nationwide) has increased slightly in both reading and math over the last three years. Hopefully, this reflects the effects of the increased emphasis on helping retainees.

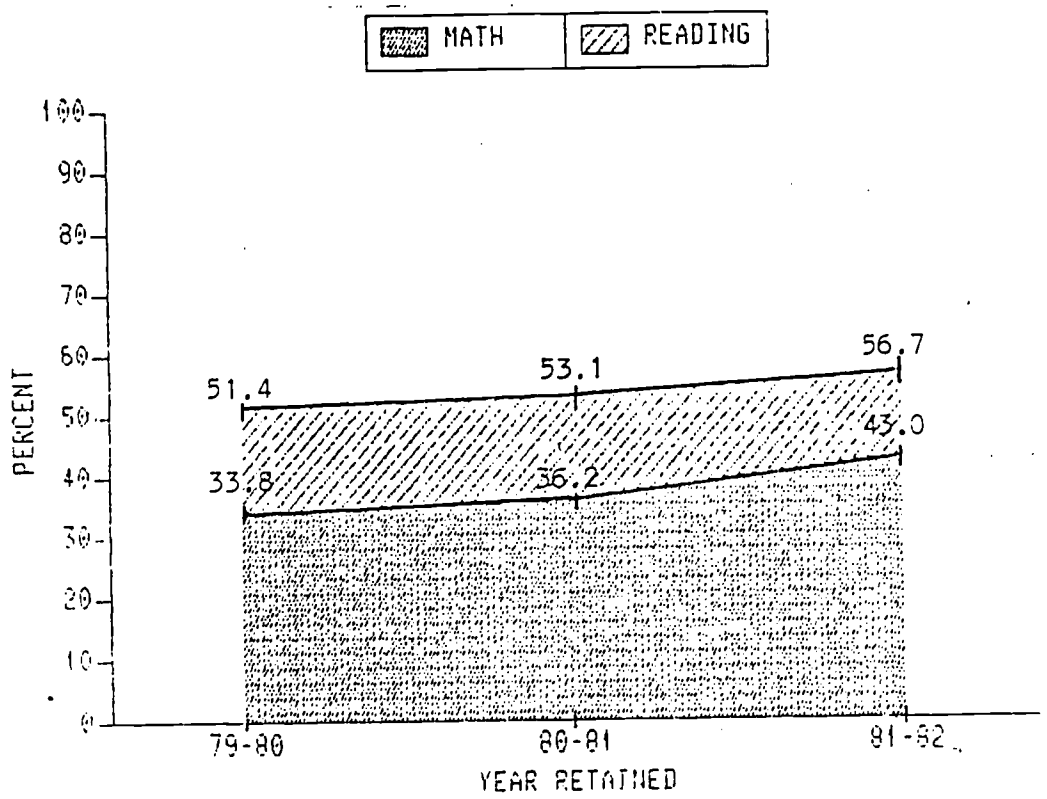


Figure 2. PERCENTAGE OF RETAINEES SHOWING A GRADE EQUIVALENT GAIN OF .8 OR MORE ON THE ITBS AFTER RETENTION.

DO ACHIEVEMENT GAINS CHANGE BEFORE AND AFTER RETENTION?

The 1981-82 retainees gained more in reading after retention than during the year leading to retention. Average growth rates increased from .61 to .85 of a GE year. However, *average growth decreased in math*, from .75 to .65 of a GE year.

For the 1980-81 retainees, scores were available for the year before, during, and after retention (see Figure 3).

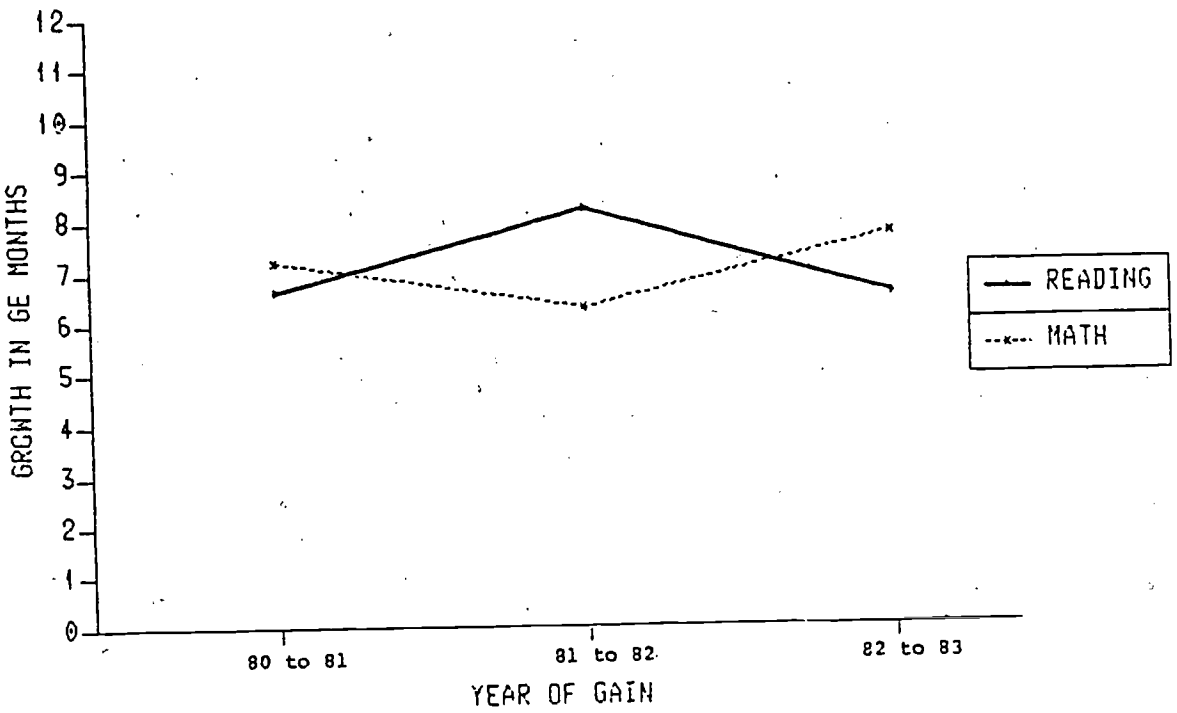


Figure 3. GROWTH PATTERNS FOR 1980-81 RETAINEES BEFORE DURING, AND AFTER RETENTION. Scores for 1979-80 were added for retainees in matched analyses. Sample sizes in reading were 205 for 1980-81 gains and 409 for other gains. Sample sizes in math were 283 for 1980-1981 gains and 405 for subsequent gains. First graders are not included due to lack of ITBS scores for 1979-80.

This figure illustrates two important trends. *In reading, students' achievement gains improve for the retention year by about two months (from .66 to .82 GE years) but then decline to the same low level (.65 of a GE year) once the students are promoted. In math, an opposite trend is evident--math gains drop from .72 to .63 of a GE year between the year leading up to retention and the retention year; they increase back up to .77 of a GE year once the students are promoted.*

The reading pattern suggests that students are doing poorly in reading before retention, and retention does help these students' reading growth rate. However, when they are promoted, they are not identified as students with special needs and receive more difficult new material. Their rate of growth again slows. Special efforts to maintain students' reading

growth rate *after* retention may be necessary to prevent the same pattern for 1981-82 retainees.

In math, students were not quite as far behind when retained as in reading. Unfortunately, their growth slows during the retention year, possibly as a result of a lack of presentation of new material. Once promoted and presented with new material, their growth rate increases to the level seen before retention. This pattern suggests that special efforts may have to be made to build on the math skills retainees come in with and that they should not simply repeat the same math material.

The pattern is not as dramatic in reading if only those with scores for all four years are considered. The students' growth rate increases from .67 to .76 GE years between the year leading to retention and the retention year, but remain at a growth rate of .74 of a GE year once the students are promoted. Gains are about even during and after retention.

DO RETAINEES "CATCH UP" TO GRADE LEVEL AFTER RETENTION?

One contention in favor of retention is that students are able to "catch up" to the skill level of their classmates. Retention, it is hoped, will allow the students to function with the middle group rather than always being the lowest in the class. Retainees' scores after retention were compared to the average scores for AISD students at the same grade level to see if they did "catch up" (see Figures 4 and 5).

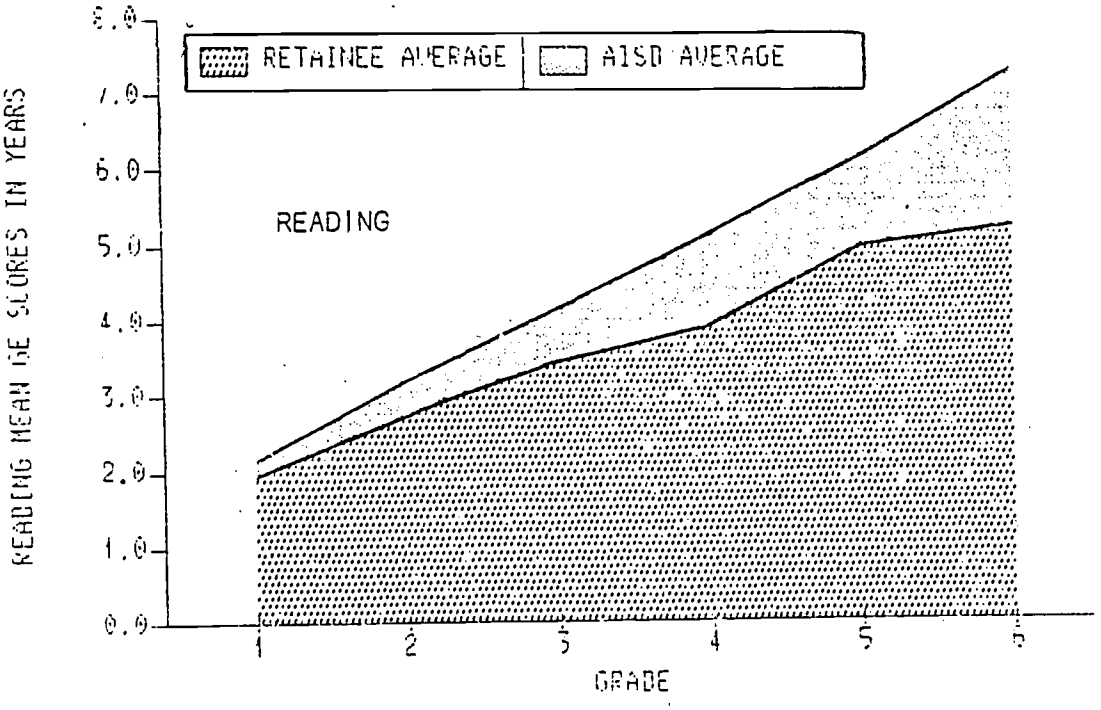


Figure 4. READING ITBS MEAN GE SCORES FOR RETAINEES AND AISD OVERALL: SPRING 1983. Retainees included are those used in matched group analyses.

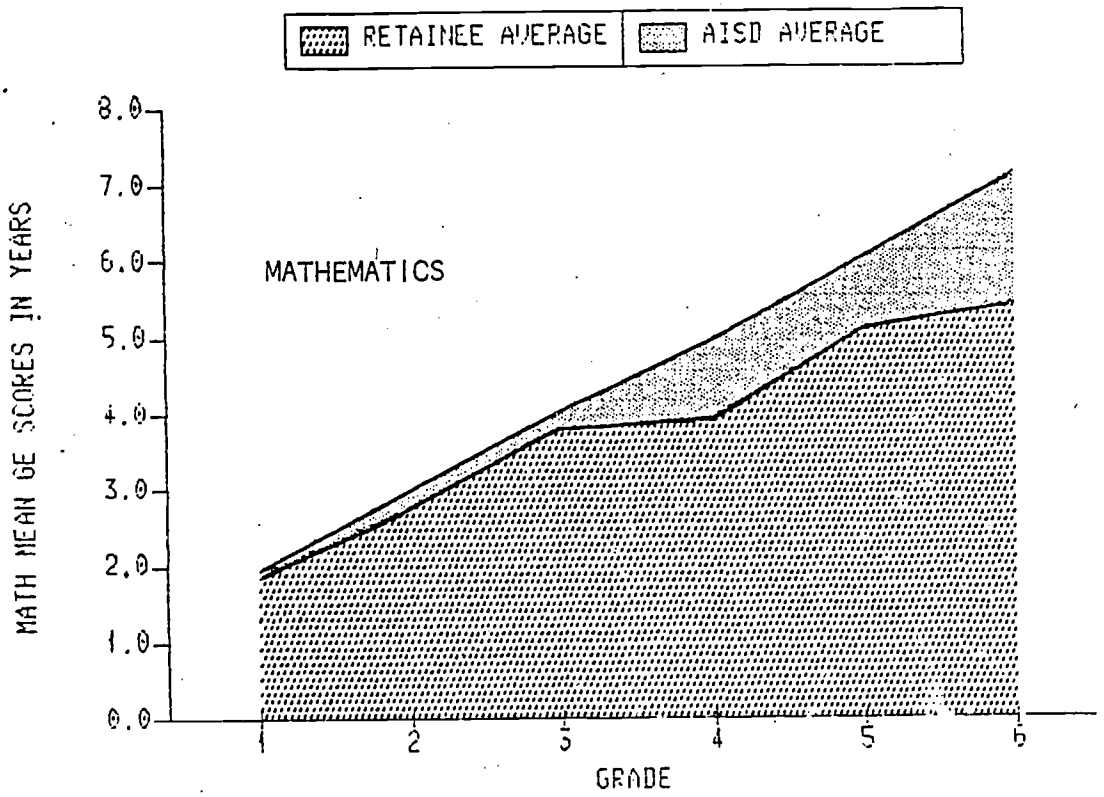


Figure 5. MATH ITBS MEAN GE SCORES FOR RETAINEES AND AISD OVERALL: SPRING 1983. Retainees included are those used in matched group analyses.

Retainees come closer to the District average after repeating a grade, but still score below average at each grade level. Retainees come closer to the District average at the primary grades and in math as opposed to reading.

The difference in reading increases from .21 of a grade equivalent year at grade one to 2.0 GE years at grade six. The difference in math increases from .09 to 1.7 GE years between grades one and six. Students come closest to average at grade one.

HOW DOES THE ACHIEVEMENT OF LOW ACHIEVERS WHO ARE RETAINED AND PROMOTED COMPARE?

It is difficult to say how retainees would have achieved if they had been promoted rather than retained. Our best estimate is a comparison of retainees with other low achievers matched on as many characteristics as possible (ITBS pretest scores, age, sex, ethnicity, free-lunch status, special education status, and limited English proficiency status). Obviously, the fact remains that one group was promoted and the other retained, and matching cannot control for some important factors (e.g., absentee rate and physical, social, and emotional growth) which may have played an important part in deciding whom to retain. On the other hand, the fact that retention rates vary so

greatly from school to school (from .3% to 15% last year) means that a low achiever who would be retained at one school might be promoted at another. This should tend to equalize the groups. Thus, while caution must be taken in comparing the achievement of retainees and matches, these results still represent our best estimate of how the retained students would have done if promoted.

One-year, two-year, and three-year follow-ups were done on the achievement of 1981-82, 1980-81, and 1979-80 retainees, respectively. *Overall, retainees gained less than similar nonretainees in both reading and math. Differences were larger in math than reading. By grade level, differences were always significant in math but not in reading.*

- In math, retainees gained about .40 of a GE year less than low achievers with similar characteristics after one year (.66 versus 1.06 of a GE year), .57 of a GE year less after two years (1.40 versus 1.97 grade equivalent years), and .60 less after three years (2.16 versus 2.76 grade equivalent years).

- In reading, retainees gained .18 less than similar low achievers after one year (.89 versus 1.07 GE years). They gained .38 less after two years (1.47 versus 1.85 GE years), and .57 less after three years (2.26 versus 2.83 GE years).

- By grade, 1981-82 retainees gained significantly less in reading at grades 1, 2, 4, and 6 after one year. The 1980-81 retainees scored significantly lower than matches at grades 1 through 4 (every grade checked). The 1979-80 retainees in grades one and two gained significantly less at grade one but not at grade two (the only grades checked). Regression analyses were not run at other grades after two and three years because of small sample sizes.

Thus, retainees gain less in absolute terms than low achievers who are promoted. These differences increase after more than one year and are slightly larger in math than in reading until three years have passed. However, retainees do score closer to the District average for their younger classmates than the promoted students do to the average for their same-age classmates.

One interpretation of these results is that most retainees would be better off if promoted. Similar students who are promoted show better gains overall, and retainees can never regain the time lost during the year repeated. The problem of being a low achiever is not avoided, because both groups progressively grow farther behind their classmates in achievement. On the other hand, it could be argued that the right students (those who gain at a slower rate) were retained, and that the retained students are better off because they score closer to the grade-level average after retention. Their future educational experiences may be more positive, and success may be more likely.

WHAT CAN BE SAID ABOUT RETAINEE ACHIEVEMENT OVERALL?

It appears that AISD is doing a good job of increasing the gains of retainees in reading during the retention year. Gains increase to a level that is about average for low achievers nationwide. There is some evidence that gains decrease once students are promoted; care must be taken to provide continuing support for these students' special needs even after the retention year is over.

Math gains are higher than those in reading before the students are retained. Unfortunately, their rate of gain decreases during the retention year and increases again afterwards. This suggests that students may not be challenged enough with new material during the retention year.

Some students show very good gains after retention--others do not. The new policy seems to have had a small impact--the percentage of retainees gaining .8 GE year or more has increased in both reading and math over the last three years.

Although retention brings retainees closer to the average level of achievement for their grade, students still score slightly below grade level, on the average, even after retention. Retainees also seem to show smaller achievement gains than similar low achievers overall, especially in math.

Continued emphasis on meeting the special needs of retainees both during and after the retention year could result in better achievement for these students.

Bibliography

1982-83 Publications

Baenen, N. RETENTION AND PROMOTION: 1982-83 evaluation design. Austin Tx.: Office of Research and Evaluation (Pub. No. 82.07), Austin Independent School District, September 1982.

The evaluation design describes the evaluation plan for the retention/promotion study during the 1982-83 school year.

MacDonald, J. and Baenen, N. R. SUMMER SCHOOL PILOT 1982: First report to the Texas Education Agency. Austin, Tx.: Office of Research and Evaluation (Pub. No. 82.04), Austin Independent School District, September 1982.

This technical report describes the evaluation procedures and short-term results for the 1982 summer school for elementary retainees. It includes a results summary, program description, demographic data on students and staff, observation results, and preliminary cost information.

Schuyler, N. B. The ideal and the real: implementing a new elementary retention policy. Paper presented at the American Educational Research Association meeting, Montreal. Austin, Tx.: Office of Research and Evaluation (Pub. No. 82.50), Austin Independent School District, April 1983.

This paper describes the nature of Austin Independent School District's new elementary retention policy, and its intended and actual effects.

Schuyler, N. B. RETENTION AND PROMOTION: 1982-83 final technical report. Austin, Tx.: Office of Research and Evaluation (Pub. No. 82.42), Austin Independent School District, July 1983.

This technical report describes the instruments and procedures employed in the elementary retention/promotion study during 1982-83 as well as the results found. A final report summary is also included. Achievement test scores, surveys, and a coordinator/teacher study were the primary sources of information used.

Schuyler, N. B., and MacDonald, J. SUMMER SCHOOL PILOT 1982: Second report to the Texas Education Agency. Austin, Tx.: Office of Research and Evaluation (Pub. No. 82.25), Austin Independent School District, November 1982.

This report documents staff and parent reactions to the 1982 summer school for retainees, fall teachers' assessment of retainee skills, mastery test results, and the nature of the long-term comparison group. A summary of results plus appendices detailing the purpose, procedures, and results for each information source are included.

Schuyler, N. B., and Matter, M. K. To retain or not to retain: implementing a new elementary retention policy. Paper presented at the American Educational Research Association meeting, Montreal. Austin, Tx.: Office of Research and Evaluation (Pub. No. 82.51), Austin Independent School District, April 1983.

This paper describes the effects of retention at the elementary level on academic achievement. The issue of whether achievement should be used as a criterion in deciding who to retain is also addressed.

1981-82 Publications

Baenen, N. R. EVALUATION DESIGN: Retention and promotion 1981-82. Austin, Tx.: Office of Research and Evaluation (Pub. No. 81.19), Austin Independent School District, September 1981.

This evaluation design describes the evaluation plan for the retention/promotion study during 1981-82.

Baenen, N. R. FINAL TECHNICAL REPORT: Retention and promotion 1981-82. Austin, Tx.: Office of Research and Evaluation (Pub. No. 81.36), Austin Independent School District, June 1982.

This report documents the purpose, procedures, and results for each information source used in the 1981-82 retention study. Descriptive statistics on the retainee population, achievement test performance, and case studies are described. A summary of results is also provided.

Baenen, N. R. A look at retention: K-6. Feedback, August 1982, 6 (1). Austin, Tx.: Office of Research and Evaluation (Pub. No. 82.01), Austin Independent School District.

This newsletter summarizes the results of the 1981-82 retention/promotion study. It was sent to central and school administrators and elementary retainees.

Baenen, N. R., and MacDonald, J. EVALUATION DESIGN: Summer school for retainees 1982. Austin, Tx.: Office of Research and Evaluation (Pub. No. 81.66), Austin Independent School District, April 1982.

This design describes the evaluation plan for the 1982 summer school for elementary retainees.

Retention/Promotion

Appendix A

IOWA TESTS OF BASIC SKILLS (ITBS)

Instrument Description: Iowa Tests of Basic Skills, 1978 Edition, Form 7

Brief description of the instrument:

The ITBS is a standardized multiple-choice achievement test battery. Level 5 was given to kindergarten students to measure skills in the areas of listening (spring only), language (fall and spring), and math (spring only). Levels 7 and 8 were given to grades 1 and 2, respectively, to measure skills in the areas of word analysis, vocabulary, reading comprehension, spelling, math concepts, math problems, and math computation. ITBS levels 9-14 were administered to grades 3-8 with the test level for students in grades 4-6 chosen on the basis of their previous achievement scores (with teacher review). Levels 9-14 include subtests in all the areas mentioned for levels 7 and 8, except for word analysis. In addition, levels 9-14 include subtests measuring capitalization, punctuation, usage, visual materials, and reference materials.

To whom was the instrument administered?

All elementary and junior high students, grades K-8. Special education students were exempted as per Board Policy 5127 and its supporting administrative regulation. Students of limited English proficiency (LEP) were not exempt, but could be excused after one test on which they could not function validly. Scores for students who were monolingual or dominant in a language other than English were not included in the school or District summaries.

How many times was the instrument administered?

Once to each student in grades 1-8, twice to students in kindergarten.

When was the instrument administered?

Kindergarten students were tested the week of September 7-10. The elementary schools administered the test April 19, 20, and 21 to students in grades K-6. Students in grades 7 and 8 were tested on February 15, 16, and 17. Tests were administered in the morning. Make-ups were administered the week after the regular testing.

Where was the instrument administered?

In each AISD elementary and junior high school, usually in the student's regular classroom.

Who administered the instrument?

Classroom teachers in the elementary schools. In the junior high schools, the counselor or principal administered the test over the public address system using taped directions provided by ORE. Teachers acted as test proctors in their classroom at these schools.

What training did the administrators have?

Building Test Coordinators participated in planning sessions prior to the testing. Teacher training was the responsibility of the Building Test Coordinator. However, teacher inservice training was available from ORE upon request. Teachers and counselors received written instructions from ORE, including a checklist of procedures and a script to follow in test administration.

Were there problems with the instrument or the administration that might affect the validity of the data?

No known problems with the instrument. Problems in the administration are documented in the monitors' reports which are available at ORE.

Who developed the instrument?

The University of Iowa. The ITBS is published by the Riverside Publishing Company.

What reliability and validity data are available on the instrument?

The reliability of individual subtests and area totals, as summarized by Kuder-Richardson Formula 20 coefficients, ranges from .75 to .97, across test levels. Coefficients for the total battery range from .94 to .99, across test levels. Equivalent-forms reliability coefficients, calculated for grades 3-8, range from .71 to .92, across subtests and area totals. The issues of content and construct validity are addressed in the publisher's preliminary technical summary, pp.13-15.

Are there norm data available for interpreting the results?

Norm data are available in the Teacher's Guide. The Teacher's Guide provides empirical norms (grade equivalent, percentile, stanine) for the fall and spring. Interpolated norms are available for midyear. National, large city, and school building norms are available.

Purpose

Iowa Tests of Basic Skills (ITBS) results were used to gain information relevant to the following decision and evaluation questions:

Decision Question D1: What effects has the District policy on retention/promotion had on achievement? on retention rates? Should the District policy be altered?

Evaluation Question D1-5: What were the achievement levels of 1981-82 retainees in spring 1982? How much did they gain between spring 1981 and spring 1982? How does this compare to their rate of gain between spring 1982 and spring 1983? by ethnicity?

Evaluation Question D1-6: How much did LEP 1981-82 retainees gain between spring 1982 and spring 1983 compared to other retainees?

Evaluation Question D1-7: How do the achievement levels and gains in reading and math of 1981-82 retainees after one year compare to those of 1979-80 and 1980-81 retainees after one year?

Evaluation Question D1-8: How do the achievement levels and gains of 1981-82 retained students compare to a group of similar students (matched on factors such as previous achievement gains, age, sex, ethnicity, special education status, LEP A and B status) after one year?

Evaluation Question D1-9: How does the average achievement of the 1981-82 retainees and the matched group compare to the average for all AISD students in the same grade?

Evaluation Question D1-10: How does the achievement of 1980-81 retainees and a matched group compare after two years?

Evaluation Question D1-11: How does the achievement of students retained as first and second graders in 1979-80 and a matched group compare after three years?

Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued and/or modified?

Evaluation Question D2-4: How did the achievement of retainees who did and did not attend summer school compare on emphasized math and reading skills?

Evaluation Question D2-5: Did the achievement of summer school retainees who received home visits, phone calls to former teachers, or no extra contacts differ on skills emphasized?

Evaluation Question D2-6: Did the achievement of summer school students who received follow-up activities in the mail differ from other students on skills emphasized?

Decision Question D3: Can students who will benefit from retention be identified?

Evaluation Question D3-1: What characteristics of students who benefit from retention can be identified?

Procedure

Achievement Gains of Retainees

Evaluation questions D1-5, D1-6, and D1-7 required calculation of mean gains in grade equivalents for retainees. All students retained at the end of 1981-82 who had Reading Total and Math Total scores for the required years were included in the analyses. Special circumstances cases were eliminated as well as anyone promoted between the spring of 1981-82 and 1982-83 (the testing grade levels had to be the same).

To answer questions D1-5 and D1-7, the District Priorities programmer wrote a program which listed individual student scores and gains in the Reading Total and Math Total areas for 1980-81, 1981-82, and 1982-83. These were done by grade and rank order of gain size between 1981-82 and 1982-83. For each grade, she also calculated the total N, number and percent special education students, number and percent LEP students, and the number gaining more than eight months in grade equivalents from 1981-82 to 1982-83. One-year gains for 1981-82 retainees were then compared to those of 1979-80 and 1980-81 retainees based on data produced last year during the retention study.

Evaluation question D1-6 required separating the Limited English Proficiency (LEP) 1981-82 retainees from those who were not LEP. LEP retainees were defined as anyone with a LEP status code of 0, 2-6 or 8 on the LANG file. These students all receive some type of bilingual services. The same type of listings of individual scores and gains were then produced for LEP students in the reading and math areas.

Matched Groups

One-year followup. Evaluation question D1-8 calls for a comparison of gains made by 1981-82 retainees and a similar group of nonretainees between spring 1982 and spring 1983. All 1981-82 retainees who had scores for the Reading Total or Math Total sections of the ITBS for 1981-82 and 1982-83 were eligible for the sample with two exceptions. Students whose scores were invalid due to special circumstances and students promoted between spring 1982 and spring 1983 were not included.

Students were matched on a number of factors independently for reading and math. Reading Total or Math Total scores for 1981-82 had to be within six grade equivalent months and were generally much closer. The matching program searched for an identical match first. If none was available, the closest higher match or lower match was chosen in an alternating sequence. If a lower case was not available, two higher cases were chosen followed by two lower cases to create a balanced sample. Students also had to be within six months of age of each other. Matches also had to be of the same sex, ethnicity, free lunch status (free or reduced-price lunch), special education status, and LEP (A and B) status. This data was based on the 1982-83 Student Master File and ITBS file. This matching procedure was the same as that used last year except for the addition of LEP A and B status.

Some additional checks were made this year to check the comparability of the groups. Descriptive statistics on all of the variables used in matching were run, as well as listings of the individual scores and gains for the students for 1980-81, 1981-82, and 1982-83. These scores were examined to see if gains were consistent across grades and to see if any students had shown large losses between 1980-81 and 1981-82 (the 1981-82 scores were the ones matched). In reviewing the scores, it was found that the matched nonretainees were more likely to show patterns of a loss in grade equivalent scores between 1980-81 and 1981-82 and a large gain between 1981-82 and 1982-83. These cases were considered to be largely a problem of invalid measurement in 1981-82. In order to correct this problem, any students in either the retainee or matched groups who had lost four months or more in grade equivalents between 1980-81 and 1981-82 or 1981-82 and 1982-83 were eliminated from the sample.

Two other new adjustments were made this year. Retainees who had been retained more than once were eliminated from the sample, and students retained before 1981-82 were not allowed to be matches for retainees. This was done in an effort to assure a clear comparison of student progress. Thus, first-time retainees are being compared to other low achievers with similar characteristics who have not been retained from the spring of 1979-80 on. Matches were then rerun with these additional qualifiers. Sample sizes were reduced slightly. The number of cases varied from 0 at grade 6 to 17 at grade 4 in math, and from 3 in grade 6 to 15 in grade 4 in reading. The file names for the 1981-82 matched groups are EDPRTM82 for math and EDPRTR82 for reading.

Two-year and three-year followups. Evaluation questions D1-10 and D1-11 address the achievement of 1980-81 and 1979-80 retainees and matches after two and three years, respectively. Matches determined last year were used--students were not rematched. All pairs of 1980-81 retainees and matches which had ITBS scores in reading or math for spring 1981 and spring 1983 were included (except special circumstances cases). Likewise, all 1979-80 retainees and matches from 1979-80 who had spring 1980 and spring 1983 scores were included. Tables were then computer-generated showing students' ITBS scores and gains for each year. Sample sizes were large enough to run regression analyses for grades one through four for the 1980-81 retainees and matches and for grades one and two for 1979-80 retainees and their matches. The file names for 1980-81 are EDPRTM81 and EDPRTR81. Those for 1979-80 are EDPRTM80 and EDPRTR80.

A total of 24 regression analyses were run for these followup groups: 12 for 1981-82 (grades one to six in reading and math), eight for 1980-81 (grades one to four in reading and math, and four for 1979-80 (grades one and two in reading and math).

Summer School. Evaluation question D2-4 asks whether the achievement of retainees who attended and did not attend summer school varied on reading and math skills emphasized in summer school. Matched groups were drawn last November based on program service (Chapter 1, Chapter 1 Migrant, LEP, Special Education), sex, ethnicity, age, grade, and Reading Total and Math Total ITBS scores. Students had to be served by the same programs, be of the same ethnicity (Hispanic, Black, or Other), and be within one year of each other in age. After these matches were done, the program forced a match with the student with the closest higher or lower score on an alternating basis. Students in grades one to three had to match within six grade equivalent months. Those at four to six were allowed nine months (for the 1981-82 retainees only).

All students retained in 1981-82 and 1980-81 who attended the 1982 summer school were eligible for the sample. Students had to have identification numbers and valid ITBS scores in reading and math for spring 1982. A total of 551 students retained in 1981-82 and 146 retained in 1980-81 were eligible for the sample given these restrictions. Final sample sizes were:

	Math	Reading
1981-82	425	393
1980-81	105	101.

The sample was checked after the ITBS testing in April. Anyone who had left AISD or who had no scores for spring 1983 was dropped from the sample. Final sample sizes were large enough to allow regression analyses for grades 1, 2, 3, 4, 5/6 for the 1981-82 retainee group and grades 2, 3-6 for the 1980-81 retainee group. Descriptive statistics on all variables were then run including all reading and math subtests. Reading includes Vocabulary

and Reading Comprehension tests; math includes Math Concepts, Math Problem Solving, and Math Computation tests. The math skills emphasized during the summer program were math concepts and problem solving, so these were the areas for which regression analyses were run. In reading, vocabulary was stressed at grade one and reading comprehension was stressed at the other grades. A total of 21 regression analyses were therefore run as follows:

	READING	MATH
80-81		
Grade 1	Vocabulary	Math Concepts, Problem Solving
2	Reading Comprehension	" " "
3-6	" "	" " "
81-82		
Grade 1	Vocabulary	Math Concepts, Problem Solving
2	Reading Comprehension	" " "
3	" "	" " "
4	" "	" " "
5/6	" "	" " "

In addition, mean scores for 1982 and 1983 for these areas were calculated for retainees who received home visits, telephone calls to teachers, both, or neither and for those who received general and specific followup activities after the regular session was over. The file names are EDPRTSS1 and EDPRTSS2.

Regression Analyses. The same basic regression procedures were used for the one, two, and three-year followups and summer school comparisons. All data analyses were done at AISD on the IBM 4341 computer. The following steps were taken:

1) Scatterplots were produced showing pretest and posttest scores for the retainees and matches.

These were examined for extreme outliers and correlations between pre- and posttest scores. Examination of 81-82 plots led to the listing of individual scores and subsequent adjustments to the sample. No cases were dropped from the 1980-81 and 1979-80 samples based on the plots.

2) Regression analyses were run to determine whether retainees and matched nonretainees progressed at similar rates after one, two, and three years based on ITBS.Reading Total and Math Total scores. Jenning's regression program (MODEL) was brought to AISD this year. It is very similar to the SORE SPOT program developed last year at ORE, and tests for curvilinear and linear trends in the data. The MODEL program also checks to see if F values are significant.

3) Regression lines were then plotted using the PLOT program on SPSS and reviewed for trends.

A description of the variables and models used is shown in Attachment A-1. A total of 49 regression analyses were run.

Discriminant Analyses

Evaluation Question D3-1 requires a discriminant analysis to see if any characteristics of successful and unsuccessful retainees can be identified. ITBS Reading Total scores were used to classify students as successful and unsuccessful. Those who gained .8 of a year or more were defined as successful; those who gained less were defined as unsuccessful. The results of the discriminant analyses are shown in Appendix I.

Mean Gains

Mean grade equivalent scores for 1981-82 retainees were determined by grade and ethnicity for the spring 1983 Reading Total and Math Total sections. The data analyst for testing calculated mean grade equivalent scores by grade and ethnicity for all students tested in these areas. Results were then compared to answer evaluation question D1-9.

Results

Evaluation Question D1-5. What were the achievement levels of 1981-82 retainees in spring 1982? How much did they gain between spring 1981 and spring 1982? How does this compare to their rate of gain between spring 1982 and spring 1983? by ethnicity?

Figure A-1 shows the Reading Total and Math Total grade equivalent scores and gains for 1981-82 retainees during spring 1981, 1982, and 1983.

Spring 1982 Achievement

Retainees for all grade levels were scoring well below the expected grade equivalent score for an average student of the same grade (X.8).

- In reading, the difference increases from .75 of a grade equivalent year at grade one to 2.3 grade equivalent years at grade six. Fourth and fifth graders were both about 1.8 years below the expected level for average students at their grade.

- In math, the difference between retainee achievement and the national average increased from .6 of a grade equivalent year at grade one to two years at grade six. Achievement for students in the primary grades (1, 2, and 3) was closer to average than that at the intermediate grades.

In general, achievement levels in reading were somewhat lower than those in math.

Gains: 1981 to 1982

In reading, gains for the year leading up to retention ranged from .43 to .74 grade equivalent years. Gains were greatest (.70 and .74) at grades three and five and smallest (.43) at grade two.

In math, gains between 1981 and 1982 ranged from .59 to .89 of a grade equivalent year. Gains were greatest at grade five and smallest at grade four.

Thus, gains were also slightly smaller in reading than in math for the year leading up to retention.

Gains: 1982 to 1983

In reading, gains for the year students were actually retained in grade ranged from .55 of a GE year at grade six to 1.02 GE years at grade two. On the average, retainees gained .85 of a GE year in reading. Retainees scored one month above grade level on the average at grade one (1.9); they were still below grade level at the other grades.

Gains in math between 1982 and 1983 ranged from .50 of a GE year at grade four to .81 of a GE year at grade three. Gains were generally smaller in math than reading. On the average, retainees gained .65 of a GE year in math. Students were at grade level in math in grades one, two, and three after retention; they were still below grade level at grades four, five, and six.

No real pattern of greater overall gains at particular grades was evident in reading and math. The gains were the most even at grade three, where retainees gained about .8 of a GE year in both reading and math.

Figure A-2 shows the range of gains made by 1981-82 retainees by grade, as well as the number and percent gaining eight GE months or more or less than eight months. In reading, the highest percentage of students gained eight months or more at grades two, three, and five (61 to 67%). The lowest percentage gained eight GE months or more at grade six (35%). In math, smaller percentages gained eight GE months or more. The highest percentages gaining eight GE months or more were 51% at grades three and five. Only 37% of fourth graders gained eight GE months or more.

R E A D I N G

GRADE	1981	One-Year Gain	1982	One-Year Gain	1983	Two-Year Gain
1			1.05 N=315	0.85 N=315	1.90 N=315	
2	1.22 N=111	0.43 N=111	1.65 N=156	1.02 N=156	2.67 N=156	1.44 N=111
3	1.83 N=76	0.70 N=76	2.51 N=99	0.83 N=99	3.34 N=99	1.50 N=76
4	2.43 N=92	0.62 N=92	3.00 N=113	0.75 N=113	3.75 N=113	1.37 N=92
5	3.28 N=79	0.74 N=79	4.03 N=92	0.84 N=92	4.87 N=92	1.58 N=79
6	3.71 N=23	0.63 N=23	4.48 N=29	0.55 N=29	5.03 N=29	1.24 N=23
		AVG.=.61		AVG.=.85		

M A T H

GRADE	1981	One-Year Gain	1982	One-Year Gain	1983	Two-Year Gain
1			1.20 N=345	.64 N=345	1.84 N=345	
2	1.39 N=117	.75 N=117	2.13 N=161	.64 N=161	2.77 N=161	1.39 N=117
3	2.22 N=80	.79 N=80	3.01 N=107	.81 N=107	3.82 N=107	1.62 N=80
4	2.76 N=102	.59 N=102	3.34 N=120	.50 N=120	3.84 N=120	1.13 N=102
5	3.47 N=87	.89 N=87	4.37 N=97	.71 N=97	5.08 N=97	1.60 N=87
6	3.87 N=26	.82 N=26	4.79 N=31	.64 N=31	5.43 N=31	1.48 N=26
		AVG.=.75		AVG.=.65		

Figure A-1. ITBS READING TOTAL AND MATH TOTAL SCORES FOR 1981-82 RETAINEES: SPRING 1981, 1982, 1983. Students were retained at the end of the 1981-82 school year. Mean grade equivalent scores and gains are shown for the year before and after retention and for the two-year period. The 1982 score is not always an exact total of the 1981 score and gain due to unequal sample sizes.

R E A D I N G

GRADE	Range	# Gaining ≥ 8 months	% Gaining ≥ 8 months	# Gaining ≤ 8 months	# Gaining ≤ 8 months
1	-1.9 to +2.8	166	52.7	149	47.3
2	-.7 to + 2.5	105	67.3	51	32.7
3	-.6 to +2.1	60	60.6	39	39.4
4	-1.3 to +2.8	59	52.2	54	47.8
5	-.9 to +2.3	56	60.9	36	39.1
6	-1.0 to +2.4	10	34.5	19	65.5
Total	-.6 to +2.8	456	56.7	348	43.3

M A T H

GRADE	Range	# Gaining ≥ 8 months	% Gaining ≥ 8 months	# Gaining ≤ 8 months	# Gaining ≤ months
1	-.6 to +2.3	143	41.4	202	58.6
2	-.2 to +2.6	67	41.6	94	58.4
3	-.4 to +2.2	55	51.4	52	48.6
4	-1.0 to +1.9	44	36.7	76	63.3
5	-.8 to +2.4	49	50.5	48	49.5
6	-.3 to +2.1	12	38.7	19	61.3
Total	-.2 to +2.6	370	43.0	491	57.0

Figure A-2. RANGE OF GAINS BY GRADE FOR 1981-82 RETAINEES. Shows gains in grade equivalent scores on the Reading Total and Math Total sections of the Iowa Tests of Basic Skills (ITBS).

Figure A-3 reveals that a slightly higher percentage of the 1981-82 retainees gained .8 GE years or more in both reading and math compared to those retained in previous years.

	N	Range of Gains	Students Gaining .8 GE Years or More		Students Gaining .7 GE Years or Less	
			No.	Percent	No.	Percent
ITBS READING TOTAL						
SPRING 1980 RETAINEES	327	-1.0 to +3.0	168	51.4%	159	48.6%
SPRING 1981 RETAINEES	650	-.9 to +3.2	345	53.1%	305	46.9%
SPRING 1982 RETAINEES	804	-.6 to +2.8	456	56.7%	348	43.3%
ITBS MATH TOTAL						
SPRING 1980 RETAINEES	331	-1.3 to +2.5	112	33.8%	219	66.2%
SPRING 1981 RETAINEES	672	-1.1 to +2.7	244	36.2%	430	63.8%
SPRING 1982 RETAINEES	861	-.2 to +2.6	370	43.0%	491	57.0%

Figure A-3. MATH AND READING ITBS GAINS FOR 1979-80, 1980-81, AND 1981-82 RETAINEES. Students were reocmmended for retention at the end of these school years. Sample sizes (N) represents the number of students with pre- and posttest scores. Pretest scores were those for the spring when retention was recommended; posttest scores were those for the spring of the year students were really retained.

A look at 1981-82 retainees' individual gains reveals a number of students who actually showed losses in grade equivalent gains between the time retention was recommended and completed. Losses in grade equivalent scores are usually considered to indicate invalid measurement. The losses are also a signal that these students were definitely not interested in trying on the tests and may also be disinterested in school in general. The number of losses in grade equivalents was distributed as shown below across grades.

	MATH		READING	
Grade	Number	Percent	Number	Percent
1	20/345	5.8%	24/315	7.6%
2	7/161	4.3%	3/156	1.9%
3	5/107	4.7%	7/99	7.1%
4	19/120	15.8%	11/113	9.7%
5	6/97	6.2%	11/92	12.0%
6	5/31	16.1%	6/29	20.7%
Total	62/883	7.0%	62/804	7.7%

Figure A-4. LOSSES IN GRADE EQUIVALENT SCORES FOR 1981-82 RETAINEES BETWEEN SPRING 1982 AND SPRING 1983. Mean grade equivalent scores for the Reading Total and Math Total sections on the ITBS were examined.

Thus, the greatest percentage of students showed losses at grades four and six.

It is also interesting to note that 12-13% of those tested in reading and math respectively were special education students. About 15-18% were LEP students in reading and math.

TRENDS BY ETHNICITY - READING

Figure A-5 shows gains for 1981-82 retainees between 1982 and 1983.

- Anglos had slightly higher achievement in reading than minorities when retained (1981-82) and after being retained (1982-83). Hispanics showed slightly higher achievement than Blacks when retained at grades two, three, and five, but Blacks showed higher achievement at grade six.

- Gains for the year leading up to retention (1980-81 to 1981-82) varied from .3 grade equivalent years for Hispanics at grade two (N=58) to 1.1 grade equivalent years for Anglos at grade six (N=5). Most were in the .5 to .8 grade-equivalent-year range. Black and Anglo gains seemed to be slightly higher, on the average, than Hispanic gains.

- Gains for the year students were retained (1981-82 to 1982-83) ranged from four months for Hispanic sixth graders (N=12) to 1.2 grade equivalent years for Anglo second graders (N=38). Most were in the .8 to 1.0 grade equivalent range. Anglos showed the greatest gains at grades two, four, five, and six, with Hispanics showing the greatest gains at grade three and Blacks and Anglos showing the greatest gains at grade one.

- Gains were slightly larger for the year the students were actually retained (1982-83) compared to the year before retention (1981-82), on the average. However, this was not true at every grade level. Anglo retainees showed greater gains for the year retained at grades two, three, four, and six, but gains were the same both years at grade five. Gains for Hispanic retainees were larger at grades two, three, and five, the same size at grade four, and smaller at grade six. The gains for Black retainees were larger at grades two and four, the same size at grade five, and smaller at grades three and six.

R E A D I N G

GRADE	1981	1-YR. GAIN	1982	1-YR. GAIN	1983	2-YR. GAIN
1981-82 BLACK RETAINEES						
1			1.0 N=90	1.0 N=90	1.9 N=90	
2	1.0 N=26	0.5 N=26	1.5 N=34	0.9 N=34	2.4 N=34	1.4 N=26
3	1.7 N=25	0.8 N=25	2.3 N=35	0.8 N=35	3.1 N=35	1.5 N=25
4	2.3 N=32	0.6 N=32	2.9 N=37	0.8 N=37	3.7 N=37	1.4 N=32
5	3.1 N=38	0.8 N=38	3.8 N=39	0.9 N=39	4.7 N=39	1.6 N=38
6	3.6 N=8	1.0 N=8	4.4 N=10	0.5 N=10	4.9 N=10	1.5 N=8
1981-82 HISPANIC RETAINEES						
1			1.0 N=151	0.8 N=151	1.8 N=151	
2	1.3 N=58	0.3 N=58	1.6 N=81	1.0 N=81	2.6 N=81	1.3 N=58
3	1.7 N=35	0.7 N=35	2.4 N=40	0.9 N=40	3.3 N=40	1.6 N=35
4	2.4 N=50	0.6 N=50	2.9 N=62	0.7 N=62	3.6 N=62	1.2 N=50
5	3.4 N=33	0.6 N=33	4.1 N=42	0.8 N=42	4.9 N=42	1.5 N=33
6	3.6 N=10	0.5 N=10	4.3 N=12	0.4 N=12	4.7 N=12	0.9 N=10
1981-82 ANGLO RETAINEES						
			1.2 N=69	1.0 N=69	2.2 N=69	
2	1.4 N=25	0.5 N=25	1.9 N=38	1.2 N=38	3.1 N=38	1.7 N=25
3	2.2 N=15	0.5 N=15	2.9 N=23	0.8 N=23	3.7 N=23	1.3 N=15
4	2.9 N=10	0.8 N=10	3.6 N=13	1.0 N=13	4.6 N=13	1.9 N=10
5	3.6 N=7	1.1 N=7	4.4 N=10	1.1 N=10	5.5 N=10	2.0 N=7
6	4.1 N=5	0.4 N=5	4.9 N=7	0.9 N=7	5.8 N=7	1.6 N=5

Figure A-5. READING GAINS OVER TWO YEARS BY ETHNICITY. Reading Total Mean on the grade equivalent scores and gains on the ITBS for students recommended for retention at the end of 1981-82. Gains shown from spring 1981 to spring 1982, spring 1982 to spring 1983, and spring 1981 to spring 1983. Anglo scores include Oriental and American Indian students. The 1981 score plus the one-year gain will not necessarily total the 1982 score due to differences in sample sizes.

TRENDS BY ETHNICITY - MATH

Figure A-6 shows math gains by ethnicity.

- Anglos tended to have slightly higher achievement when retained (1981-82) than minority students; this was also true after the students were retained (1982-83). Hispanics had slightly higher achievement when retained than Blacks except at grade four; after retention, Hispanics still had slightly higher achievement except at grades one and six.

- Gains between 1980-81 and 1981-82 (the year prior to retention) were similar for all ethnic groups except at grades one and six (sample sizes were small at these levels). Average gains (excluding grade one) varied from .5 to 1.2 grade equivalent years, with most in the seven- to eight-month range.

- Gains between 1981-82 and 1982-83 (when the students were actually retained) at the primary level did not vary by more than .1 of a grade equivalent year. However, gains at the intermediate level did vary, although small sample sizes must be kept in mind interpreting results (especially for Anglo students). Anglo students gained more than minority students at grade four; minority students gained more than Anglo students at grade five; and Anglo students gained more than minority students at grade six.

- Two-year gains did not differ greatly across groups except at grades four and six. Anglos gained more at grade four and Blacks seemed to gain more at grade six.

- Rate of gain between 1980-81 and 1981-82 and from 1981-82 to 1982-83 did not vary in a systematic way. Anglo gains increased slightly at grades three, four, and six, decreased at grade five, and stayed the same at grade two. Black gains increased at grade six, decreased at grades two, four, and five, and stayed the same at grade three. Hispanic gains decreased at grades five and six and stayed the same at grades two, three, and four.

Summary

Several main points can be made about the pattern of achievement of the 1981-82 retainees.

1. Their achievement in reading was lower than their achievement in math when they were retained. The students had made slightly smaller gains in reading during the year leading up to retention than in math.

MATH

GRADE	1981	1-YR. GAIN	1982	1 YR. GAIN	1983	2 YR. GAIN
1981-82 BLACK RETAINEES						
1			1.1 N=91	0.7 N=91	1.8 N=91	
2	1.2 N=28	0.8 N=28	2.0 N=37	0.6 N=37	2.6 N=37	1.4 N=28
3	2.0 N=22	0.8 N=22	2.8 N=33	0.8 N=33	3.6 N=33	1.7 N=22
4	2.6 N=34	0.6 N=34	3.3 N=41	0.4 N=41	3.7 N=41	1.0 N=34
5	3.3 N=39	0.8 N=39	4.1 N=41	0.7 N=41	4.8 N=41	1.5 N=39
6	3.5 N=8	1.2 N=8	4.6 N=10	0.6 N=10	5.2 N=10	1.7 N=8
1981-82 HISPANIC RETAINEES						
1			1.2 N=178	0.6 N=178	1.8 N=178	
2	1.4 N=62	0.7 N=62	2.1 N=82	0.7 N=82	2.8 N=82	1.4 N=62
3	2.3 N=39	0.8 N=39	3.0 N=47	0.8 N=47	3.8 N=47	1.6 N=39
4	2.8 N=55	0.5 N=55	3.3 N=63	0.5 N=63	3.8 N=63	1.1 N=55
5	3.6 N=38	0.9 N=38	4.5 N=43	0.8 N=43	5.3 N=43	1.6 N=38
6	3.9 N=13	0.7 N=13	4.7 N=14	0.5 N=14	5.2 N=14	1.3 N=13
1981-82 ANGLO RETAINEES						
1			1.3 N=71	0.7 N=71	2.0 N=71	
2	1.5 N=25	0.7 N=25	2.2 N=39	0.7 N=39	2.9 N=39	1.4 N=25
3	2.4 N=18	0.7 N=18	3.2 N=26	0.8 N=26	4.0 N=26	1.6 N=18
4	3.0 N=13	0.7 N=13	3.5 N=15	0.9 N=15	4.4 N=15	1.6 N=13
5	3.8 N=9	1.1 N=9	4.7 N=12	0.5 N=12	5.2 N=12	1.6 N=9
6	4.5 N=5	0.5 N=5	5.3 N=7	0.9 N=7	6.2 N=7	1.5 N=5

Figure A-6. MATH GAINS BETWEEN 1981 AND 1983 BY ETHNICITY. Math Total ITBS mean grade equivalent scores are shown for students retained at the end of 1981-82 for spring 1981, 1982, and 1983. One-year and two-year gains are also shown. Anglo scores include Oriental and American Indian students. The 1981 score plus the one-year gain does not necessarily total the 1982 score due to different sample sizes.

2. Once retained, students made slightly larger gains in reading than in math.

3. Compared to 1979-80 and 1980-81 retainees, the 1981-82 retainees were more likely to gain .8 or more of a GE year for one year of instruction during the grade repeated.

4. Anglo students tend to have slightly higher achievement in reading and math when retained compared to minority students. They also show slightly higher gains in reading at four of six grade levels in reading for the year retained. No systematic differences were found between Anglo, Black, and Hispanic students in terms of math gains for the retention year.

Evaluation Question D1-6. How much did LEP 1981-82 retainees gain between spring 1982 and spring 1983 compared to other retainees?

LEP retainees overall gained about one month less in reading, on the average, than retainees who were not LEP. However, LEP retainees gained about one month more, on the average, in math over one year.

Reading

LEP retainees start out one-two months behind other retainees in grade equivalent scores at the primary grades when they are retained. This difference increases to five months at grade one and three months at grade two after retention. At grade three, both LEP and other retainees score at the 3.3 GE level after retention. At the intermediate grades, the LEP retainees start out four to eight GE months lower when retained. The LEP retainees gain one month more at grade four than the other retainees but less at grades five and six.

Math

LEP retainees have slightly lower scores when retained, on the average, except at grade two. Differences are smaller than in reading, and are within one or two GE months except at grade six (where the difference is nine months based on a small sample).

The LEP retainees actually gain slightly more in math than other retainees except at grade four (one month more except at grade six). Fourth-grade LEP retainees gain one month less than their counterparts. The two groups actually have fairly comparable achievement by the end of the retention year except at grade four (where LEP retainees end up three months lower).

READING		LEP			NON-LEP				DIFF. IN GAINS
GRADE	N	82	GAIN	83	N	82	GAIN	83	
1	41	0.9	0.6	1.5	274	1.1	0.9	2.0	0.3
2	35	1.5	0.9	2.4	121	1.7	1.0	2.7	0.1
3	16	2.4	0.9	3.3	83	2.5	0.8	3.3	-0.1
4	15	2.3	0.8	3.1	98	3.1	0.7	3.8	-0.1
5	7	3.7	0.6	4.3	85	4.1	0.9	4.9	0.3
6	4	3.2	0.1	3.3	25	4.7	0.6	5.3	0.5
OVERALL MEANS	118	1.7	.74	2.44	686	2.16	.87	3.01	0.13
MATH		LEP			NON-LEP				DIFF. IN GAINS
GRADE	N	82	GAIN	83	N	82	GAIN	83	
1	65	1.0	0.7	1.8	280	1.2	0.6	1.9	-0.1
2	36	2.1	0.7	2.8	125	2.1	0.6	2.8	-0.1
3	20	2.9	0.9	3.7	87	2.0	0.8	3.8	-0.1
4	17	3.2	0.4	3.6	103	3.4	0.5	3.9	0.1
5	6	4.3	0.8	5.1	91	4.4	0.7	5.1	-0.1
6	4	4.0	1.3	5.3	27	4.9	0.5	5.4	-0.8
OVERALL MEANS	148	1.99	.71	2.74	713	2.44	0.62	3.12	-.09

Figure A-7. GAINS FOR LEP AND NON-LEP STUDENTS IN READING AND MATH: 1981-82 AND 1982-83. Spring ITBS grade equivalent scores for Reading Total and Math Total are shown. LEP students include all those with a status code of 0, 2-6, or 8.

READING

GRADE	79-80			80-81			81-82		
	80	Gain	81	81	Gain	82	82	Gain	83
1	1.06 N=129	.79	1.84	1.04 N=243	.83	1.87	1.05 N=315	.85	1.90
2	1.64 N=62	.84	2.48	1.58 N=116	.75	2.33	1.65 N=156	1.02	2.67
3	2.41 N=55	.78	3.19	2.46 N=87	.82	3.28	2.51 N=99	.82	3.34
4	3.20 N=29	.73	3.92	3.18 N=66	.74	3.93	3.00 N=113	.75	3.75
5	4.25 N=23	.78	5.03	4.19 N=53	.84	5.03	4.03 N=92	.84	4.87
6	4.40 N=10	.92	5.32	4.61 N=16	.72	5.33	4.48 N=29	.55	5.03

Figure A-8. ONE-YEAR GAINS IN READING FOR 1979-80, 1980-81, and 1981-82 RETAINEES. Students were recommended for retention at the end of each school year. ITBS Reading Total mean grade equivalent scores are shown.

MATH

GRADE	79-80			80-81			81-82		
	80	Gain	81	81	Gain	82	82	Gain	83
1	1.13 N=123	.60	1.74	1.13 N=248	.63	1.76	1.20 N=345	.65	1.84
2	2.03 N=62	.52	2.55	2.07 N=125	.47	2.54	2.13 N=161	.64	2.77
3	2.70 N=54	.61	3.31	2.79 N=91	.74	3.53	3.01 N=107	.81	3.82
4	3.39 N=31	.51	3.91	3.59 N=59	.57	4.16	3.34 N=120	.51	3.84
5	4.56 N=22	.55	5.11	4.48 N=51	.64	5.12	4.37 N=97	.72	5.08
6	5.02 N=10	.80	5.82	4.83 N=20	.91	5.74	4.79 N=31	.64	5.43

Figure A-9. ONE-YEAR GAINS IN MATH FOR 1979-80, 1980-81, AND 1981-82 RETAINEES. Students were recommended for retention at the end of each school year. ITBS Math Total mean grade equivalent scores are shown.

Evaluation Question D1-7. How do the achievement levels and gains in reading and math of 1981-82 retainees after one year compare to those of 1979-80 and 1980-81 retainees after one year?

In reading across all grades, the 1981-82 retainees score about the same as the 1979-80 and 1980-81 retainees. However, patterns vary by grade.

- There is a very slight upward trend in one-year gains (though probably not significant) at grades one, three, and five between 1979-80 and 1981-82 retainees. Gains were all about .8 of a GE year over a one-year period.
- Second-grade gains for the 1981-82 retainees (1.0 years) were considerably higher than those of 1979-80 and 1980-81 retainees (about .8 GE years).
- Grade four one-year gains have remained fairly stable (about .75 GE years).
- Grade six gains over one year were highest for 1979-80 retainees (.9 of a GE year) and lowest for the 1981-82 retainees (.55 of a GE year). The 1981-82 retainees gained almost .4 GE years less than the 1979-80 retainees after one year.

In math, the 1981-82 retainees made slightly higher gains than the 1979-80 and 1980-81 retainees at every grade but four and six.

- The differences at grades one, two, three, and five between 1981-82 retainees and 1979-80 retainees ranged from .05 of a GE year at grade one to .2 of a GE year at grade three. The size of gains ranged from .65 to .81 of a GE year.
- Gains at grade six were smallest for those retained at the end of 1980-81 (.64). Those retained at the end of 1979-80 and 1980-81 in sixth grade gained .8 to .9 GE years in one year.

Evaluation Question D1-8: How do the achievement levels and gains of 1981-82 retained students compare to a group of similar students (matched on factors such as previous achievement gains, age, sex, ethnicity, special education status, LEP A and B status) after one year?

A word of caution is necessary before matched-group results are discussed. While the matching program controls for a number of student characteristics, complete information is not available on factors which may impact retention decisions. The fact remains that the groups are different in one important way--one group was promoted and the other retained. Additional unknown factors may have been very important to teachers and principals in deciding who to retain. On the other hand, the fact that retention rates vary so widely across schools suggests that low achievers who would be retained in one school would not be in another. The matched groups still represent our best estimate of the progress retainees would have made if they had been promoted.

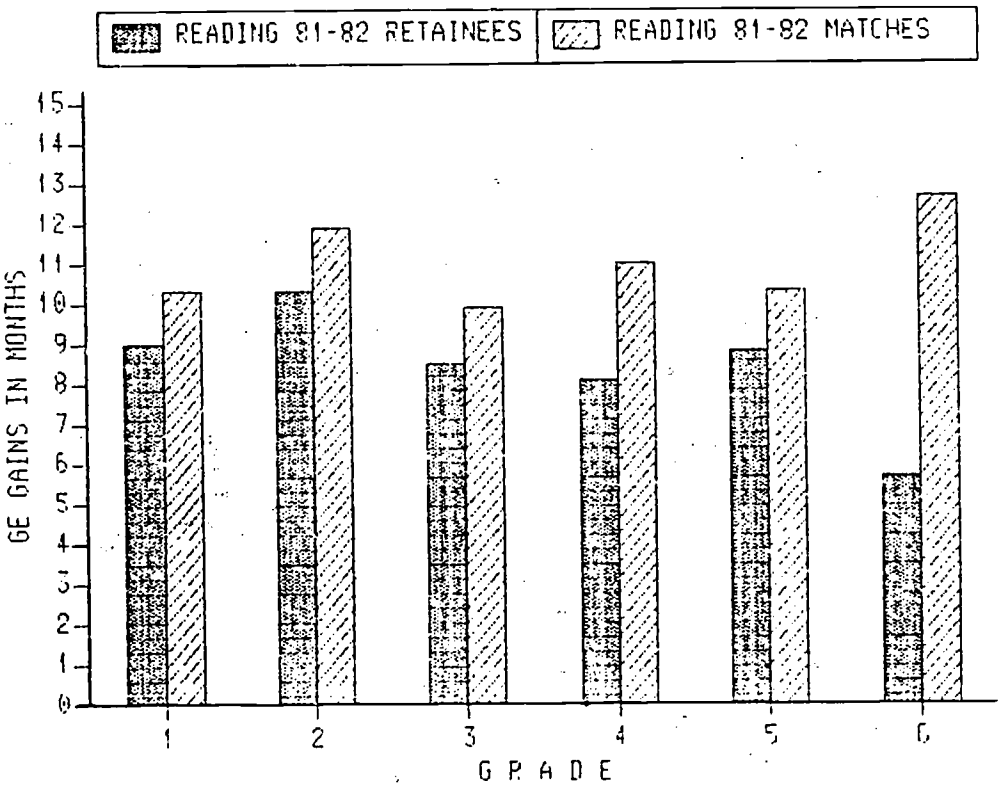
The 1981-82 retainees gained less than the matched nonretainees with similar characteristics. Gains were significantly different in math at every grade level and significantly different in reading at grades one, two, four, and six. Average growth in math for retainees was .66 of a GE year; in reading, it was .89 of a GE year.

Reading

Overall, retainees gained .89 of a GE year for one year of instruction while the matched nonretainees gained 1.07 GE years. Thus, retainees gained about .18 months less over a one-year period. Figure A-10 shows mean grade equivalent scores and gains.

Gains were significantly different in reading at grades one, two, four, and six. Retainees gained .9 of a GE year at grade one while matched students gained 1.03 GE years on the average. At grade two, retainees and matched students gained 1.03 and 1.19 GE years, respectively. It should be pointed out that the retainees at these grades showed respectable gains for low achievers; the matched students simply gained more. The size of the grade two matched group gain seems slightly higher for low achievers.

At grade four, retainees and matched low achievers gained .81 and 1.10 GE years, respectively (retainees gained almost three months less than matches). The grade six pattern is rather unusual in that the retainees gained considerably less than at any other grade level and the matched group gained considerably more. Although the matched group scores may be slightly inflated, it seems likely that the difference in scores would still be significant.



81-82 RETAINEES 81-82 MATCHES AISD OVERALL

	READING				READING				SPRING 1983	
GRADE	PRE	POST	GAIN	N	PRE	POST	GAIN	N	SCORE	N
0(NA)	0.0	0.0	0.0	0.	0.0	0.0	0.0	0.	-	-
1**	1.04	1.94	0.90	298.	1.11	2.14	1.03	298.	2.15	3969
2*	1.70	2.73	1.03	135.	1.73	2.92	1.19	135.	3.20	3758
3ns	2.55	3.41	0.85	91.	2.57	3.56	0.99	91.	4.14	3500
4**	3.07	3.87	0.81	93.	3.07	4.17	1.10	93.	5.11	3553
5ns	4.02	4.91	0.88	84.	3.93	5.00	1.08	84.	6.12	3557
6**	4.62	5.19	0.57	23.	4.57	5.84	1.27	23.	7.22	3826
TOTAL*	2.07	2.97	0.89	724.	2.10	3.13	1.07	724.	-	-

Figure A-10. READING SCORES FOR 1981-82 RETAINEES AND MATCHES. Reading Total mean grade equivalent ITBS scores are shown. A * and ** indicate significant differences between groups at the .05 and the .01 level or better based on regression analyses. The 1981-82 retainees were recommended for retention at the end of the 1981-82 school year.

The relationship found between pre- and posttest scores was linear at five of the six grades (except at grade one). In cases of significant differences in scores (at grades one, two, four, and six), the slopes were the same but intercepts varied. Retainees gained consistently less regardless of pretest scores (see Attachment A-2); Attachment A-2 also shows the curvilinear plan for grade one.

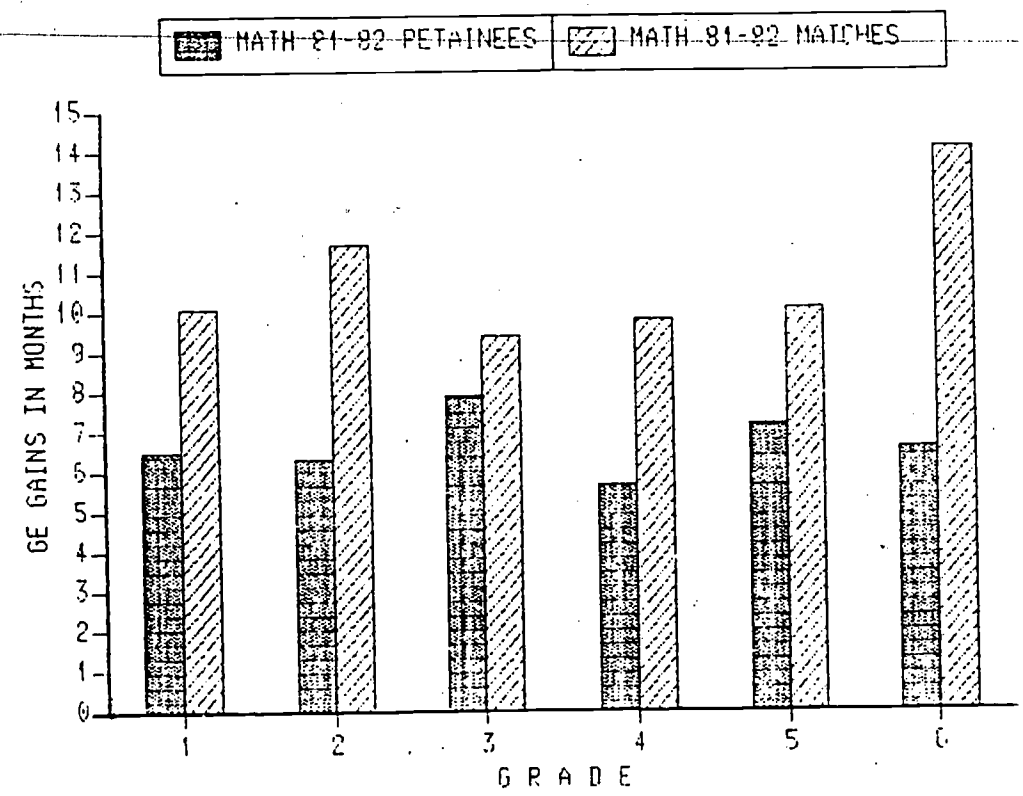
Gain sizes at grades two and six do suggest that the problems of poor measurement on pretest and/or posttest scores were not completely eliminated by adjustments made in the matching program this year.

Last year, the 1980-81 retainees gained significantly less than matched nonretainees at three grade levels (2, 4, and 5). It is interesting to note that differences at grade three were not significant either year. Retainees from 1981-82 did seem to gain a little more than those from 1980-81. While 1981-82 retainees gained about .9 of a GE year, 1980-81 retainees gained about .8 of a GE year after one year of instruction. It is unknown whether this difference is significant. It does seem, however, that increased emphasis on special help for retainees this past year may have had some impact.

Math

In math, the differences between groups are larger and retainees gain less than in reading. Average gains for retainees were .66 of a GE year compared to 1.06 GE years for the matched students. Gains were significantly less for retainees at all grade levels (see Figure A-11). Attachment A-2 shows the F values and line plots for grades one and two. At these two grades, differences between groups were not consistent across pretest scores. The retainees' rate of gain drops sharply from low pretest scores to high pretest scores. Those with low initial scores gain eight-nine months over the year, while those with high scores gain only about 4 or 4.5 months. The matched-group gains stay fairly even at grade two across pretest scores and drop only slightly (about one month) at grade one. These results are consistent with the argument that those who were doing fairly well in math when retained suffer from the lack of presentation of new skills.

Gains for the matched group are suspiciously high at grades two and six. However, the size of the retainee gains is so small that differences would probably still be significant even if matched gains were "deflated." The large gains at these two grade levels do suggest that the problem of artificially low pretest scores for matched students was not completely eliminated with adjustments made this year in matching. These results closely match those found last year, where 1980-81 retainees also gained significantly less than matched students at every grade level. Gain sizes for the two groups of retainees were also similar; 80-81 and 81-82 retainees gained .62 and .66 of a GE year over a one-year period, respectively. Since retainees seemed to gain about .8 of a GE year in math before retention, these results do suggest that students' math skills do suffer from retention.



	81-82 RETAINEES MATH				81-82 MATCHES MATH				AISD OVERALL SPRING 1983	
GRADE	PRE	POST	GAIN	N	PRE	POST	GAIN	N	SCORE	N
0(NA)	-0.05	0.65	0.70	17.	-0.04	1.54	1.58	17.	-	-
1*	1.20	1.85	0.65	328.	1.31	2.33	1.01	328.	1.94	3986
2*	2.14	2.77	0.63	150.	2.14	3.31	1.17	150.	3.00	3746
3*	3.02	3.81	0.79	101.	3.04	3.98	0.94	101.	4.06	3490
4**	3.35	3.91	0.57	98.	3.34	4.32	0.99	98.	4.97	3552
5**	4.37	5.09	0.72	92.	4.36	5.37	1.01	92.	6.03	3554
6**	4.79	5.44	0.65	30.	4.79	6.21	1.41	30.	7.14	3820
TOTAL*	2.32	2.98	0.66	816.	2.37	3.42	1.05	816.	-	-

Figure A-11. MATH SCORES FOR 1981-82 RETAINEES AND MATCHES. Math Total mean grade equivalent ITBS scores are shown. A * and ** indicate significant differences between groups at the .05 and the .01 level or better based on regression analyses. The 1981-82 retainees were recommended for retention at the end of the 1981-82 school year.

Evaluation Question D1-9: How does the average achievement of the 1981-82 retainees and the matched group compare to the average for all AISD students in the same grade?

In terms of 1982-83 ITBS reading scores, retainees score below average at every grade level even after retention. The difference increases from .21 of a grade equivalent year at grade one to 2.03 grade equivalent years at grade six. Second graders score .47 of a GE year below the AISD average, third graders .73 of a GE year, and fourth and fifth graders 1.24 and 1.21 of a GE year below average (see Figure A-10).

The matched students score a little higher than retainees in GE's overall, but are further away from the average for their classmates. Since they were promoted, they must meet the higher standard of their same-age classmates. These promoted low achievers score 1.06 (at grade two) to 2.22 (at grade six) GE years below their classmates, with increasing differences at each grade level.

In math, retainees scored .09 (at grade one) to 1.7 (at grade six) GE years behind the average for their younger classmates at the end of the year retained (see Figure A-11). Second and third graders score .23-.25 GE years below the average for their grade, and fourth and fifth graders score 1.06 to .94 GE years below their grade level. Thus, primary-grade retainees score closer to their younger classmates than do intermediate-level retainees.

The matched group of low achievers who were promoted again scored higher in absolute terms than the retainees, but were further behind their same-age classmates. The difference increased from .67 GE years at grade two to 1.77 GE years at grade six.

Evaluation Question D1-10: How does the achievement of 1980-81 retainees and a matched group compare after two years?

Students retained at the end of 1980-81 repeated a grade in 1981-82 and completed the subsequent grade in 1982-83. This group was retained during the transition year when the new policy had been published but not officially adopted.

Regression analyses tested whether there was any difference in gains after two years between those retained and those with similar characteristics who were promoted. Comparisons were limited to grades one-four due to small sample sizes at grades five and six (see Figures A-12 and A-13 and Attachment A-3).

Last year's one-year followup showed retainees gaining significantly less in reading at grades two and four and significantly less in math at grades one, two, and four. After two years, regression analyses revealed the following:

- Retainees gained significantly less than nonretainees over the two-year period at every grade (1-4) and in both reading and math.

- Differences were smallest at grade three in reading (retainees gained .12 GE years less over the two-year period). However, third-grade retainees gained .53 years less in math over two years compared to matched students.

- Retainees gained .37 (in reading at grade two) to .69 (in math at grade two) grade equivalent years less than the non-retainees with similar characteristics after two years.

Attachment A-3 shows the significance values for all F tests and the nature of the relationships between pre- and posttest scores for the groups. Four cases of curvilinear and four cases of linear relationships were found. In most cases, retainees consistently gained less than nonretained matches regardless of pretest scores. Line plots for grades one and three in reading and grades one and two in math are also included in attachment A-3 because of the more unusual nature of the relationships.

- At grade one in reading, gains for low pretest scores for both groups are larger than for those with high pretests. Up to pretest scores of about .7, all students gain up to about the same level (2.2 GE for retainees and 2.9 GE for matched students). Gains for matched students are considerably larger than for retainees at all pretest levels.

- At grade three, retainees gain a little more than matches in reading up to pretest levels of about 2.1 GE years. The trend is reversed from there on, with matched students gaining more. The difference between groups is fairly small.

- In math at grade 1, retainees consistently gain less than matched students. Retainees with low pretest scores show considerably higher gains than those with high pretest scores (.9 versus .4 GE years).

- In math at grade two, retainee gains drop off slightly with higher pretest scores, but remain at reasonable levels (they drop from gains of about 1.3 to 1.0 GE years). Matched students show good gains which increase across pretest scores. They gain about 2 to 2.3 GE years depending on pretest scores.

Mean grade equivalent scores and gains in reading and math for 1980-81, 1981-82, and 1982-83 are shown in Figures A-12 and A-13. Examination of these figures reveals some interesting patterns of changes in scores over the two-year period.

- In reading, the size of the gains made for retainees while they were repeating a grade were larger than those once they were promoted at every grade level except five. The comparison group showed losses at every grade but one and six.

- In math, gains usually improved for retainees once they were again promoted (at every grade but three). Comparison students showed smaller gains at four grades, the same gains at one grade, and higher gains at one grade.

This pattern suggests that retainees' math performance improves because they are being presented with more new material. In reading, however, retainees seem to bog down and be unable to keep up the same gains (perhaps precisely because of new and more difficult material).

Control students show smaller gains between 1981-82 and 1982-83 than for the previous year in four of six cases in both subject areas. This at least suggests that gains at some grades for the first year (especially grades two and four) may have been slightly inflated by students with artificially low pretest scores. This problem was considered in the 1981-82 retainee matched program. Two-year gains should balance this problem somewhat, but differences in gains between the groups still could be inflated somewhat.

READING - MATCHED GROUPS

80-81 RETAINEES

GRADE	80-81	GAIN	81-82	GAIN	82-83	2 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0
1 **	1.07	0.86	1.93	0.51	2.44	1.37
N	162	162	162	162	162	162
2 **	1.60	0.74	2.34	0.70	3.04	1.45
N	85	85	85	85	85	85
3 *	2.44	0.81	3.25	0.68	3.94	1.50
N	59	59	59	59	59	59
4 *	3.30	0.81	4.11	0.73	4.84	1.54
N	48	48	48	48	48	48
5	4.17	0.82	5.00	0.94	5.94	1.76
N	42	42	42	42	42	42
6	4.81	0.86	5.67	0.56	6.23	1.42
N	13	13	13	13	13	13
TOTAL	2.08	0.82	2.89	0.65	3.54	1.47
N	409	409	409	409	409	409

80-81 CONTROL

GRADE	80-81	GAIN	81-82	GAIN	82-83	2 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0
1	1.09	0.89	1.98	1.00	2.98	1.89
N	162	162	162	162	162	162
2	1.61	1.09	2.70	0.73	3.43	1.82
N	85	85	85	85	85	85
3	2.49	0.84	3.33	0.78	4.11	1.62
N	59	59	59	59	59	59
4	3.27	1.16	4.43	0.78	5.21	1.94
N	48	48	48	48	48	48
5	4.19	1.13	5.32	0.78	6.10	1.91
N	42	42	42	42	42	42
6	4.79	0.53	5.32	1.43	6.80	2.01
N	13	13	13	13	13	13
TOTAL	2.09	0.97	3.06	0.88	3.94	1.85
N	409	409	409	409	409	409

Figure A-12. READING TOTAL ITBS SCORES FOR 1980-81 RETAINEES AND MATCHES. Mean grade equivalent scores and gains for 1980-81, 1981-82, and 1982-83 are shown. A * and ** indicate significant differences between groups at the .05 and .01 level, respectively, based on regression analyses. The 1980-81 retainees were recommended for retention at the end of 1980-81, repeated the grade in 1981-82, and were promoted in 1982-83.

82.42

MATH - MATCHED GROUP

80-81 RETAINEES

GRADE	80-81	GAIN	81-82	GAIN	82-83	2 YR GAIN
0	0.0	0.0	0.0	[illegible]	[illegible]	[illegible]
N	0	0	0	0	0	0
1 *	1.13	0.64	1.77	0.73	2.51	1.37
N	165	165	165	165	165	165
2 *	2.10	0.48	2.59	0.80	3.39	1.29
N	84	84	84	84	84	84
3 **	2.84	0.73	3.58	0.66	4.23	1.39
N	65	65	65	65	65	65
4 **	3.63	0.59	4.22	0.90	5.12	1.49
N	40	40	40	40	40	40
5	4.30	0.61	4.91	0.80	5.70	1.41
N	36	36	36	36	36	36
6	4.75	0.96	5.71	1.12	6.83	2.08
N	15	15	15	15	15	15
TOTAL	2.27	0.63	2.90	0.77	3.67	1.40
N	405	405	405	405	405	405

80-81 CONTROL

GRADE	80-81	GAIN	81-82	GAIN	82-83	2 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0
1	1.21	0.99	2.20	1.00	3.20	1.99
N	165	165	165	165	165	165
2	2.10	1.22	3.33	0.76	4.09	1.98
N	84	84	84	84	84	84
3	2.86	0.90	3.77	1.02	4.79	1.92
N	65	65	65	65	65	65
4	3.57	1.13	4.71	0.91	5.62	2.04
N	40	40	40	40	40	40
5	4.26	0.96	5.22	0.91	6.13	1.87
N	36	36	36	36	36	36
6	4.95	1.30	6.15	0.55	6.70	1.85
N	15	15	15	15	15	15
TOTAL	2.30	1.05	3.35	0.92	4.27	1.97
N	405	405	405	405	405	405

Figure A-13. MATH TOTAL ITBS SCORES FOR 1980-81 RETAINEES AND MATCHES. Mean grade equivalent scores and gains for 1980-81, 1981-82, and 1982-83 are shown. A * and ** indicate significant differences between groups at the .05 and .01 level, respectively, based on regression analyses. Regression analyses were done only at grades one-four. The 1980-81 retainees were recommended for retention at the end of 1980-81, repeated the grade in 1981-82, and were promoted in 1982-83.

Evaluation Question D1-11: How does the achievement of students retained as first and second graders in 1979-80 and a matched group compare after three years?

Mean grade equivalent scores in reading and math are shown in Figures A-14 and A-15 for grades one-six. Regression analyses were done at grades one and two using Reading Total and Math Total scores from 1979-80 and 1982-83. Attachment A-4 shows F values and a line plot for grade one in reading.

At grade one, a significant difference was found in reading ($p<.001$) and math ($p<.03$) between the retainees and matched low achievers. Retainees gained about 2.27 years over a three-year period, six months less than the 2.88 GE years gained by matched low achievers. In reading at grade one, gains are fairly even regardless of pretest scores up to a level of .66 GE year, drop slightly from .66-1.38, and then increase slightly for the highest pretest scores.

At grade two, the matched group gained more than the retainees in math but not in reading over three years. In math, retainees gained 1.83 years compared to 2.48 years for the matched students with similar characteristics (six months' difference). In reading, both groups gained 2.35 GE years, an average of .78 GE years per year of instruction.

The relationship between pretest and posttest scores was linear in math and curvilinear in reading. All three cases of significant differences revealed parallel lines with different intercepts. Retainees consistently gained less than matched low achievers across all pretest scores. Attachment A-4 shows correlations between pre- and posttest variables and F ratios.

READING--MATCHED GROUPS 79-80 RETAINEES

GRADE	79-80	GAIN	80-81	GAIN	81-82	GAIN	82-83	3 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0	0	0
1**	1.00	0.87	1.87	0.56	2.53	0.86	3.27	2.27
N	62	62	62	53	53	53	62	62
2	1.59	0.98	2.57	0.72	3.41	0.66	3.94	2.35
N	22	22	22	18	18	18	22	22
3	2.43	0.80	3.23	0.50	3.75	0.73	4.51	2.08
N	26	26	26	24	24	24	26	26
4	3.36	0.75	4.12	0.67	4.83	0.99	5.69	2.33
N	20	20	20	18	18	18	20	20
5	4.75	0.55	5.30	1.43	6.69	0.71	7.43	2.68
N	10	10	10	9	9	9	10	10
6	4.15	-0.35	3.80	0.10	3.90	0.95	4.85	0.70
N	2	2	2	2	2	2	2	2
TOTAL	2.00	0.82	2.81	0.65	3.55	0.82	4.26	2.26
N	142	142	142	124	124	124	142	142

79-80 CONTROL

GRADE	79-80	GAIN	80-81	GAIN	81-82	GAIN	82-83	3 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0	0	0
1	1.03	1.13	2.17	0.86	3.14	0.85	3.91	2.88
N	62	62	62	56	56	56	62	62
2	1.57	1.00	2.57	0.59	3.19	0.77	3.92	2.35
N	22	22	22	18	18	18	22	22
3	2.42	0.84	3.26	0.87	4.14	0.88	5.10	2.68
N	26	26	26	22	22	22	26	26
4	3.34	1.16	4.50	1.12	5.71	0.71	6.47	3.12
N	20	20	20	18	18	18	20	20
5	4.69	1.47	6.16	0.75	7.40	1.22	8.09	3.40
N	10	10	10	8	8	8	10	10
6	4.20	1.60	5.80	0.70	6.50	0.50	7.00	2.80
N	2	2	2	2	2	2	2	2
TOTAL	2.00	1.09	3.09	0.85	4.03	0.84	4.93	2.83
N	142	142	142	124	124	124	142	142

Figure A-14. READING TOTAL ITBS SCORES FOR 1979-80 RETAINEES AND MATCHES. Mean grade equivalent scores for 1979-80 through 1982-83 are shown. Regression analyses were done at grades one and two to compare three-year gains. One * and two ** indicate significant differences between groups at the .05 and .01 levels, respectively. The 1979-80 retainees were recommended for retention in the spring of 1980.

MATH--MATCHED GROUPS

79-80 RETAINEES

GRADE	79-80	GAIN	80-81	GAIN	81-82	GAIN	82-83	3 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0	0	0
1*	1.19	0.61	1.80	0.91	2.72	0.77	3.47	2.28
N	54	54	54	49	49	49	54	54
2**	2.04	0.54	2.58	0.90	3.55	0.52	3.87	1.83
N	33	33	33	26	26	26	33	33
3	2.72	0.70	3.42	0.67	4.09	0.67	4.73	2.01
N	31	31	31	28	28	28	31	31
4	3.52	0.59	4.11	1.03	5.09	0.95	5.99	2.47
N	19	19	19	17	17	17	19	19
5	5.01	0.50	5.51	0.97	6.70	0.99	7.47	2.46
N	10	10	10	9	9	9	10	10
6	4.40	1.30	5.70	-0.80	4.90	2.30	7.20	2.80
N	1	1	1	1	1	1	1	1
TOTAL	2.28	0.61	2.89	0.86	3.78	0.75	4.44	2.16
N	148	148	148	130	130	130	148	148

79-80 CONTROL

GRADE	79-80	GAIN	80-81	GAIN	81-82	GAIN	82-83	3 YR GAIN
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0	0	0	0	0	0	0	0
1	1.19	0.93	2.12	0.94	3.10	0.72	3.77	2.58
N	54	54	54	49	49	49	54	54
2	2.11	0.92	3.03	0.79	3.82	0.76	4.59	2.48
N	33	33	33	30	30	30	33	33
3	2.74	1.22	3.95	0.73	4.81	1.00	5.81	3.07
N	31	31	31	29	29	29	31	31
4	3.51	0.96	4.47	0.87	5.39	1.16	6.37	2.96
N	19	19	19	17	17	17	19	19
5	4.94	1.39	6.33	1.30	7.63	0.88	8.51	3.57
N	10	10	10	10	10	10	10	10
6	4.30	2.40	6.70	-1.00	5.70	0.90	6.60	2.30
N	1	1	1	1	1	1	1	1
TOTAL	2.29	1.03	3.32	0.88	4.26	0.86	5.05	2.76
N	148	148	148	136	136	136	148	148

Figure A-15. MATH TOTAL ITBS SCORES FOR 1979-80 RETAINEES AND MATCHES. Mean grade equivalent scores and gains for 1979-80 through 1982-83 are shown. A * and ** indicate significant differences between groups at the .05 and .01 level, respectively, based on regression analyses. Regression analyses were done only at grades one and two. Analyses were done to compare three-year gains only at grades one and two. The 1979-80 retainees were recommended for retention in the spring of 1980.

SUMMER SCHOOL FOLLOWUP

Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued and/or modified?

> Evaluation Question D2-4: How did the achievement of retainees who did and did not attend summer school compare on emphasized math and reading skills?

Because 1981-82 retainees who attended summer school seemed to show better reading and math skills in the fall but 1980-81 retainees did not, analyses were done separately for the two groups. In reading, Vocabulary scores were examined at grade one through six as the skills emphasized. Math skills emphasized were those tested by Math Problems and Math Concepts on the ITBS.

1981-82 Retainees

Reading: Five regression analyses in reading revealed no significant differences between 1981-82 retainees who attended summer school and those who did not. A linear relationship was found between pre- and posttest scores. The gains of 1981-82 retainees who attended summer school ranged in size from .49 (at grade four) to 1.17 (at grade six) GE years. Third- and fourth-grade gains were considerably smaller than those made at the other grade levels.

Math. No significant differences were found in math problem solving skills based on ITBS scores. Gains for retainees who attended summer school ranged from .52 (at grade four) to 1.04 (at grade three) grade equivalent years (see Figure A-17).

Two significant differences in favor of retainees who attended summer school were found in Math Concepts. On the average, retainees who attended summer school after repeating second grade gained about .87 GE years compared to .74 GE years for those who did not. For students with low pretest scores, retainees who attended summer school showed better gains than those who did not. At grade five/six, retainees who attended summer school gained .58 GE years compared to .52 GE years for those who did not (see Figure A-18). Retainees who attended summer school with higher pretest scores showed better gains than those who did not attend. Both the slopes and intercepts for the two groups at grades two and four differed. Line plots are shown in Attachment A-5. A linear relationship was found between pre- and posttest scores in both math concepts and problem solving.

Math Computation was not emphasized during summer school but scores are shown in Figure A-19 for informational purposes. Retainees who attended summer school at grades one, two, and three appeared to have slightly higher (one to two months) mean GE scores than those who did not. These may or may not be significant differences. Students who attended summer school gained about .67 GE years overall in Math Computation while those who did not gained about .61 GE years.

SUBJECT AND SUBTEST(S): Vocabulary Grade 1
Reading Comprehension Grade 2-6 GROUP: 81-82 Retainees in Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST	F Sig.
1	93	.94	1.92	.24	.98	.74	-.8 to +2.6	7	30	ns
2	42	1.71	2.62	.49	.91	.57	-.7 to +2.3	8	67	ns
3	25	2.62	3.12	.45	.51	.73	-.8 to +2.0	9	44	ns
4	24	3.08	3.57	.60	.49	.80	-2.1 to +1.8	10	49	.052
5	31	3.85	4.60	.39 (5/6)	.75	1.17	-1.3 to +2.6	11	54	ns (5/6)
6	3	4.73	5.90		1.17	1.46	- .2 to +2.7	12	56	
	218									

SUBJECT AND SUBTEST(S): Vocabulary Grade 1
Reading Comprehension Grade 2-6 GROUP: 81-82 Retainees Not in Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	93	.95	1.91	.17	.96	.86	-1.7 to +2.6	7	30
2	42	1.59	2.66	.59	1.06	.67	- .8 to +2.4	8	67
3	25	2.43	3.23	.45	.80	.76	- .7 to +2.3	9	44
4	24	3.15	3.85	.69	.70	.86	-1.8 to +2.1	10	49
5	31	3.83	5.15	.44 (5/6)	1.32	.87	0.0 to +2.8	11	54
6	3	4.40	3.80		-.60	1.04	-1.8 to 0.0	12	56

Figure A-16. READING ITBS SCORES FOR 1981-82 RETAINEES. Mean grade equivalent scores for students taking the 1978 version of the ITBS (Form 7) are shown. The top half shows information for 1981-82 retainees (retained in spring 1982) who attended summer school; the bottom half focuses on those who did not attend. SSPP refers to the Summer School Pilot Project.

SUBJECT AND SUBTEST(S): Math Problem-Solving GROUP: 81-82 Retainees Attending Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST	F Sig.
1	103	1.12	1.86	.48	.74	.65	-1.1 to +2.5	7	22	ns
2	46	2.00	2.59	.23	.59	.80	-1.0 to +2.1	8	24	ns
3	29	2.53	3.57	.18	1.04	.88	- .8 to +2.4	9	23	ns
4	32	3.17	3.68	.41	.52	.89	-1.1 to +2.7	10	25	ns
5	36	3.95	4.80	.61 (5/6)	.86	.90	-1.2 to +2.4	11	27	ns (5/6)
6	3	3.73	4.33		.60	.53	+ .0 to +1.0	12	29	
	249									

SUBJECT AND SUBTEST(S): Math Problem-Solving GROUP: 81-82 Retainees Not Attending Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	103	1.10	1.73	.43	.63	.74	-1.2 to +2.3	7	22
2	46	1.97	2.55	.50	.58	.65	- .9 to +2.0	8	24
3	29	2.62	3.55	.31	.93	1.03	- .7 to +3.0	9	23
4	32	3.15	3.45	.57	.31	.85	-1.4 to +1.8	10	25
5	36	4.03	4.96	.64 (5/6)	.93	.75	- .9 to +2.4	11	27
6	3	4.47	4.83		.37	1.79	-1.7 to +1.4	12	29

Figure A-17. MATH PROBLEM-SOLVING SCORES FOR 1981-82 RETAINEES. Mean grade equivalent scores on the 1978 ITBS Form 7 are shown for those who attended and did not attend summer school.

81-82

SUBJECT AND SUBTEST(S): Math Concepts GROUP: Retainees Attending Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST	F Sig.
1	104	1.13	1.83	.38	.70	.60	- .4 to +2.6	7	33	ns
2	47	1.88	2.75	.35	.87	.63	- .6 to +2.2	8	36	.006
3	29	2.65	3.58	.51	.93	.80	- .4 to +2.9	9	28	ns
4	32	3.32	3.89	.39	.58	.74	-1.1 to +1.7	10	32	ns
5	36	4.38	5.05	.73 (5/6)	.67	.82	- .8 to +2.7	11	37	.045 (5/6)
6	3	5.07	4.57	-.50	.58	.36	- .8 to -.10	12	40	
	251		4.43	5.01						

SUBJECT AND SUBTEST(S): Math Concepts GROUP: 81-82 Retainees Not Attending Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	104	1.13	1.76	.38	.63	.67	- .8 to +2.5	7	33
2	47	1.96	2.70	.63	.74	.52	- .2 to +2.1	8	36
3	29	2.91	3.71	.56	.80	.81	- .4 to +2.7	9	28
4	32	3.28	3.83	.71	.54	.70	- .6 to +2.4	10	32
5	36	4.38	4.90	.55 (5/6)	.52	.84	-1.7 to +2.2	11	37
6	3	4.70	5.23		.53	.55	- .1 to + .9	12	40

Figure A-18. MATH CONCEPTS SCORES FOR 1981-82 RETAINEES. Mean GE scores on the ITBS (1978 Form 7) are shown for those attending and not attending summer school.

SUBJECT AND SUBTEST(S): Math Computation GROUP: 81-82 Retainees in Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	102	1.34	2.02		.68	.47	- .6 to +1.6	7	26
2	46	2.26	2.94		.68	.45	- .4 to +1.7	8	28
3	29	2.99	3.76		.76	.62	- .2 to +2.1	9	39
4	32	3.39	3.97		.58	.61	- .7 to +2.0	10	42
5	36	4.58	5.27		.69	.93	-1.1 to +2.6	11	45
6	4	4.90	5.10		.20	.26	- .1 to + .5	12	45
	249								

SUBJECT AND SUBTEST(S): Math Computation GROUP: 81-82 Retainees Not in Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	102	1.34	1.93		.59	.54	- .6 to +2.1	7	26
2	46	2.33	2.93		.60	.58	- .8 to +2.2	8	28
3	29	3.15	3.74		.59	.53	- .6 to +1.3	9	39
4	32	3.53	4.12		.59	.79	-1.2 to +2.2	10	42
5	36	4.51	5.21		.71	.72	- .9 to +2.2	11	45
6	4	5.23	5.65		.43	.28	+ .1 to + .7	12	45

Figure A-19. MATH COMPUTATION ITBS SCORES. Mean grade equivalent scores for students taking Form 7 of the ITBS (normed in 1978). Scores for retainees attending and not attending summer school are shown.

1980-81 Retainees

Regression analyses for the skills emphasized were also run for the 1980-81 retainees who did and did not attend summer school. Analyses were carried out for grades one, two, and three-five combined. None of the 1980-81 retainees who had scores available were in the sixth grade.

No significant differences were found in either reading or math between the groups. All sample sizes were small (6 to 33 per group) so gains varied widely by grade. Scores are shown in Figures A-20 through A-23. The chart below shows the range of mean gains made by those who did and did not attend summer school who were retained at the end of the 1980-81 school year.

1980-81 RETAINEES--MEAN GAINS IN GE'S

Area	Attended Summer School	Did Not Attend Summer School
Reading	.29-1.63	.12-.87
Math Problem-Solving	.45-.82	.0-1.66
Math Concepts	.60-1.12	.23-1.20

Summary

Overall, the summer session appeared to have little long-term impact on student achievement--at least as measured by the ITBS. There is some indication that math concepts skills were improved slightly. Since 1981-82 retainees who attended summer school did appear to have better skills than those who did not based on teacher judgements in the fall, it may be that this advantage was largely lost during the year. Five weeks may not be long enough to have an impact on long-term achievement, or the ITBS subtests chosen may not have matched the curriculum closely enough to be sensitive to the change. The impact on math concepts may reflect the greater time spent on math relative to the regular school year per day. Reading scores also tended to be somewhat lower initially, which could have made it a little more difficult for teachers to impact skills in five weeks. Reading is generally more difficult to remediate based on AISD's high school tutorial classes.

SUBJECT AND SUBTEST(S): Vocabulary Grade 1
Reading Comprehension Grades 2-6 GROUP: 1980-81 Retainees Attended Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST	F Sig.
1	31	1.73	2.27	.49	.54	.71	-1.2 to 1.8	7	30	ns
2	16	2.34	2.93	.58	.59	.65	- .5 to +1.9	8	67	ns
3	9	2.84	3.13	.82 (3-5)	.29	.77	-1.5 to + .9	9	44	ns (3 - 5)
4	6	4.32	5.17		.85	.93	- .3 to +2.0	10	49	
5	8	4.63	6.25		1.63	1.04	- .2 to +3.2	11	54	
	70									

82.42

SUBJECT AND SUBTEST(S): Vocabulary Grade 1
Reading Comprehension Grades 2-6 GROUP: Did Not Attend Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	31	1.69	2.24	.59	.55	.68	- .7 to +2.0	7	30
2	16	2.23	2.76	.68	.53	.57	- .5 to +1.5	8	67
3	9	2.96	3.82	.63 (3-5)	.87	.93	- .1 to +2.9	9	44
4	6	4.42	4.53		.12	1.02	-1.3 to +1.6	10	49
5	8	4.53	5.21		.69	1.11	- .7 to +1.8	11	54

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Figure A-20. MATH CONCEPTS SCORES FOR 1980-81 RETAINEES. Mean GE scores on Form 7 of the ITBS (1978) for those attending and not attending summer school are shown.

SUBJECT AND SUBTEST(S): Math Problem Solving GROUP: 1980-81 Retainees Attended Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST	F Sig.
1	33	1.81	2.63	.47	.82	.86	-1.0 to +3.0	7	22	ns
2	19	2.42	3.14	.15	.73	1.02	-2.1 to +2.2	8	24	ns
3	8	3.06	3.80	.55 (3-5)	.74	1.24	-1.5 to +2.2	9	23	ns (3 - 5)
4	6	4.28	4.73		.45	.99	- .7 to +2.0	10	25	
5	6	4.37	4.92		.55	1.21	-1.2 to +2.3	11	27	
	72									

82.42

SUBJECT AND SUBTEST(S): Math Problem Solving GROUP: Did Not Attend Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	33	1.86	2.65	.24	.78	.91	-1.3 to +3.1	7	22
2	19	2.34	3.05	.50	.71	.70	- .6 to +1.9	8	24
3	8	3.10	4.76	.25 (3-5)	1.66	.75	.4 to +2.9	9	23
4	6	4.27	4.27		0.0	1.13	-1.5 to +1.4	10	25
5	6	4.45	5.28		.83	.78	- .1 to +1.9	11	27

A-40

Figure A-21. MATH PROBLEM-SOLVING SCORES FOR 1980-81 RETAINEES ON THE ITBS FOR THOSE ATTENDING AND NOT ATTENDING SUMMER SCHOOL. Form 7 of the ITBS normed in 1978 was given in April of both years. Mean grade equivalent scores are shown.

SUBJECT AND SUBTEST(S): Math Concepts GROUP: 1980-81 Retainees Attended Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST	F Sig.
1	33	1.89	2.55	.80	.65	.51	-.6 to +1.8	7	33	ns
2	20	2.09	3.21	.49	1.12	.68	-.7 to +2.2	8	36	ns
3	8	3.11	3.71	.73 (3-5)	.60	.82	-.5 to +1.9	9	28	ns
4	6	4.57	5.53		.97	.73	-.1 to +1.9	10	32	ns
5	6	4.95	5.57		.62	1.08	-.6 to +2.3	11	37	ns
	73									

82-42

SUBJECT AND SUBTEST(S): Math Concepts GROUP: Did Not Attend Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	33	1.78	2.64	.58	.86	.57	- .3 to +2.2	7	33
2	20	2.47	3.18	.39	.71	.75	- .5 to +2.5	8	36
3	8	3.16	4.36	.55 (3-5)	1.20	.69	.3 to +2.6	9	28
4	6	4.53	4.77		.23	1.01	- .8 to +2.1	10	32
5	6	4.40	5.45		1.05	.83	- .2 to +2.1	11	37

A-41

Figure A-22. MATH CONCEPTS SCORES FOR 1980-81 RETAINEES. Mean GE scores on Form 7 of the ITBS (1978) for those attending and not attending summer school are shown.

SUBJECT AND SUBTEST(S): Math Computation GROUP: 80-81 Retainees Attended Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	33	2.04	2.82		.78	.62	- .3 to +2.7	7	26
2	18	2.61	3.48		.87	.63	- .2 to +2.1	8	28
3	8	3.71	4.29		.58	1.05	- .9 to +1.7	9	39
4	6	5.05	5.35		.30	.81	-.6 to +1.3	10	42
5	6	4.95	6.45		1.50	.82	-.6 to +2.8	11	45
	71								

SUBJECT AND SUBTEST(S): Math Computation GROUP: Did Not Attend Summer School

1982 SSPP GRADE	n	PRETEST MEAN GE	POSTTEST MEAN GE	CORR(r) PRE/POST	GAIN MEAN GE	GAIN SD	GE SCORE RANGE-GAINS	ITBS LEVEL	# ITEMS ON SUBTEST
1	33	2.01	2.79		.78	.50	-.3 to +1.8	7	26
2	18	2.87	3.40		.53	.56	-1.2 to +1.5	8	28
3	8	3.69	4.33		.64	.77	-1.1 to +1.3	9	39
4	6	4.68	5.65		.97	.77	.1 to +1.9	10	42
5	6	4.95	5.80		.85	.63	.2 to +1.7	11	45

Figure A-23. MATH COMPUTATION SCORES FOR 1980-81 RETAINEES. Mean GE scores on Form 7 of the ITBS (1978) for those attending and not attending summmer school are shown.

Reading Objective

As of April 1983, retainees participating in the 1982 summer school will show higher achievement in reading areas emphasized than will retainees who did not participate based on the Iowa Tests of Basic Skills (ITBS).

This objective was not met. Retainees who attended summer school did not show higher achievement in reading skills emphasized compared to those who did not based on spring 1982 and 1983 ITBS scores.

Math Objective

As of April 1983, retainees participating in the 1982 summer school will show higher achievement in math areas emphasized than will retainees who did not participate based on the Iowa Test of Basic Skills (ITBS).

Retainees who attended summer school scored higher than those who did not in Math Concepts at grades two and five-six. They did not score higher in Math Concepts at grades one, three, and four.

Retainees who attended summer school did not show significantly higher achievement in Math Problem Solving than those who did not at any of the grade levels.

Spanish Reading

It was hoped that the summer school would improve LEP participants' ability to read in Spanish. This was difficult to measure for several reasons:

- The Prueba de Lectura, a Spanish Reading test, is given each spring but only to students in grades two through six.
- Only nine of the 39 LEP summer school participants had pre- and posttest scores.
- Any gains made by the summer school participants from spring to spring are probably due to a combination of summer school and regular school-year instruction.
- A good comparison group is not available, in that scores are only reported for all students tested each year at each grade. Scores are not reported on a pre- and post-test basis. Also, scores are reported separately for those LEP students who did and who did not receive Spanish instruction during the year. It is not known whether the summer school participants received this instruction or not during the regular school year.

Given these precautions, the best comparison available seems to be that of LEP summer school students' versus Spanish-dominant students who received Spanish instruction during the regular school year.

GRADE 82 AND 83		81-82	82-83
2 - 3	SS (N = 4)	35.5	47.0
	All	48.0 (N=77)	61.9 (N=52)
3 - 4	SS (N = 2)	50.0	67.5
	All	60.5 (N = 37)	69.4 (N=33)
4 - 5	SS (N = 2)	48.5	66.0
	All	61.7 (N = 32)	70.2 (N=22)
5 - 6	SS (N = 1)	71	87
	All	69.6 (N = 15)	72.1 (N=18)
Total (Mean)		51.25	66.9
		59.95	68.4

Figure A-24. PRUEBA DE LECTURA SCORES FOR 1981-82 AND 1982-83. Raw scores are shown for those attending summer school with pre- and posttest scores (SS) and all those receiving Spanish instruction during the regular school year (All).

Although extreme caution must be taken in interpreting these scores, this information overall suggests that LEP students in summer school scored closer to average after the program. The only grade at which this pattern does not hold is for those in grade three in 1982-83.

LEP Reading and Math

No formal objective was set for English reading ability, but the general questions of interest were: What were the average GE scores of retainees in summer school in April 1982 and April 1983? How did they compare to those of all LEP retainees? Was there an increase in the number of these students able to take the ITBS in 1983 compared to 1982?

There were three classes of LEP A and B students in the program. Reading for these students was a separate curriculum for Spanish reading and English as a Second Language. Math for Everyone (in English) and the rest of the regular math program were used. One bilingual teacher taught both reading and math to the students and helped the children by telling them what the English directions were in Spanish. One class operated basically at the kindergarten level, one at grade one, and one at an intermediate level (grades four - six).

Very few students had Reading Total and Math Total scores on a pre- and posttest basis, but those that are available are shown in Figure A-25.

It is difficult to compare these scores to those of all LEP students by grade since summer school grade assignments did not necessarily match regular school year assignments. However, a look at overall scores across grades suggests that:

- LEP students who attended summer school scored below the average for all LEP retainees in spring 1982.
- Summer School LEP students still score below the LEP retainee average in 1983, but close the gap somewhat in the reading area (but not in math).

READING TOTAL

Grade	N	1981-82	1982-83
0	2	.60	.95
1	5	1.20	2.20
4-6	2	2.60	3.60
Mean	9	1.38	2.23
Mean for all LEP Retainees	118	1.70	2.44

MATH TOTAL

Grade	N	1981-82	1982-83
0	4	1.13	1.75
1	15	1.5[illegible]	2.37
4-6	7	2.89	3.73
Mean	26	[illegible].25	2.64
Mean for all LEP Retainees	148	[illegible].09	2.74

Figure A-25. SUMMER SCHOOL LEP A AND B STUDENT SCORES. Reading Total and Math Total mean GE scores on the 1981-82 (Pre) and 1982-83 (Post) ITBS.

One final measure of improved English skills was the ability of these students to take the ITBS. Teachers have the option of exempting students from taking the ITBS after they have attempted one subtest (usually in math) if they feel the students' command of English is not great enough to handle the remaining tests. A check was made to see how many valid scores were available for these students in reading. Overall, there was an increase from 10 students with 1981-82 scores to 23 students with 1982-83 scores. Thus, it appears that these students did show some improvement in their command of the English language. How much of this improvement is due to summer school is impossible to say.

Evaluation Question D2-5: Did the achievement of summer school retainees who received home visits, phone calls to former teachers, or no extra contacts differ on skills emphasized?

Before summer school began, teachers called the former teachers of about half of the students and visited the homes of about one fourth of the students. These groups were randomly selected, so some students fell in both groups. About one fourth had no contacts made. The home visits and phone calls to former teachers were designed to give the summer teacher more information about the students' needs and interests and build rapport with the homes.

Teachers reported completing about two thirds of the randomly assigned phone calls and 98% of the assigned home visits. Incomplete calls or home visits were included in the group receiving "neither" contact.

Figures A-26 and A-27 show the reading and math scores of summer school students in the areas emphasized.

In reading, students whose teachers both called former teachers and visited the home seemed to show better gains at grades 1, 3, and 5/6. Those receiving just home visits showed the best gains at grade two and those receiving just phone calls gained the most at grade four. The group which had no contacts did not show the best gains in any case.

In math concepts, students who had both a home visit and call to the former teacher showed the best gains at grades 1, 2, and 5/6. Those receiving just home visits and those receiving no visit or call made the best gains at grade 4, while those receiving no visit or call showed the best gains at grade 3. In math problem solving, those receiving home visits showed the best gains at grades two and three, those whose former teachers were called did best at grade one, those receiving home visits or both did best at grade four, and those receiving both did best at grade 5/6.

Thus, those students for whom teachers had additional information did seem to make slightly larger gains in reading and math. A phone call to the former teacher and a home visit seemed to have the most impact (eight cases), followed by home visits only (five cases), and phone calls only (two cases). There were only two cases in which the group for which the teachers had no advance information did as well or better than the other groups.

VOCABULARY (1ST) AND READING COMPREHENSION

GRADE	HOME VISITS				PHONE CALLS				BOTH				NEITHER			
	N	82	Gains	83	N	82	Gains	83	N	82	Gains	83	N	82	Gains	83
1 (V)	63	1.04	.86	1.90	13	1.06	.95	2.02	10	.93	1.12	2.05	105	1.18	.85	2.03
2(RC)	37	1.87	.97	2.85	14	1.80	.91	2.71	6	1.78	.90	2.68	89	2.02	.83	2.85
3(RC)	35	2.92	.70	3.62	8	2.58	.48	3.05	8	3.34	.79	4.13	39	2.70	.54	3.24
4(RC)	32	3.43	.73	4.17	11	2.85	.88	3.74	5	3.72	.20	3.92	54	3.47	.60	4.06
5 & 6(RC)	35	4.41	.83	5.23	7	4.31	.44	4.76	9	4.63	1.02	5.66	90	4.22	.92	5.14

Figure A-26. READING SCORES FOR THOSE RECEIVING CONTACT BEFORE SUMMER SCHOOL. ITBS mean grade equivalent scores are shown for the reading areas emphasized in summer school--vocabulary (V) at grade 1 and reading comprehension (RC) at grades 2-6.

MATH CONCEPTS

GRADE	HOME VISITS				PHONE CALLS				BOTH				NEITHER			
	N	82	Gains	83	N	82	Gains	83	N	82	Gains	83	N	82	Gains	83
1	63	1.27	.65	1.92	12	1.14	.92	2.06	10	1.07	1.03	2.10	108	1.36	.74	2.10
2	41	1.99	.90	2.89	14	2.31	.78	3.09	6	2.10	.97	3.07	87	2.13	.85	2.98
3	39	3.11	.68	3.79	7	3.10	.59	3.69	10	3.27	.74	4.01	44	2.66	.80	3.47
4	34	3.74	.66	4.40	13	3.56	.42	3.98	5	3.50	.14	3.64	58	3.51	.65	4.16
5 & 6	41	4.74	.60	5.34	8	4.56	.40	4.96	9	4.82	1.44	6.27	93	4.54	.80	5.34

MATH PROBLEM SOLVING

GRADE	HOME VISITS				PHONE CALLS				BOTH				NEITHER			
	N	82	Gains	83	N	82	Gains	83	N	82	Gains	83	N	82	Gains	83
1	63	1.15	.81	1.96	12	1.32	.84	2.16	10	1.32	.65	1.97	108	1.37	.72	2.09
2	40	2.09	.67	2.75	14	2.30	.53	2.83	6	2.60	.17	2.77	87	2.24	.64	2.87
3	38	2.87	.81	3.67	6	2.60	.65	3.25	9	3.44	.78	4.22	44	2.69	.76	3.45
4	34	3.35	.63	3.98	13	3.54	.30	3.84	5	2.72	.62	3.34	59	3.45	.45	3.90
5 & 6	41	4.28	.54	4.82	8	3.68	.84	4.51	9	4.41	1.28	5.69	93	4.30	.87	5.18

Figure A-27. MATH CONCEPTS AND MATH PROBLEM SOLVING SCORES FOR THOSE RECEIVING CONTACT BEFORE SUMMER SCHOOL. ITBS mean grade equivalent scores in math concepts are shown.

Evaluation Question D2-6: Did the achievement of summer school students who received follow-up activities in the mail differ from other students on skills emphasized?

Follow-up activities were designed to provide additional practice in reading and math for summer school retainees for the rest of the summer. Classes were randomly assigned to receive a general or specific form of followup to allow comparisons of effectiveness.

In reading, the "general" follow-up group received a letter giving general ideas on how to help the child with reading the rest of the summer. The "structured" group received this letter plus five weekly fun reading activities for parents to work on with their children. In math, all students were allowed to take home their workbooks. The "general" follow-up group received a letter on the last day of class indicating recommended activities in specific areas to work on in the workbook. The "structured" group received this letter plus five weekly letters with specific instructions for workbook pages to work on.

It should be noted that all students were assigned to a group but about one-third of the parents said they had received no follow-up information in at least one area. Since parent surveys were anonymous, the groupings shown in Figure A-28 are based on those assigned to receive structured or general followup. The fact that some parents reported that they had not received the materials must be considered in interpreting results.

Parent survey results indicated that those who received specific followup in math were more likely to complete workbook pages than those who received general or no followup.

Figure A-28 shows the mean grade equivalent scores in reading areas emphasized in summer school for those assigned to receive general and specific followup.

	STRUCTURED				GENERAL			
Grade	N	82 Mean	Gain	83 Mean	N	82 Mean	Gain	83 Mean
Gr. 1 (V)	101	1.06	.84	1.90	90	1.18	.91	2.09
Gr. 2 (RC)	80	1.88	.85	2.72	66	2.04	.92	2.96
3 (RC)	49	2.77	.51	3.28	41	2.90	.75	3.65
4 (RC)	56	3.63	.67	4.30	46	3.13	.63	3.75
5 & 6 (RC)	77	4.39	.85	5.24	64	4.19	.92	5.10

Figure A-28. ITBS READING SCORES FOR SUMMER SCHOOL RETAINEES RECEIVING STRUCTURED AND GENERAL FOLLOWUP ACTIVITIES. Mean grade equivalent scores are shown for areas emphasized in the summer program--vocabulary at grade 1 (V) and reading comprehension (RC) at grades 2-6. Fifth and sixth graders used the same materials and were often in the same classrooms.

Gains for the two groups appear to be quite similar except at grade 3 where the general followup group appeared to gain more. Thus, those who received structured followup activities for five weeks did not appear to gain any more than the other students in the reading areas emphasized.

MATH PROBLEM SOLVING

	STRUCTURED				GENERAL			
GRADE	N	82 Mean	Gain	83 Mean	N	82 Mean	Gain	83 Mean
Gr. 1	104	1.27	.75	2.02	89	1.32	.76	2.08
2	81	2.20	.60	2.80	66	2.24	.63	2.87
3	52	2.78	.66	3.44	45	2.88	.90	3.78
4	59	3.42	.66	4.09	52	3.37	.31	3.68
5/6	82	4.35	.89	5.25	69	4.17	.70	4.88

MATH CONCEPTS

	STRUCTURED				GENERAL			
GRADE	N	82 Mean	Gain	83 Mean	N	82 Mean	Gain	83 Mean
1	104	1.27	.75	2.02	89	1.35	.71	2.06
2	81	2.00	.83	2.83	67	2.24	.89	3.13
3	54	2.78	.79	3.51	46	3.10	.74	3.84
4	58	3.69	.61	4.31	52	3.47	.59	4.06
5/6	82	4.83	.76	5.59	69	4.36	.77	5.12

Figure A-29. ITBS MATH SCORES FOR SUMMER SCHOOL RETAINEES RECEIVING GENERAL AND SPECIFIC FOLLOWUP. Mean grade equivalent scores are shown for the two areas emphasized in the summer program.

As these charts reveal, gains in math problem solving were similar for the two groups at grades one and two, greater for the general group at grade three, and greater for the specific followup group at grades four and five/six. In math concepts, gains were similar for the two groups at all grade levels.

Decision Question D3: Can students who will benefit from retention be identified?

Evaluation Question D3-1: What characteristics of students who benefit from retention can be identified?

Results of the discriminant analyses are discussed in Appendix I of this report.

CASE2

Variables

U = Unit vector

1 = posttest

2 = pretest

3 = pretest if group 1; 0, otherwise

4 = pretest if group 2; 0, otherwise

5 = pretest squared (variable 2 squared)

6 = variable 3 squared

7 = variable 4 squared

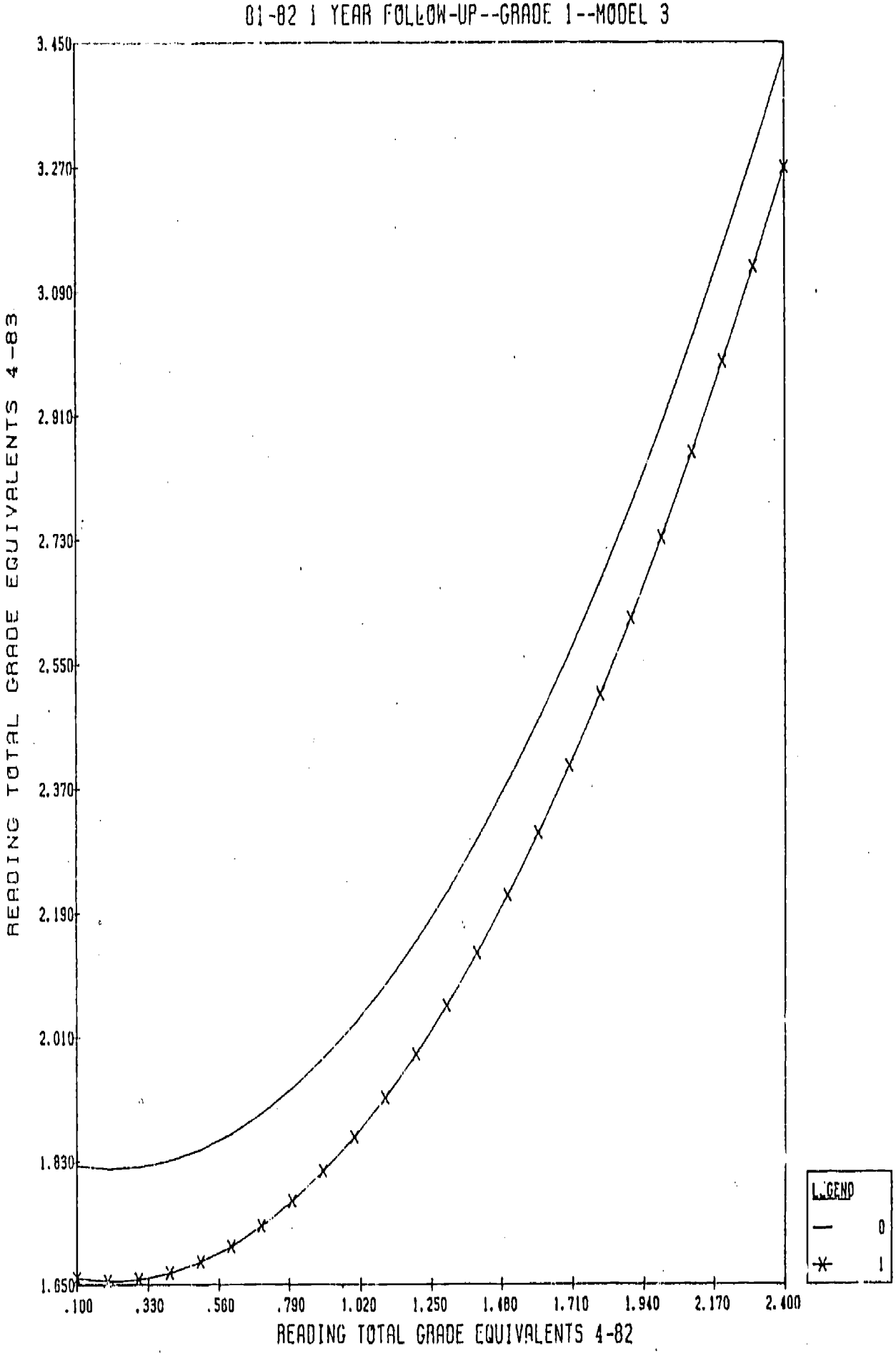
8 = 1 if group 1; 0, otherwise

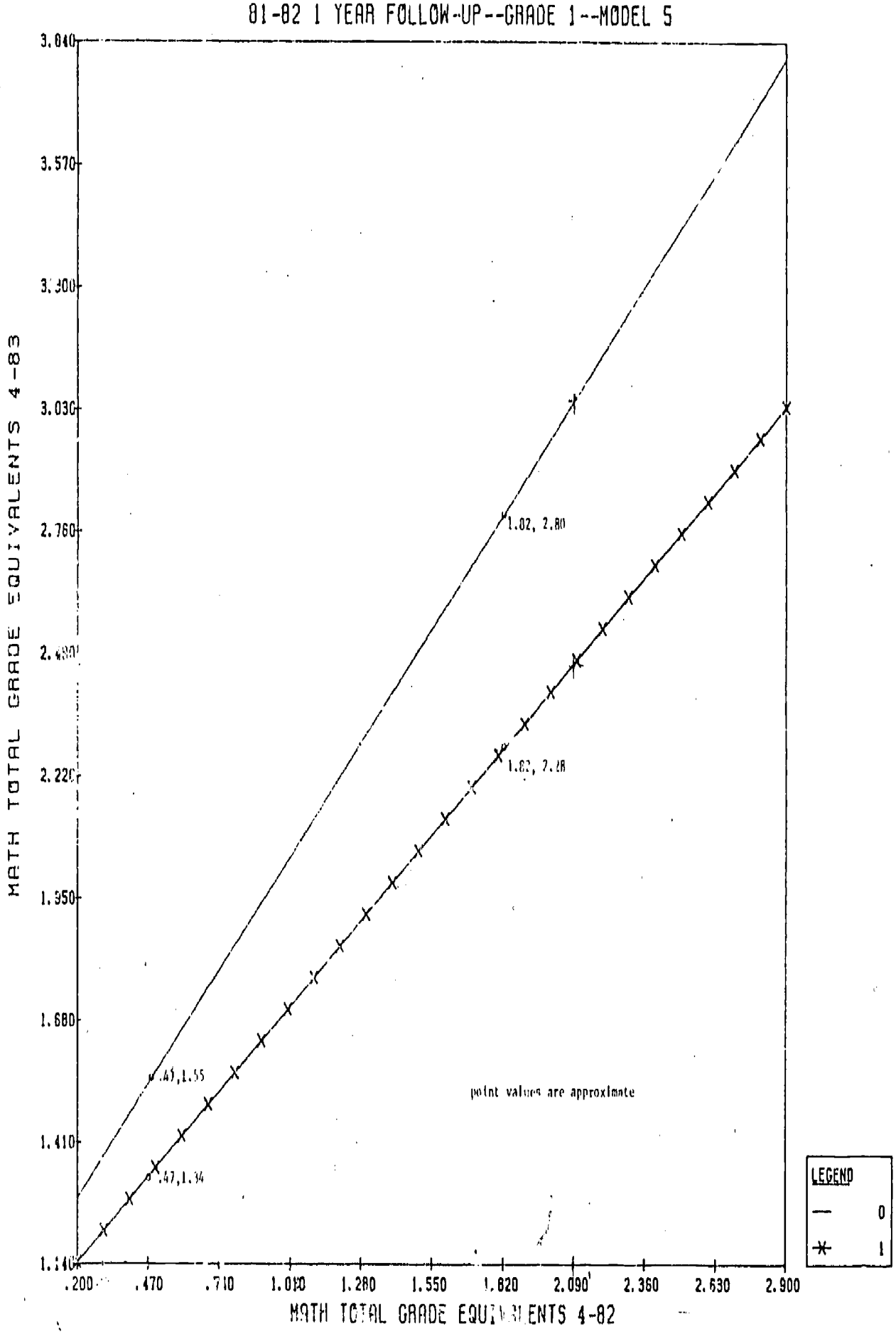
9 = 1 if group 2; 0, otherwise

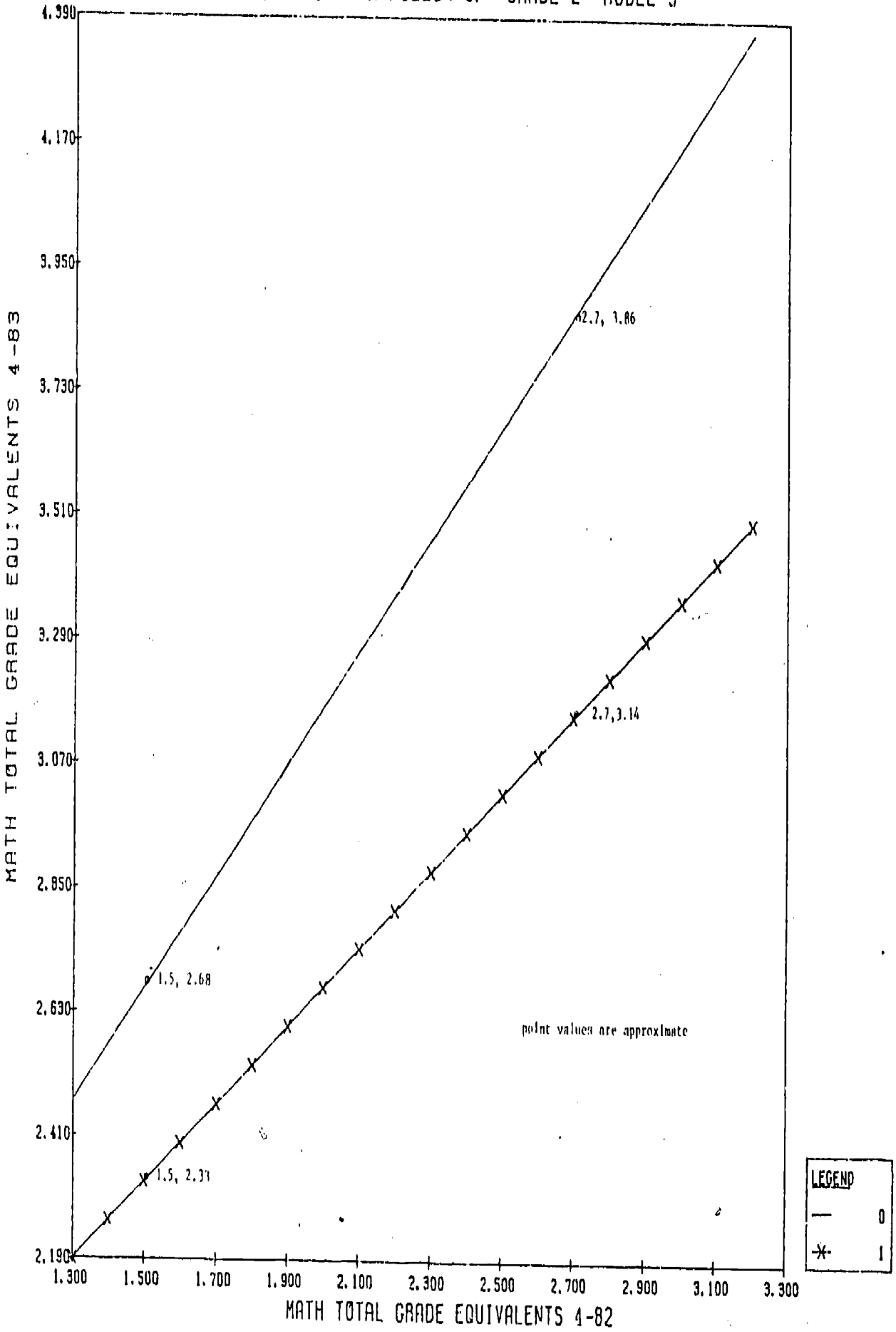
Models		Comments
Model 1	1 = U + 3 + 4 + 6 + 7 + 8 + 9	Allows independent curvilinear regression lines.
Model 2	1 = U + 3 + 4 + 5 + 8 + 9	Requires quadratic component of lines to be equal for each group. Intercepts may differ.
Model 3	1 = U + 2 + 5 + 8 + 9	Requires parallel curvilinear regression lines. Intercepts may differ.
Model 4	1 = U + 2 + 5	Requires parallel curvilinear regression lines with common intercept.
Model 5	1 = U + 3 + 4 + 8 + 9	Allows independent (different) linear (straight line) regression lines.
Model 6	1 = U + 2 + 8 + 9	Requires common linear slopes; and intercepts may differ.
Model 7	1 = U + 2	Requires common linear slopes and common intercepts.

81-82 Retainee Followup--One Year
Reading Total 81-82 to 82-83

	Correlation Pre/Post	Linear or Curvilinear	p Value	Model
Overall	.89	L	0.0000	Accept Model 3--same slopes, different intercepts. Rets.-two months lower
1	..37	C	.001	Accept Model 3--same slopes, diff. intercepts. Rets.-.16 months
2	.64	L	.02	Accept Model 6--same slope, diff. intercepts. Rets.-.16 GE years lower
3	.72	L	ns	
4	.79	L	.001	Accept Model 6--same slopes, different intercepts. Rets. .29 GE years lower
5	.80	L	ns	
6	.82	L	.002	Accept Model 6--same slope, diff. intercepts. Rets. .70 GE years lower
		Math Total		
1	.54	L	.03	Accept Model 5--slopes and intercepts vary. Lines intersect. Rets. .36 GE years lower.
2	.52	L	.03	Accept Model 5--intersecting lines. Rets. .54 GE years lower.
3	.73	L	.02	Accept Model 6--same slope, diff. intercepts. Rets. .15 GE year lower.
4	.69	L	.0007	Accept 6--different inter pts. Rets. .41 GE year behind.
5	.78	L	.001	Accept 6. Different int cepts. Rets. .29 GE years behind.
6	.72	L	.0001	Accept 6. Different intercepts. Rets. .76 GE years behind.


81-82 1 YEAR FOLLOW-UP--GRADE 1--MODEL 3
READING TOTAL GRADE EQUIVALENTS 4-83
3.450
3.270
3.090
2.910
2.730
2.550
2.370
2.190
2.010
1.830
1.650
.100
.330
.560
.790
1.020
1.250
1.480
1.710
1.940
2.170
2.400
READING TOTAL GRADE EQUIVALENTS 4-82
LEGEND
0
1


81-82 1 YEAR FOLLOW-UP--GRADE 1--MODEL 5
MATH TOTAL GRADE EQUIVALENTS 4-83
MATH TOTAL GRADE EQUIVALENTS 4-82
3.840
3.570
3.300
3.030
2.760
2.490
2.220
1.950
1.680
1.410
1.140
.200
.470
.740
1.010
1.280
1.550
1.820
2.090
2.360
2.630
2.900
1.02, 2.80
1.02, 2.08
.45,1.55
.47,1.34
point values are approximate
LEGEND
0
1

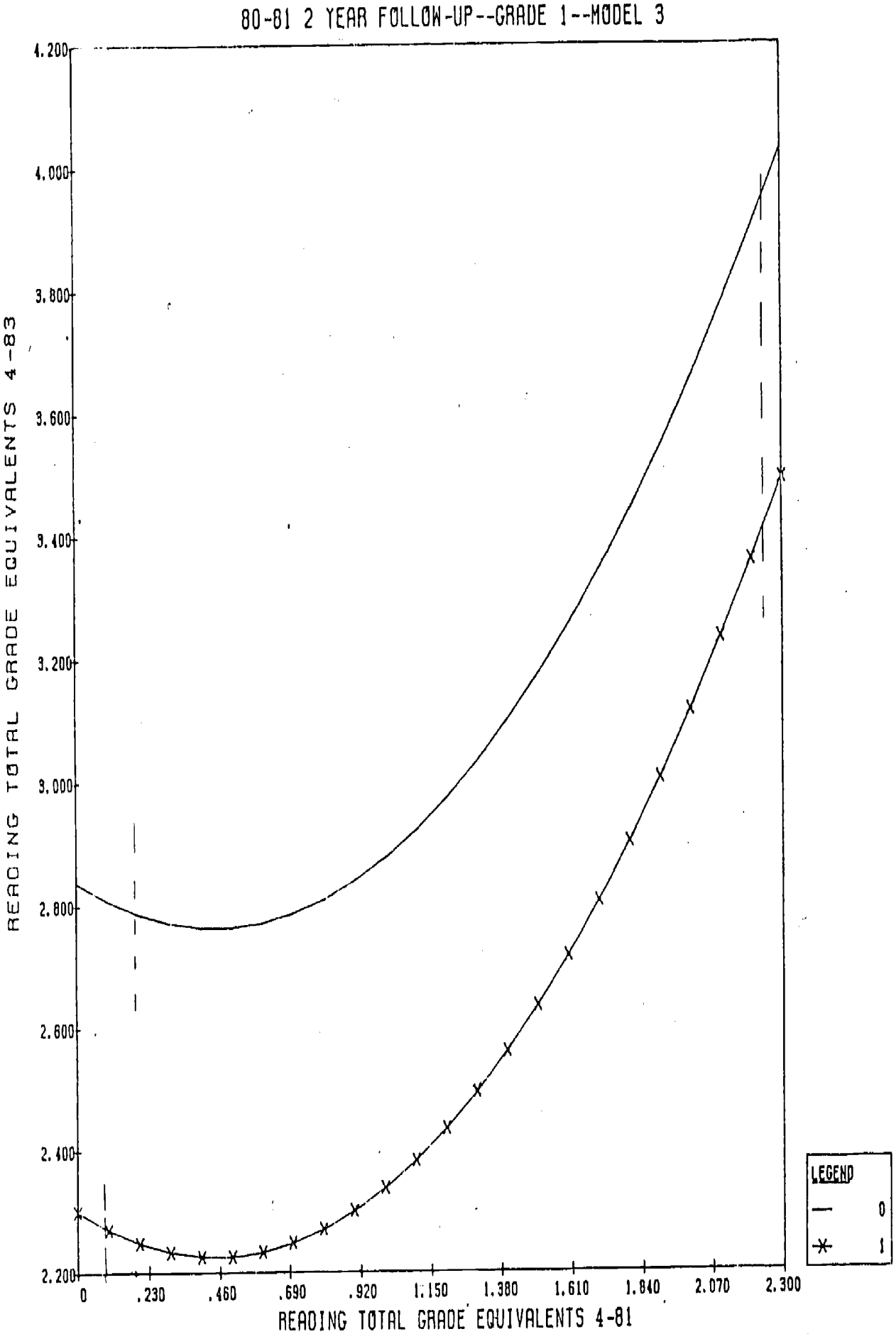

B1-82 1 YEAR FOLLOW-UP--GRADE 2--MODEL 5
MATH TOTAL GRADE EQUIVALENTS 4-83
4.390
4.170
3.950
3.730
3.510
3.290
3.070
2.850
2.630
2.410
2.190
2.7, 3.86
2.7, 3.14
1.5, 2.68
1.5, 2.31
point values are approximate
LEGEND
0
1
1.300
1.500
1.700
1.900
2.100
2.300
2.500
2.700
2.900
3.100
3.300
MATH TOTAL GRADE EQUIVALENTS 4-82

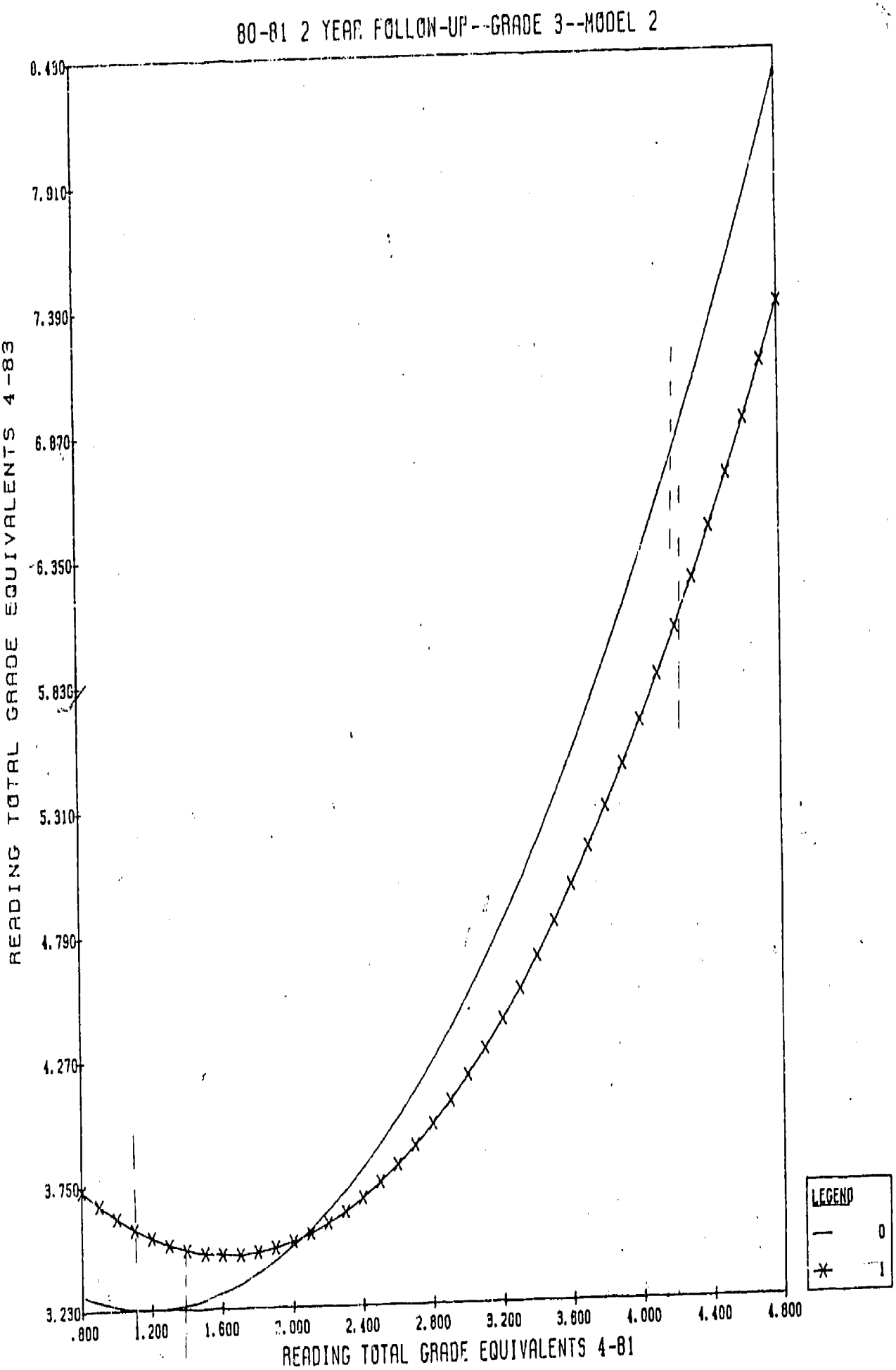
80-81 Retainee two-year Followup: Reading Total

	Correlation	Linear or Curvilinear	P Value	Model
1	.27	C	.0000	Accept Model 3. Same slope--different intercept, Rets. .52 GE yrs. behind.
2	.55	L	.0007	Accept Model 6. Same slope different intercepts. Rets. .37 GE years behind.
3	.70	C	.05	Accept Mo[illegible] 2--different slopes and intercepts (ret. .12 behind).
4	.72	C	.04	Accept Model 3--same slope, different intercepts. Rets. .40 GE years behind.

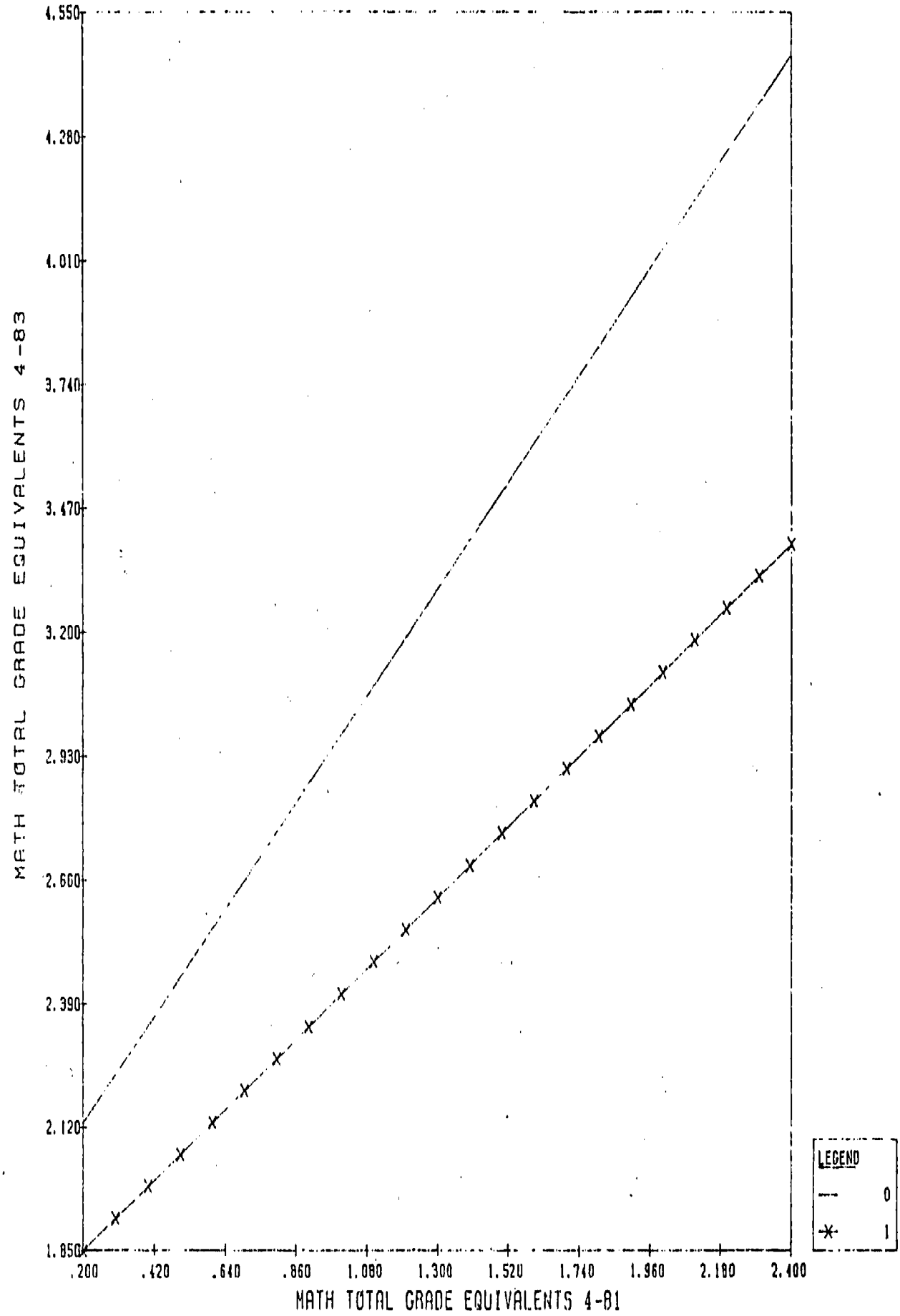
80-81 Retainee two-year Followup: Math Total

1	.48	L	.04	Lines intersect (slopes and intercepts differ). Accept full model 5). Rets. .62 mos lower.
2	.57	:	.04	Regression lines intersect--MOdel 5. Retainees .69 GE years lower.
3	.53	C	.0003	Accept Model 3--Parallel curvilinear lines with different intercepts (Ret. .53 years behind).
4	.67	L	.001	Accept Model 6. Parallel lines with different intercepts. Ret. .55 years behind.

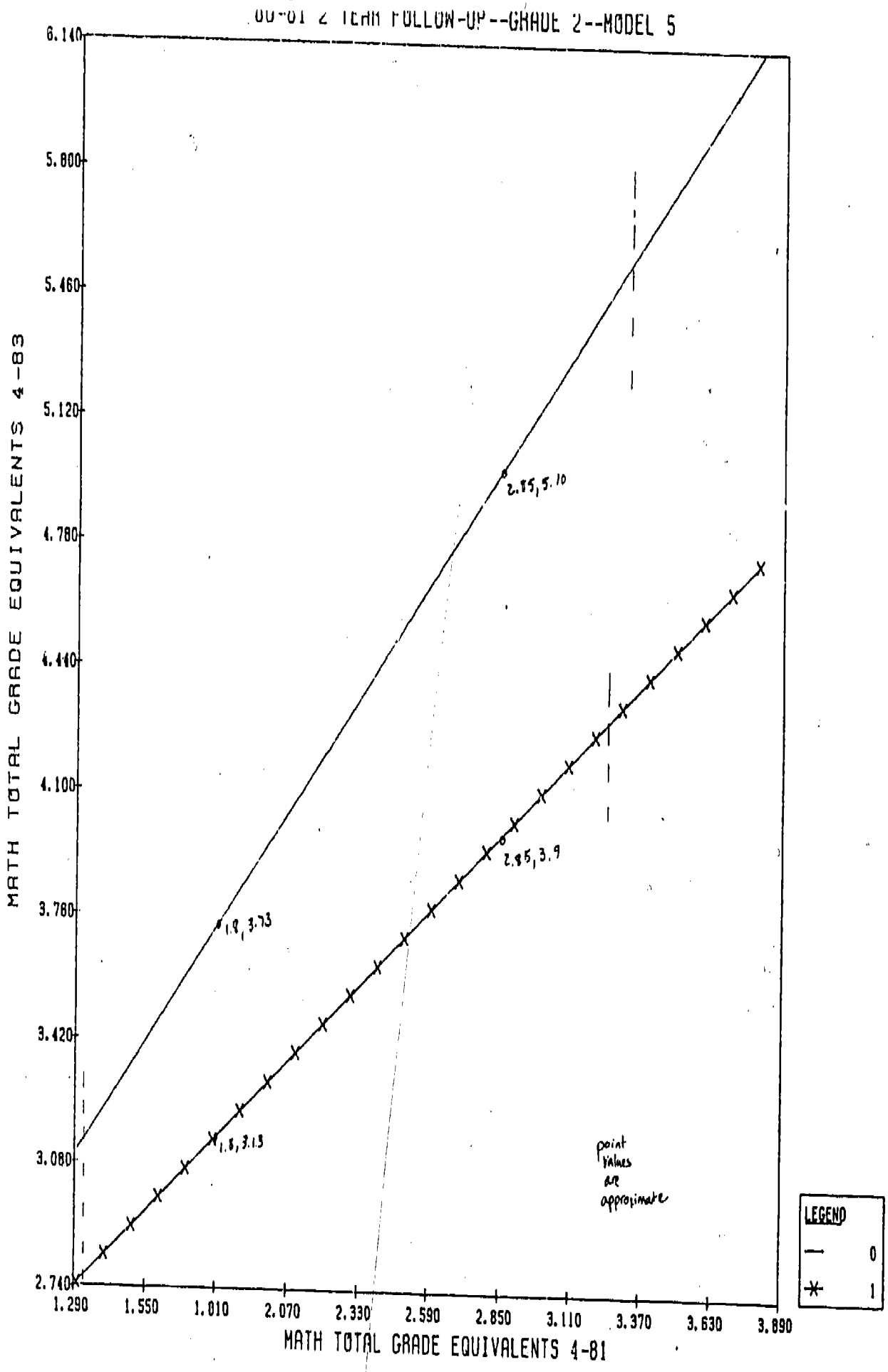

80-81 2 YEAR FOLLOW-UP--GRADE 1--MODEL 3
READING TOTAL GRADE EQUIVALENTS 4-83
4.200
4.000
3.800
3.600
3.400
3.200
3.000
2.800
2.600
2.400
2.200
0
.230
.460
.690
.920
1.150
1.380
1.610
1.840
2.070
2.300
READING TOTAL GRADE EQUIVALENTS 4-81
LEGEND
0
1


80-81 2 YEAR FOLLOW-UP--GRADE 3--MODEL 2
READING TOTAL GRADE EQUIVALENTS 4-83
8.430
7.910
7.390
6.870
6.350
5.830
5.310
4.790
4.270
3.750
3.230
.800
1.200
1.600
2.000
2.400
2.800
3.200
3.600
4.000
4.400
4.800
READING TOTAL GRADE EQUIVALENTS 4-81
LEGEND
0
1

95



Attachment A-3
(Continued, Page 4 of 5)

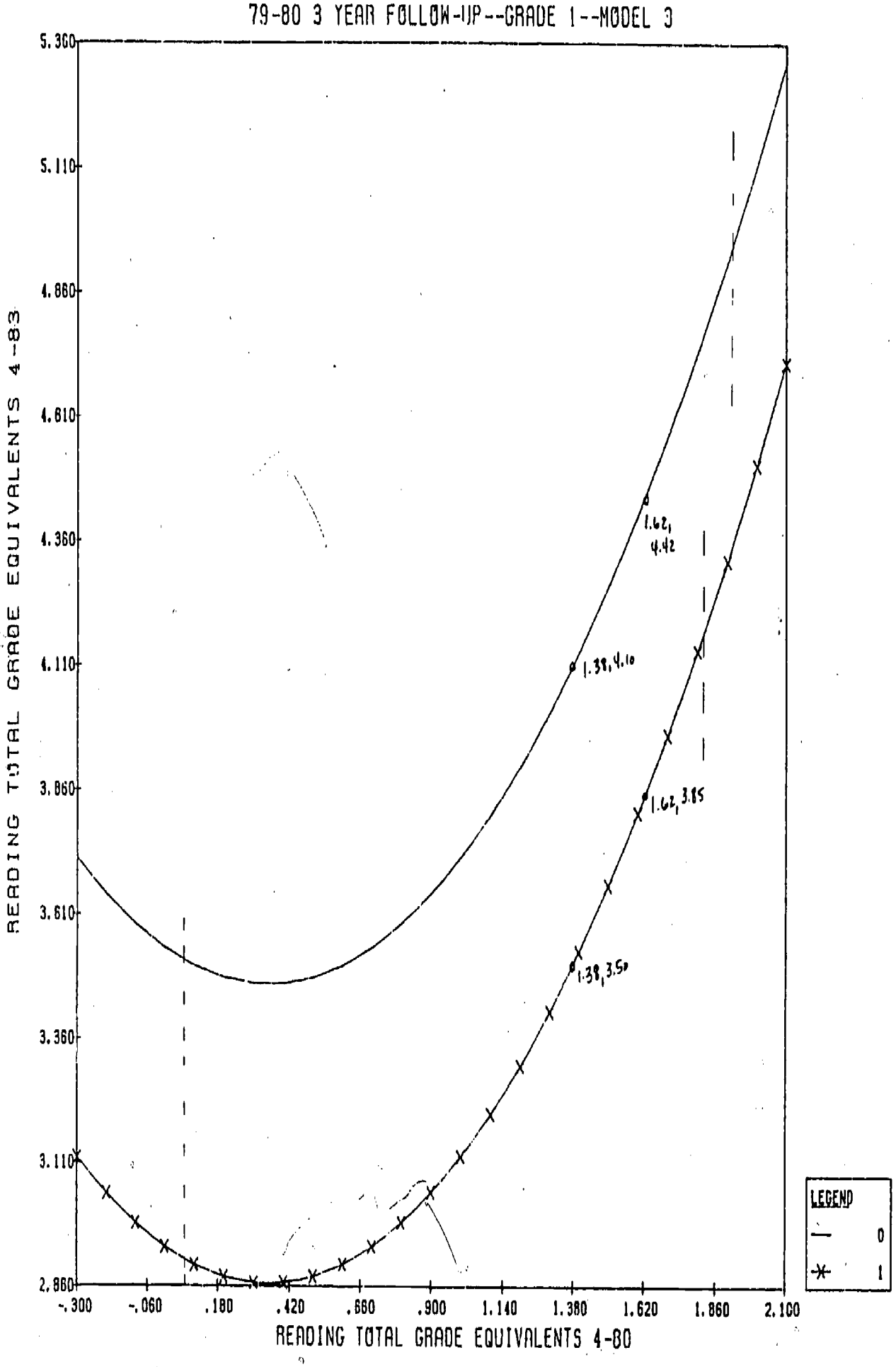

00-01 2 YEAR FOLLOW-UP--GRADE 2--MODEL 5
MATH TOTAL GRADE EQUIVALENTS 4-83
6.140
5.800
5.460
5.120
4.780
4.440
4.100
3.760
3.420
3.080
2.740
1.290
1.550
1.810
2.070
2.330
2.590
2.850
3.110
3.370
3.630
3.890
MATH TOTAL GRADE EQUIVALENTS 4-81
2.85, 5.10
1.8, 3.73
2.85, 3.9
1.8, 3.13
point values are approximate
LEGEND
0
1

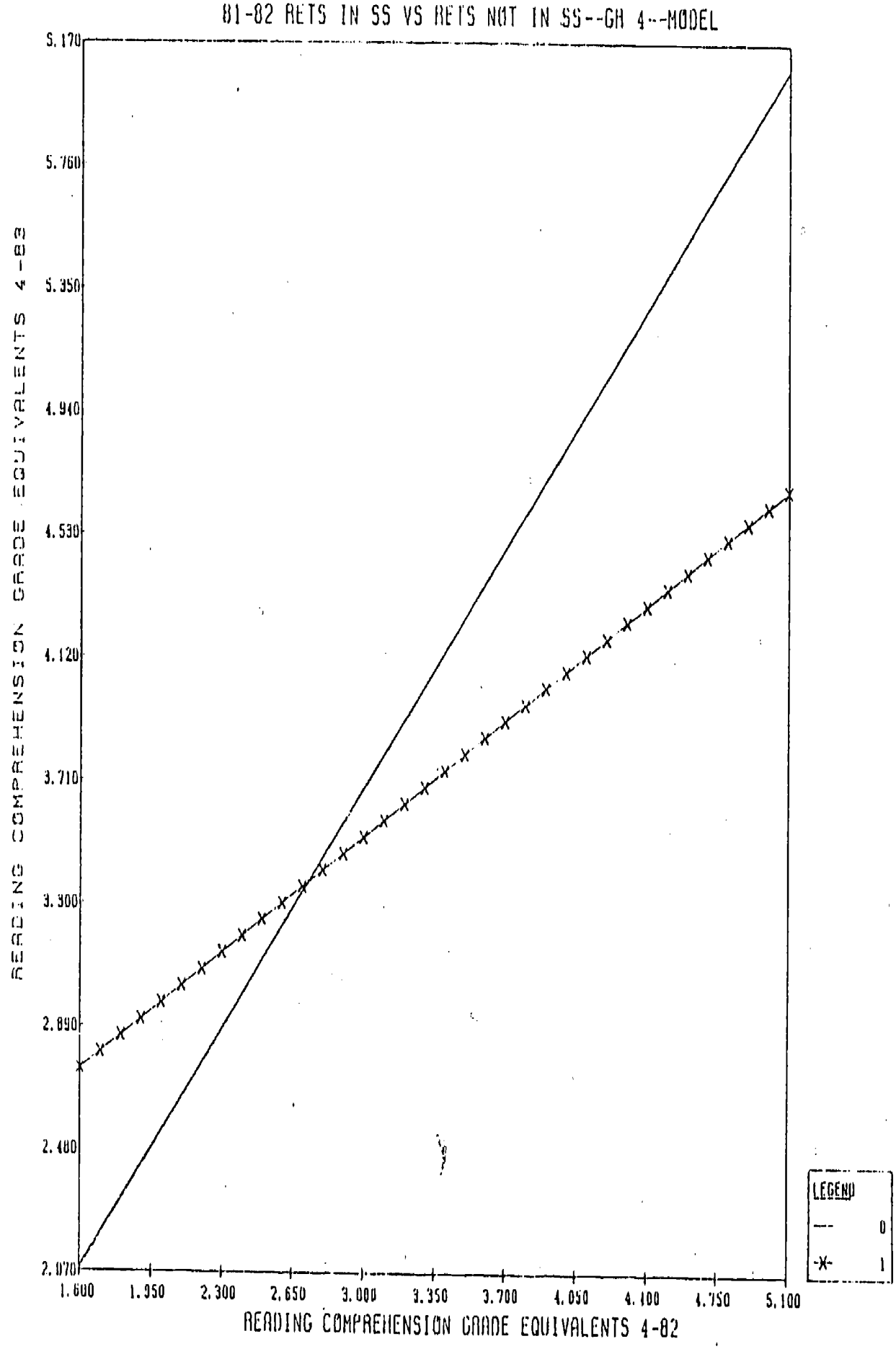
79-80 Retainees Three-Year Followup Reading Total

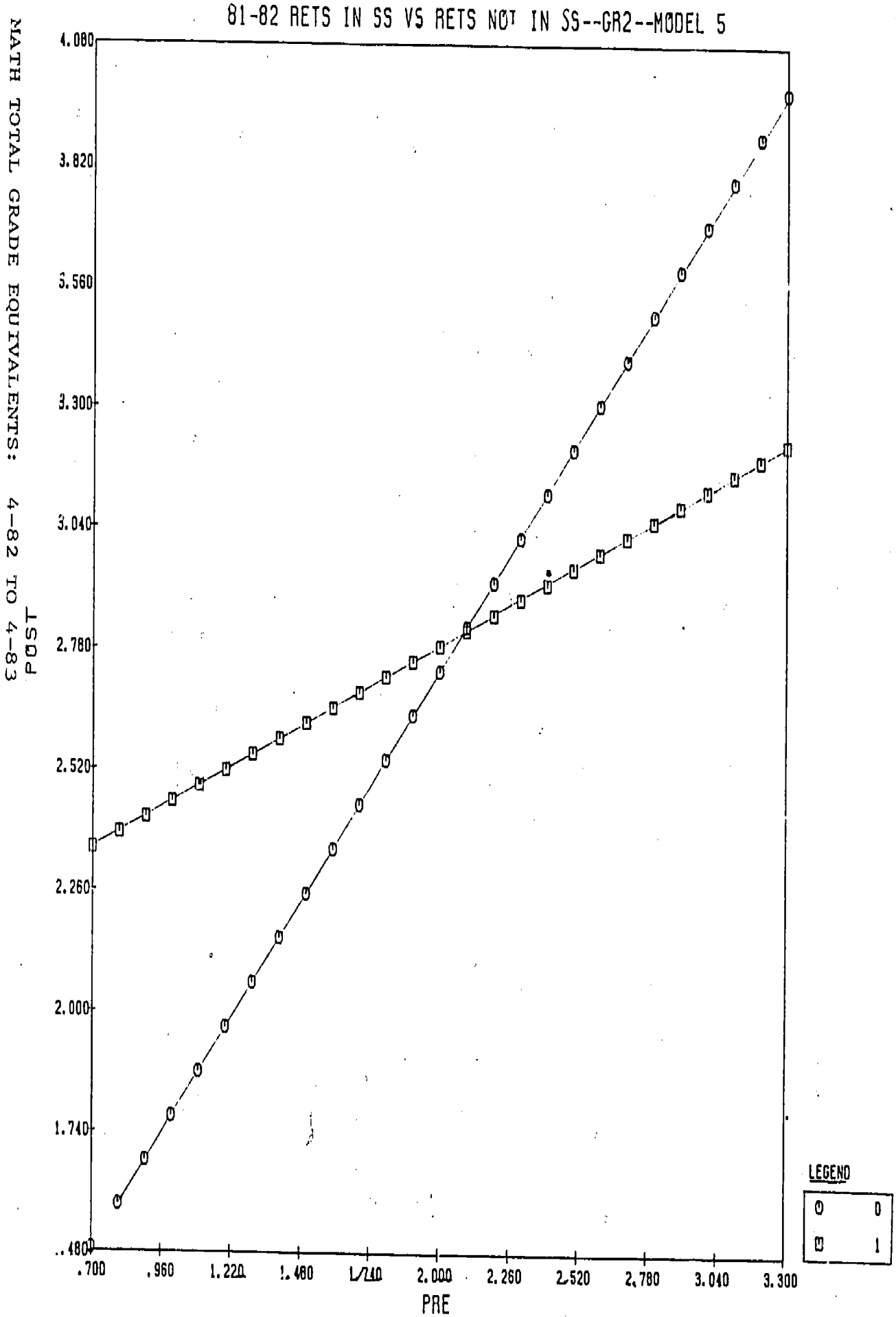
Grade	Correlation	Linear or Curvilinear	F Sig.	Model
1	.36	C	.001	Accept Model 3--parallel lines but different itnercepts. Rets. .61 months behind.
2	.53	C	ns	Model 4--same slopes and intercepts.

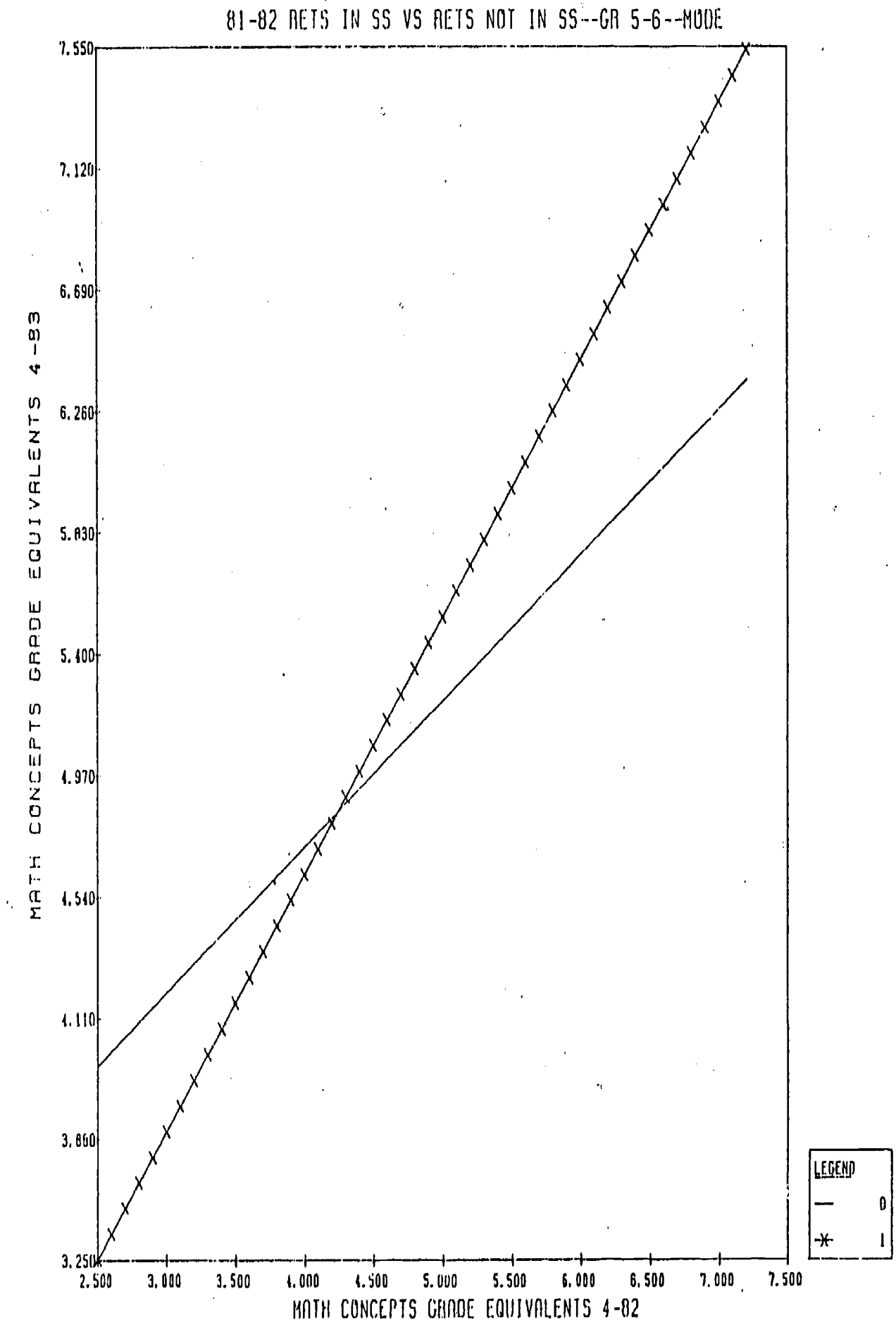
79-80 Retainees Three-Year Followup Math Total

1	.47	L	.03	Accept Model 6--parallel lines, different intercepts. Retainees gain .3 GE years less.
2	.58	L	.001	Accept Model 6--parallel lines with different intercepts. Retainees gain .65 GE years less.


79-80 3 YEAR FOLLOW-UP--GRADE 1--MODEL 3
READING TOTAL GRADE EQUIVALENTS 4-83
5.360
5.110
4.860
4.610
4.360
4.110
3.860
3.610
3.360
3.110
2.860
1.62, 4.42
1.38, 4.10
1.62, 3.85
1.38, 3.50
LEGEND
0
1
-.300
-.060
.180
.420
.660
.900
1.140
1.380
1.620
1.860
2.100
READING TOTAL GRADE EQUIVALENTS 4-80


81-82 RETS IN SS VS RETS NOT IN SS--GR 4--MODEL
READING COMPREHENSION GRADE EQUIVALENTS 4-83
5.170
5.760
5.350
4.940
4.530
4.120
3.710
3.300
2.890
2.480
2.070
1.600
1.950
2.300
2.650
3.000
3.350
3.700
4.050
4.100
4.750
5.100
READING COMPREHENSION GRADE EQUIVALENTS 4-82
LEGEND
0
1


81-82 RETS IN SS VS RETS NOT IN SS--GR2--MODEL 5
MATH TOTAL GRADE EQUIVALENTS: 4-82 TO 4-83
POST
PRE
4.080
3.820
3.560
3.300
3.040
2.780
2.520
2.260
2.000
1.740
1.480
.700
.960
1.220
1.480
1.740
2.000
2.260
2.520
2.780
3.040
3.300
LEGEND
0 0
1 1



Attachment A-5
(Continued, Page 3 of 3)

Retention/Promotion

Appendix B

RETENTION FILES

INSTRUMENT DESCRIPTION: Retention Files

Brief description of the data file: This collection of data files contains descriptive information (school, grade, sex, ethnicity, LEP status, Special Education status, ITBS Reading and Math total scores, free lunch status) on retainees. Files exist for those retained at the end of 1979-80, 1980-81, and 1982-83. Separate files also exist for retainees attending summer school in 1982 and 1983 and for those matched with nonretainee low achievers for comparisons of achievement.

Which students or other individuals are included on the file?

The files created each June include all students recommended for retention by the schools. Matched achievement files only include those who were actually retained-- those with the same grade level listed on the ITBS records two years in a row.

How often is information on the file added, deleted, or updated?
Schools send in lists of students to be retained each spring. When the files are to be used, current retention status is generally verified based on the Student Master File or ITBS files to see if any students were promoted since spring.

Who is responsible for changing or adding information to the file?
ORE programmer for District Priorities.

How was the information contained on the file gathered?

Prior to 1981-82, schools sent in hand-written lists of students to be retained along with their grade level and identification numbers. Starting in 1981-82, Data Services sent each school a complete list of students and asked them to cross through the names of retainees. These are due in one week after school ends.

Are there problems with the information on the file that may affect the validity of the data?

None that are known.

What data are available concerning the accuracy and reliability of the information on the file?

School records. Student Master File records, and ITBS records can be used to verify accuracy.

Are there normative or historical data available for interpreting the results?

Retention files are available for 1979-80, 1980-81, 1981-82, and 1982-83.

Brief description of the file layout:

File layouts vary. The files of recommended retainees have had a standard layout for 1981-82 and 1982-83 (see Attachment B-1). Other formats can be found in the District Priorities programmer's notebook. Key file names include:

- 1979-80 Retainee File EDPRTN80
- 1980-81 Retainee File EDPRTN81
- 1981-82 Retainee File EDPRTN82
- 1982 Summer School File EDPSUM82

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Purpose

Retention files were used as an information source for the following decision and evaluation questions in the retention/promotion design:

Decision Question D1. What effects has the District policy on retention/promotion had on achievement? on retention rates? Should the District policy be altered?

Evaluation Question D1-1. What is the overall rate of retention for grades K-6 for 1982-83? How does this compare to 1979-80, 1980-81 and 1981-82?

Evaluation Question D1-2. In terms of 1982-83 enrollment, what are the retention rates by grade level, school, and ethnicity? How do these rates compare to previous years?

Evaluation Question D1-3. What are the characteristics of those retained in terms of:

- Grade level,
- Ethnicity,
- Sex,
- LEP status,
- Chapter I status?

Does this differ from previous years?

Evaluation Question D1-4. How many students recommended for retention in June of 1982 were listed as retainees as of October 1982? as of April 1983? How many students not recommended for retention in spring 1982 were placed in lower grades in fall 1982?

Evaluation Question D1-5. What were the achievement levels of 1981-82 retainees in spring 1982? How much did they gain between spring 1981 and spring 1982? How does this compare to their rate of gain between spring 1982 and spring 1983? by ethnicity?

Evaluation Question D1-6. How much did LEP 1981-82 retainees gain between spring 1982 and spring 1983 compared to other retainees?

Evaluation Question D1-7. How do the achievement levels and gains in reading and math of 1981-82 retainees after one year compare to those of 1979-80 and 1980-81 retainees after one year?

Evaluation Question D1-8. How do the achievement levels and gains of 1981-82 retained students compare to a group of similar students (matched on factors such as previous achievement gains, age, sex, ethnicity, special education status, LEP A and B status) after one year?

Evaluation Question D1-9. How does the average achievement of the 1981-82 retainees and the matched group compare to the average for all AISD students in the same grade?

Evaluation Question D1-10. How does the achievement of 1980-81 retainees and a matched group compare after two years?

Evaluation Question D1-11. How does the achievement of students retained as first and second graders in 1979-80 and a matched group compare after three years?

Decision Question D2. How effective have efforts been directed towards retainees? Should they be continued and/or modified?

Evaluation Question D2-1. Did the fall teachers of retainees receive skills and weaknesses sheets filled out by the previous teachers? Were they helpful?

Evaluation Question D2-2. How many retainees attended the 1982 summer school for retainees?

Evaluation Question D2-3. What were the attendance rates of 1981-82 retainees who attended summer school during 1981-82, summer school, and 1982-83?

Evaluation Question D2-4. How did the achievement of retainees who did and did not attend summer school compare on emphasized math and reading skills?

Evaluation Question D2-5. Did the achievement of summer school retainees who received home visits, phone calls to former teachers, or no extra contacts differ on skills emphasized?

Evaluation Question D2-6. Did the achievement of summer school students who received follow-up activities in the mail differ from other students on skills emphasized?

Evaluation Question D2-10. Does focusing special attention on retainees have an impact on their achievement?

Evaluation Question D2-11. If so, what methods seem most effective in meeting the needs of the retained child?

Decision Question D3. Can students who will benefit from retention be identified?

Evaluation Question D3-1. What characteristics of students who benefit from retention can be identified?

Procedure

Each June, the list of those recommended for retention is obtained from data services. Since 1981-82, this had taken the form of a computer file of names, identification numbers, and some descriptive information from the Student Master File. The District Priorities programmer then adds additional information to the file as needed. At least once in the fall and spring, the retention status of students is checked against the Student Master File or ITBS Files to see if students are still retained or have been promoted.

Summer schools have been held for elementary retainees during 1982 and 1983. Names and identification numbers of students enrolled were obtained from the teachers at each summer school campus. Additional descriptive information was added from the Student Master File, project files, ITBS files, and Student Data Cards supplied at the end of the summer session.

Matched student achievement files were created by matching all retainees tested in two or more consecutive years with similar low achievers not retained.

Results

The retention files were used only as an information source of retainee names and characteristics. Results of subsequent analyses performed are shown in other appendices in this report. The list below shows the results discussed in each appendix which used the retention files as a beginning source:

Appendix Letter	Appendix Name	Results Discussed
A	ITBS	Achievement Analyses.
C	Student Master File	Descriptive Information.
F	Attendance Registers	Attendance of a sample of 1982 summer school students.
G	Teacher Checklist	Ratings of a sample of retainees' skills and behavior by fall teachers.

H	Coordinator/Teacher Study	Effects of coordinators supplying lists of retained and pre-K students to first-grade teachers.
I	Discriminant Analyses	Characteristics of successful and unsuccessful retainees.

FILE LAYOUT

☑ LABELED ☐ UNLABELED PAGE ____ OF ____

LABEL ID EDRTW72 TAPE NO. _____ BY: _____

BLOCKSIZE 197 CHARACTERS _____ DATE CREATED: _____

RECORD SIZE 197 CHARACTERS _____ SUG. SCRATCH DATE: _____

_____ DENSITY _____ BPI

SEQUENCE _____

DESCRIPTION 1971-72 Recommended Retain. File

REMARKS From Jim M.

N=148

NO. OF COLS.	COLUMNS FROM	COLUMNS TO	DATA FORMAT	FIELD NAME	REMARKS
7	1	7		Id #	
1		8		Loc Status	
1		9		Type #	
1		10		Entry Code	≠ 0 Std Internal
6	11	16		Date of Birth	YY/mm/DD
1		17		Sex 0	
3	18	20		School	
2	21	22		Grade	
27	23	49		Name	
3	50	52	Packed	Entry Date	
1		53		Entry Type	I = Entry
1		54		Ethnicity	
2	55	56	A/N	Mark Status	
3	57	59	Packed	Status Date	
1		60			
4	61	64	Packed	Family #	
1		65		Unit 0 #	
27	66	92		Town	
33	93	125		Address	
5	126	130		Zip Code	
1		131		Address Type	
2	132	133		Area #	
2	134	135		[illegible]	72
2	136	137		[illegible]	
4	138	141		Withdrawal CE	4 -12
4	142	145		Completion "	
4	146	149		Entry Term "	
4	150	153		Credits "	
4	154	157		Problems "	
4	158	161		[illegible]	

SAMPLE RETENTION FILE FORMAT. Once Data Processing supplies the basic file, ORE's programmer "unpacks" it and adds other data. This is only part of the format.

Retention/Promotion

Appendix C

RETAINEE CHARACTERISTICS: STUDENT MASTER FILE

Instrument Description: Retainee Characteristics: Student Master File

Brief description of the data file:

The Student Master File is a computerized data file which contains essential District information on student enrollment status and eligibility for a variety of programs. This file includes each student's name, identification number, birthdate, grade, school (past and present), sex, ethnicity, immunizations, low-income status, and desegregation status.

Which students or other individuals are included on the file?

All students ever enrolled in the Austin Independent School District until age 21.

How often is information on the file added, deleted, or updated?

Continuously.

Who is responsible for changing or adding information to the file?

Personnel in the Office of Student Records and Reports, although the Office of Research and Evaluation also changes some fields.

How was the information contained on the file gathered?

Most information is provided by the parents on a card returned to the school. Identification numbers are assigned by the Office of Student Records and Reports.

Are there problems with the information on the file that may affect the validity of the data?

None that are known. Occasionally, a student is deleted from the file and the number reused which could result in mismatches.

What data are available concerning the accuracy and reliability of the information on the file?

The file is used by a number of AISD personnel quite often. Any inconsistencies or errors are reported as discovered to Data Processing.

Are there normative or historical data available for interpreting the results?

Only for some dates when the file was saved. A copy of the Student Master File was saved at the end of the 1980-81, 1981-82, and 1982-83 school year.

Brief description of the file layout:

For purposes of the retention study, the following information was pulled from the student master file: student name, identification number, birthdate, sex, ethnicity, low-income status, desegregation status. This became part of a new file of retainees from 1980-81, 1981-82, and 1982-83.

RETAINEE CHARACTERISTICS: STUDENT MASTER FILE

Purpose

The Student Master File is a computerized data file which includes a variety of descriptive information on students enrolled in Austin ISD. Information from this data file provided data relevant to the following decision and evaluation questions:

Decision Question D1: What effects has the District policy on retention/promotion had on achievement? on retention rates? Should the District policy be altered?

Evaluation Question D1-1: What is the overall rate of retention for grades K-6 for 1982-83? How does this compare to 1979-80, 1980-81, and 1981-82?

Evaluation Question D1-2: In terms of 1982-83 enrollment, what are the retention rates by grade level, school, and ethnicity? How do these rates compare to previous years?

Evaluation Question D1-3: What are the characteristics of those retained in terms of:

- Grade level,
- Ethnicity,
- Sex,
- LEP status,
- Chapter 1 status?

Does this differ from previous years?

Evaluation Question D1-4: How many students recommended for retention in June of 1982 were listed as retainees as of October 1982? as of April 1983? How many students not recommended for retention in spring 1982 were placed in lower grades in fall 1982?

Procedure

At the end of each school year, schools send in a list of students to be retained the following school year. These are keypunched in Data Processing onto a diskette. ORE is allowed access to the file, copies it, and adds information as needed to the file.

The Student Master File provided information on students' schools (present and past), grade, sex, and ethnicity. Information on LEP status and Chapter 1 status was obtained from project files. All of this information was merged onto one retention file. Enrollment figures from spring 1980, 1981, 1982, and 1983 were used in calculating retention rates in terms of enrollment.

The retention status of students recommended for retention in spring 1982 was checked in October and March to see if any students had been promoted or had left AISD.

Results

Evaluation Qeustion D1-1: What is the overall rate of retention for grades K-6 for 1982-83? How does this compare to 1979-80, 1980-81, and 1981-82?

Our best estimate of the overall retention rate for grades K-6 in 1982-83 is 1,025. Four schools have not reported as yet--the 57 schools which have reported recommended 1,001 students for retention. The known count of 1,001 retainees will be used in further breakdowns in this appendix.

The number of retainees recommended for retention at the end of the last four school years was:

School Year	Number Recommended for Retention	
1979-80	652	(Old policy)
1980-81	1,225	(New policy published)
1981-82	1,448	(New policy in effect)
1982-83	1,025	(Estimate)

Thus, the rate decreased this spring after an upward trend started with the publication of the new policy. The 1982-83 rate is lower than the 1981-82 rates.

Evaluation Question D1-2: In terms of 1982-83 enrollment, what are the retention rates by grade level, school, and ethnicity? How do these rates compare to previous years?

	1982-83		
Grade	Enrollment	Retained	%
K	5,086	48	.9
1	4,764	539	11.3
2	4,322	158	3.7
3	4,062	76	1.9
4	4,119	97	2.4
5	4,188	52	1.2
6	4,403	31	.7
Total	30,944	1,001*	3.2

Figure C-1. RETENTION RATE BY GRADE IN TERMS OF ENROLLMENT. Enrollment based on year-end figures from Student Master File for 1982-83. *The total number of retainees for 1982-83 is based on data for 57 out of 61 schools.

Looking at Figure C-1, we can see that the highest number of students retained in terms of enrollment was at first gra . (539 or 11.3%) and the lowest number was at grade six (31 or .7%). This pattern was also seen in past years.

The number and percent of students retained by school at the end of the 1982-83 school year is shown in Attachment C-1. At the end of 1982-83, the number recommended for retention varied from 0 to 74 per school. The percent retained ranged from .0% to 10.9%. Between 1980-81 and 1981-82, retention rates by school increased in about half of the cases and decreased in about half of the cases. Between 1981-82 and 1982-83, retention rates decreased in most cases (48 of 57 schools or 84%).

In 1982-83, 10.3% of the American Indian, 3.8% of the Black, 5.0% of the Asian, 5.1% of the Hispanic, and 1.8% of the Anglo students enrolled in AISD were retained. Percentages increased slightly over previous years for the American Indians and Asians and decreased for Blacks, Hispanics, and Anglos (with the largest decrease for Blacks).

	1980-81			1981-82			1982-83*		
	Enrolled	Retained	Percent	Enrolled	Retained	Percent	Enrolled	Retained	Percent
American Indian	97	0	0	104	8	7.7	117	12	10.3
Black	5,795	337	5.8	5,943	420	7.1	6,062	229	3.8
Asian	409	14	3.4	449	17	3.8	563	28	5.0
Hispanic	8,690	575	6.6	8,986	677	7.5	9,238	469	5.1
Anglo	15,013	293	2.0	15,234	321	2.1	14,964	263	1.8

Figure C-2. RETENTION RATES BY ETHNICITY IN TERMS OF ENROLLMENT. Enrollment based on year-end figures from Student Master File. *The total number of retainees for 1982-83 is based on data from 57 out of 61 schools.

Evaluation Question D1-3: What are the characteristics of those retained in terms of: grade level, ethnicity, sex, LEP status, Chapter 1 status? Does this differ from previous years?

Out of the 1001 students recommended for retention:

- 4.8% were at kindergarten.
- 53.8% were at first grade.
- 15.8% were at second grade.
- 7.6% were at third grade.
- 9.7% were at fourth grade.
- 5.2% were at fifth grade, and
- 3.1% were at sixth grade.

As can be seen from the figures above, the highest percent of retainees was at grade one followed by grade two.

	American Indian		Black		Asian		Hispanic		Anglo/ Other		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1979-80	2	.3	122	19	15	2	288	45	216	34	643	100
1980-81	0	0	337	28	14	1	575	47	293	24	1219	100
1981-82	8	.6	420	29	17	1	677	47	321	22	1443	100
1982-83	12	1	229	23	28	3	469	47	263	26	1001*	100

Figure C-3. RETENTION RATES BY ETHNICITY: 1979-80, 1980-81, 1981-82 1982-83. Rates are based on those recommended to be retained at the end of each year. Data was missing for nine retainees from 1979-80, six from 1980-81, and five from 1981-82. *The total number of retainees for 1982-83 is based on data for 57 out of 61 schools.

In 1979-80, the largest group of retainees was Hispanics, followed by Anglo, Black, Asian, and American Indian students. The only difference in the pattern in 1980-81 and 1981-82 was that the Black retainee population exceeded the Anglo population in these years. In 1982-83, the number of Anglo retainees exceeded Black retainees once again. Compared to last year's figures, Hispanic's retainee figures stayed the same, Anglos increased by 4%, Blacks decreased by 6%, Asians increased by 2% and American Indians increased by .4%.

	No.	Percent	No.	Percent	No.	Percent	Male: Number Enrolled	Male: Number Retained	Male: Percent Retained	Female: Number Enrolled	Female: Number Retained	Female: Percent Retained
1979-80	392	61%	251	39%	643	100%						
1980-81	765	63%	454	37%	1219	100%	15,325	765	5%	14,678	454	3%
1981-82	882	61%	561	39%	1443	100%	15,630	882	6%	15,080	561	4%
1982-83	608	61%	393	39%	1001*	100%	15,739	608	4%	15,205	393	3%

Figure C-4. RETENTION RATES BY SEX. Enrollment based on June Student Master File for each year. *The total number of retainees for 1982-83 is based on data for 57 out of 61 schools.

Approximately two thirds of those retained were male and one third were female. These percentages have been stable for the last four years.

About 4% of the 15,739 boys enrolled were retained in 1982-83 compared to 6% last year and 5% in 1980-81. The percentage of girls retained in 1982-83 was 3% of the 15,205 girls enrolled compared to 4% last year and 3% in 1980-81.

There was a decrease of 1% in the number of male and female retainees between 1981-82 to 1982-83.

Grade	Chapter 1 No.	Chapter 1 %	LEP No.	LEP %	Total No.	Total %
K	15	31.3%	13	27.1%	48	100%
1	274	50.8%	96	17.8%	539	100%
2	62	39.2%	20	12.7%	158	100%
3	32	42.1%	11	14.5%	76	100%
4	21	21.6%	20	20.6%	97	100%
5	13	25.05	8	15.4%	52	100%
6	5	16.1%	4	12.9%	31	100%
Total	422	42.2%	172	17.2%	1001*	100%

Figure C-5. PARTICIPATION OF STUDENTS RECOMMENDED FOR RETENTION IN 1981-82 IN CHAPTER 1 AND LEP PROGRAMS DURING 1982-83. *The total number of retainees for 1982-83 is based on data for 57 of 61 schools. Duplicated counts--some students were served by both programs.

Figure C-5 shows the number and percent of students recommended for retention who participated in the Chapter 1 program or were classified as limited English proficient (LEP) students during 1982-83. The total number of students involved in the Chapter 1 program was 422 (42.2% of 1001). The total number of students classified as LEP during 1982-83 who were retained was 172 (17.2%). The percentage of retainees who participated in Chapter 1 is higher than the percentage involved in Title I in 1980-81 (42.2% versus 32.7%). The percentage of retainees who are LEP is down slightly from 1980-81 (17.2% versus 22.2%).

Evaluation Question D1-4: How many students recommended for retention in June of 1982 were listed as retainees as of October 1982? as of April 1983? How many students not recommended for retention in spring 1982 were placed in lower grades in fall 1982?

The first two parts of this question, calling for updated information on students recommended for retention last spring, are addressed with the Student Master File. The last part, asking for students placed in a lower grade in fall, is addressed in the Teacher Checklist appendix (Appendix G).

Student Master File updates were completed in October 1982 and March 1983 (one month before the originally planned date). Figure C-6 shows the number of students retained as of June 1982, October 1982, and March 1983.

Date	Retained in AISD		Promoted in AISD		Left District	
	Number	Percent	Number	Percent	Number	Percent
June 1982	1448	(100%)				
October 1982	1204	(83.1%)	82	(5.7%)	162	(11.2%)
March 1983	1143	(78.9%)	118	(8.1%)	187	(12.9%)

Figure C-6. STUDENTS RETAINED AS OF JUNE 1982, OCTOBER 1982, AND MARCH 1983. Figures based on Student Master File.

As this figure illustrates, 79% of the students recommended for retention in spring of 1981-82 were still retained and in AISD as of March 1983. About 8% were promoted and in AISD in March, and 13% had left AISD. Of those who left AISD, eight were known to be in Austin private schools--five had been promoted and three had been retained.

How many students were promoted after attending summer school?

An extra breakdown was done to see if the promotion rate was higher for those attending the 1982 summer school or not by March 1983. Figure C-7 shows the results.

	Summer School Attendees		Non-SS Attendees		Total	
	N	%	N	%	N	%
Promoted	26	5.2%	97	12.6%	123	9.7%
Not Promoted	476	94.8%	670	87.4%	1146	90.3%
Total	502	100.0%	767	100.0%	1269	100.0%

Figure C-7. PROMOTION RATES FOR 1981-82 RETAINEES WHO ATTENDED AND DID NOT ATTEND SUMMER SCHOOL. Figures are based on all students still on the Student Master File as of March 1983. Figures include eight students on AISD's Student Master File but in Austin private schools.

Thus, 26 (5.2%) of the 502 1981-82 retainees who attended summer school were promoted. However, 97 (12.6%) of the 767 1981-82 retainees who did not attend summer school were promoted. The source of this difference in promotion rate is not clear. It could be that those who went to summer school were the lowest achievers, or that parents of those who attended summer school did not push for promotion because they had been told summer school would not lead to promotion.

Summary

The data indicate that:

- Almost half of the retainees are Hispanic with about one fourth Anglo and one fourth Black students making up the remainder. Very few retainees are Asian or American Indian. In terms of percent of each ethnic group enrolled recommended for retention, more Hispanic and Black students are retained than Anglo, Asian, or American Indian students.
- About two thirds of the students retained are male.
- About 42% of those recommended for retention during 1982-83 had been served by Chapter 1; 17% were classified as limited English proficienct students.
- Of the 1448 students recommended for retention in spring of 1982, 79% were still retained and in AISD as of March 1983. About 8% were promoted and in AISD in March, and 13% had left AISD.
- The number recommended for retention this spring was lower than last spring when the new retention policy first went into effect.

Attachment C-1
(Page 1 of 2)

RETAINEES 1982-83
(STUDENTS RETAINED IN JUNE 1983)

SCHOOL	ENROLLMENT (ADM)*	NO. RETAINED	% RETAINED
Allan - 142	682	74	10.9
Allison - 101	384	29	7.6
Andrews - 102	702	12	1.7
*Barrington - 149	468	0	0
Barton Hills - 103	252	11	4.4
Becker - 104	697	72	10.3
Blackshear - 105	478	5	1.0
Blanton - 106	494	6	1.2
*Brentwood - 107	-	-	-
Brooke - 108	364	5	1.4
Brown - 109	584	37	6.3
Bryker Woods - 110	222	9	4.1
Campbell - 111	368	1	.3
Casis - 112	350	34	9.7
Cook - 161	657	19	2.9
Cunningham - 113	674	1	.1
Dawson - 114	681	25	3.7
Doss - 154	541	6	1.1
Govalle - 116	601	31	5.2
Graham - 159	304	6	2.0
*Gullett - 117	-	-	-
Harris - 118	580	4	.7
Highland Park - 119	380	19	5.0
Hill - 155	413	11	2.7
Houston - 162	1041	25	2.4
Joslin - 120	800	17	2.1
Langford - 168	999	67	6.7
Lee - 121	302	1	.3
Linder - 160	533	15	2.8
Maplewood - 122	403	15	3.7
Mathews - 123	391	4	1.0
Menchaca - 147	463	9	1.9
Metz - 124	444	25	5.6
Norman - 150	239	10	4.2
Oak Hill - 148	1029	21	2.0
Oak Springs - 125	447	41	9.2
Odom - 156	861	14	1.6
Ortega - 126	257	3	1.2
Pease - 128	237	1	.4
*Pecan Springs - 129	-	-	-
Pillow - 151	360	5	1.4
Pleasant Hill - 130	621	17	2.7
*Read - 131	-	-	-
Reilly - 132	315	14	4.4
Ridgetop - 133	224	8	3.6
Rosedale - 134	224	1	.4
Rosewood - 135	239	15	6.3
St. Elmo - 136	607	9	1.5
Sanchez - 127	372	32	8.6
Sims - 139	207	6	2.9
Summitt - 138	280	5	1.8
Sunset Valley - 158	655	45	6.9
Travis Heights - 140	685	12	1.8

SCHOOL	ENROLLMENT (ADM)*	NO. RETAINED	% RETAINED
Walnut Creek-141	282	10	3.5
Webb-167	697	3	.4
Williams-166	1026	40	3.9
Winn-157	548	20	3.6
Wooldridge-152	525	3	.6
Wooten-144	417	28	6.7
Zavala-145	373	24	6.4
Zilker-146	462	19	4.1

*No retainee information for these schools available.

Retention/Promotion

Appendix D

TEACHER SURVEY

Brief description of the instrument:

A computer-generated questionnaire, with a unique assortment of about 15 questions per teacher from an item pool of 102 items. There were specific items for some programs and the remaining questions were randomly assigned.

To whom was the instrument administered?

All Migrant Program teachers, all teachers who did not receive Teacher Surveys last year (except random 50% samples from Crockett and Martin who all received surveys last year), and a 50% random sample of all new teachers.

How many times was the instrument administered?

Once, with one reminder notice.

When was the instrument administered?

Initial mailing was February 16, 1983, with a reminder sent on March 2, 1983. The closing date for data processing was April 6, 1982.

Where was the instrument administered?

To the teachers in their schools.

Who administered the instrument?

Self-administered.

What training did the administrators have?

N/A.

Was the instrument administered under standardized conditions?

N/A.

Were there problems with the instrument or the administration that might affect the validity of the data?

Unknown.

Who developed the instrument?

The Office of Research and Evaluation.

What reliability and validity data are available on the instrument?

None.

Are there norm data available for interpreting the results?

Some items are comparable to items from previous surveys.

TEACHER SURVEY

Purpose

Teacher survey results provided information relevant to the following decision and evaluation questions in the retention/promotion design:

Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued or modified?

Evaluation Question D2-7: How many schools used the three videotapes on instructional ideas for retainees? Were they viewed as helpful?

Evaluation Question D2-8: Are teachers adequately prepared to deal with the needs of retainees?

Procedure

Complete procedure information can be found in appendix Q of SYSTEMWIDE EVALUATION: 1982-83 Technical Report Volume IV, Survey and Records (ORE Pub. No. 82.55). Basically, the retention items were sent to a random sample of 310-350 elementary teachers. About 81-86% of the teachers surveyed responded to the items. After responses were keypunched, the District Priorities Data Analyst wrote a program to calculate the number and percent of respondents giving each possible option. Responses are shown in Figure D-1.

Results

Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued or modified?

Evaluation Question D2-7: How many schools used the three videotapes on instructional ideas for retainees? Were they viewed as helpful?

Evaluation Question D2-8: Are teachers adequately prepared to deal with the needs of retainees?

Videotapes

The three videotapes on instructional ideas for retainees focused on diagnosis, self-concept, and direct instruction. Elementary principals

previewed the tapes at the August administrator workshop. They were then made available on a checkout basis at the Library Learning Center (LRC). LRC records indicate that 27 of the 61 elementary schools (44.3%) checked out the tapes in the fall of 1982-83. It is possible that some additional schools simply made copies of the tapes.

Items 89-92 dealt with teachers' opinions on the instructional videotapes for retainees. Of the 282 teachers responding, about two thirds (68%) said they had not seen any of the tapes. Approximately 16-20% said they had seen the diagnosis, self-concept, and direct instruction tapes. These figures indicate less use of the tapes than the LRC records. It is possible, of course, that teachers had forgotten the names or nature of the tapes between fall and February.

About 60% of those who indicated they had seen the tapes said they were very or somewhat useful. Close to 90% thought they were at least a little helpful, with only 8-13% responding that they were not helpful. These responses are close to those of the administrators.

Teacher Preparation

Only 40% of the teachers in the sample felt adequately prepared to foster learning in students who had been retained (Item 31). About one third were neutral or did not know if they were adequately prepared, with 28% saying they were not adequately prepared to help retainees learn. Half of the teachers sampled last year thought they were adequately prepared to foster learning in retainees.

Teachers were also asked whether retention of students with serious achievement deficiencies is beneficial (Item 32). Three fourths agreed that retention of these students was a good idea with only 8% disagreeing and 17% unsure. These results were similar to those of last year. About two thirds of the administrators surveyed this year agreed that retention of these students is beneficial.

Thus,most teachers seem to believe retention is beneficial for those with serious achievement problems. Less than half feel adequately prepared to foster learning for these students. Most teachers did not see the videotapes on retention produced last summer - - about 60% of those who saw them thought they were very or somewhat useful in helping retainees.

82.42

TEACHER SURVEY QUESTIONS ON RETENTION
SA = Strongly Agree
A = Agree
N = Neutral
D = Disagree
SD = Strongly Disagree
DK = Don't Know

	SA 1	A 2	N 3	D 4	SD 5	DK 6
31. TEACHERS ARE ADEQUATELY PREPARED TO FOSTER LEARNING IN STUDENTS WHO HAVE BEEN RETAINED IN A GRADE. (86.45% Responded) N=268/310	6%	34%	20%	23%	5%	12%
32. RETENTION OF STUDENTS WITH SERIOUS ACHIEVEMENT DEFICIENCIES IS BENEFICIAL. (87.05% Responded) N=270/N=289/332	32%	43%	11%	7%	1%	6%

39. WHICH OF THE THREE VIDEOTAPES ON INSTRUCTIONAL IDEAS FOR RETAINEES DID YOU SEE THIS YEAR? N (80.6% responded) N=282/350

1. 16% DIAGNOSIS (45)
2. 17% SELF-CONCEPT (49)
3. 20% DIRECT INSTRUCTION (58)
4. 68% NONE (192)

HOW WOULD YOU RATE THE HELPFULNESS OF THE TAPES YOU SAW IN DEALING WITH RETAINEES?

	VERY HELPFUL	SOMEWHAT HELPFUL	A LITTLE HELPFUL	NOT HELPFUL	DID NOT SEE
90. DIAGNOSIS N=198	4%5	11%4	8%3	2%2	75%1
91. SELF-CONCEPT N=195	4%5	13%4	7%3	3%2	73%1
92. DIRECT INSTRUCTION (N=200)	6%5	12%4	10%3	4%2	72%1

Figure D-1. TEACHER SURVEY RESPONSES TO RETENTION ITEMS. Items were sent to random samples of 310 - 350 teachers in February 1983. Response rates were 81-86%.

Retention/Promotion

Appendix E

ADMINISTRATOR SURVEY

82.42

Instrument Description: Administrator Survey

Brief description of the instrument:

The "Questions for Administrators" survey included 62 questions. Some questions on this annual survey were also included on the "Questions for Teachers" survey to allow comparisons--others were asked only of administrators. The survey was computer-generated during 1982-83 for the first time, with administrators asked only about topics applicable to them. Information related to accreditation, staff development, retention, discipline, bus monitors, achievement, insurance, administrator evaluation, Project PASS, school resources, gifted/talented programs, and counselors was collected.

To whom was the instrument administered?

All District administrators were surveyed (N=315). Administrators received only questions which applied to them. The number of questions received varied from 10 questions for some central administrators to 33 questions for some elementary school administrators.

How many times was the instrument administered?

Once. Surveys were first sent out February 14 with a reminder sent February 28.

When was the instrument administered?

February 14, 1983 with a reminder survey February 28.

Where was the instrument administered?

Through the school mail to administrators' building addresses.

Who administered the instrument?

Self-administered.

What training did the administrators have?

N/A.

Was the instrument administered under standardized conditions?

No, although instructions were the same to everyone.

Were there problems with the instrument or the administration that might affect the validity of the data?

None that are known.

Who developed the instrument?

District Priorities' evaluator finalized questions submitted by Office of Research and Evaluation (ORE) and other AISD staff.

What reliability and validity data are available on the instrument?

None.

Are there norm data available for interpreting the results?

Responses for some questions are available from last year's survey. Some item responses can be compared to those of teachers on their survey.

ADMINISTRATOR SURVEY

Purpose

The "Questions for Administrators" survey includes items on a variety of issues important districtwide. Some of the questions dealt with retention of students at the elementary level (items 4-7, 34-45). These provided opinions on retention, the policy in general, the potential usefulness of a number of possible interventions. Items 34-45 provided information relevant to the following decision and evaluation questions:

> Decision Question D2. How effective have efforts been directed towards retainees? Should they be continued or modified?
>
> > Evaluation Question D2-7. How many schools used the three videotapes on instructional ideas for retainees? Were they viewed as helpful?

Procedure

Complete information on the procedures and results used for the Administrator survey are included in Appendix R (ORE Pub. No. 82.55). All administrators received a sample of questions applicable to them during February. All central administrators responded to item 4. A random half of the elementary school administrators responded to items 5, 7, 34-45, while the other random half responded to items 4 and 6. All items used a Likert-type rating scale of 5 or 6 points. The number and percent of respondents giving each possible response was then calculated.

Results

Response Rate

A total of 40 central elementary administrators were asked item 4--all responded (100%). Half of the elementary school administrators responded to items 4 and 6 while the other half responded to items 5, 7, 34-45. The response rate among the elementary school administrators was 93%. Response rates for each item and the percent giving each possible response are shown in Attachment E-1.

Interventions for Retainees

> Decision Question D2. How effective have efforts been directed towards retainees? Should they be continued or modified?

Evaluation Question D2-7. How many schools used the three videotapes on instructional ideas for retainees? Were they viewed as helpful?

Items 34-36 deal specifically with three videotapes developed by elementary coordinators on helping teachers of retainees with diagnosis, self concept, and direct instruction. Elementary principals previewed these tapes at the August workshop and they were made available on a checkout basis through the Library Learning Center (LRC). LRC records indicate that 27 schools checked out the tapes during the school year. It is possible that some additional schools copied the tapes.

Of the 34 elementary school administrators responding to items 34-36, 3 (8.8%) said they had not seen the tapes. Of those who saw the tapes, over 90% said they have been at least somewhat useful in helping the teachers of retainees. "Useful" (3) was the most common rating given for the diagnosis and self-concept tapes; equal numbers of respondents rated the direct instruction segment "Useful" (3) and "Very Useful" (4). The direct instruction tape received the highest ratings of usefulness overall (with 54.8% rating as extremely or very useful).

Items 37 and 38 focus on other efforts during 1982-83 to help schools deal with retainees. The Assistant Superintendent asked principals to send in summaries of their efforts to help retainees. These were then distributed to all schools in an attempt to help districtwide and school efforts in this area. Of the 30 administrators who had seen this summary, 12.5% viewed the summaries as extremely useful, 40.6% as very useful, 43.8% as useful, and 3.1% as not very useful. Thus, 53.1% rated the summaries as extremely or very useful (almost equal to the percent rating the direct instruction tape highly). Item 38 refers to the potential usefulness of the new videotape on difficult parent-teacher conferences available mid-year. As of the February survey date, 97% thought the tape would be useful. About 18% said it would be extremely useful, 38% very useful, and 41% useful. Thus, 55.8% felt the tape would be extremely or very useful.

Thus, all of the efforts specifically mentioned in the survey were considered at least somewhat useful. The direct instruction and difficult parent-teacher conference videotapes and the summaries of efforts at each school for retainees were rated the most useful.

Items 39-45 concerned possible efforts to help retainees--respondents were asked to rate their potential usefulness. A summer school for students retained at any point in their elementary years was held in 1982, but items 41 and 42 focused on who should be included in future summer schools. Possible interventions included in the list and the percentage of respondents rating each as very or extremely useful were:

39.	Training in working with parents to accept the decision and help the student at home.	71.4%
40.	Training in individualizing instruction.	57.2%

41.	Annual summer school for those to be retained during the following year only.	68.6%
42.	Annual summer school for all 5-6-7-year-old potential retainees.	64.7%
43.	Special supplemental materials and activities.	65.7%
44.	More direct assistance from instructional coordinators.	77.2%
45.	Special transitional classes at the primary level (e.g., transitional first grade covering K-1 material).	68.6%

Thus, the potential interventions rated most highly were more direct assistance from instructional coordinators (77%), training in working with parents (71%), special transitional classes at the primary level (69%), and summer school for those to be retained the following year (69%).

The interventions rated most often as potentially extremely useful included the special transitional classes, annual summer school for 5-, 6-, and 7-year-old potential retainees, and special supplemental materials and activities. Individualized instruction and the idea of an annual summer school for potential retainees were most often rated as potentially not very useful. Thus, the summer school for potential retainees provoked the strongest opinions.

Opinions on Retention Policy

About two thirds (65%) of the administrators and three fourths (75%) of the teachers surveyed this year said retention is beneficial for students with serious achievement problems. Administrators also believe the policy provides adequate guidance to teachers and principals in deciding whether to retain students (83%). Finally, most believe they were given adequate staff development to implement the policy (79%) and adequate support from central staff in carrying out the policy (72%).

Summary

Administrators seemed to view the efforts provided so far as useful. However, they also would like to see other interventions attempted, especially more direct assistance from coordinators, training in working with parents, special transitional classes at the primary level, and summer school for those to be retained the following year. Summer school for potential retainees and special supplemental materials and activities were also viewed as having great potential by respondents.

Most administrators believe retention can be helpful for those with serious achievement problems. They also seem to feel comfortable with the new policy and the staff development and support from central staff they have received.

ELEMENTARY ADMINISTRATORS

Attachment E-1
(Page 1 of 2)

69 of 74 responded (93%)

PLEASE CIRCLE THE NUMBER INDICATING YOUR LEVEL OF AGREEMENT WITH THE FOLLOWING STATEMENTS USING THE SCALE BELOW:

1 = STRONGLY AGREE
2 = AGREE
3 = NEUTRAL
4 = DISAGREE
5 = STRONGLY DISAGREE
6 = DON'T KNOW

		% 1	% 2	% 3	% 4	% 5	% 6
4.	RETENTION OF STUDENTS WITH SERIOUS ACHIEVEMENT DEFICIENCIES IS BENEFICIAL. N=31	35.5	41.9	12.9	3.2	6.5	0.0
5.	THE NEW RETENTION/PROMOTION POLICY PROVIDES ADEQUATE GUIDANCE TO TEACHERS AND PRINCIPALS IN DECIDING WHETHER TO RETAIN STUDENTS. N=35	2.9	30.0	5.7	8.6	2.9	0.0
6.	PRINCIPALS WERE GIVEN ADEQUATE STAFF DEVELOPMENT TO ASSIST THEM IN IMPLEMENTING THE PROMOTION/RETENTION POLICY. N=33	15.2	63.6	18.2	3.0	0.0	0.0
7.	PRINCIPALS RECEIVED ADEQUATE SUPPORT FROM CENTRAL ADMINISTRATION IN CARRYING OUT THE PROMOTION/RETENTION POLICY. N=36	11.1	61.1	11.1	11.1	0.0	5.6

EXTREMELY USEFUL 1 | VERY USEFUL 2 | USEFUL 3 | NOT VERY USEFUL 4 | USELESS 5 | DID NOT SEE 6

USING THE ABOVE SCALE, CIRCLE THE NUMBER THAT INDICATES HOW USEFUL YOU THINK THE FOLLOWING VIDEOTAPES ON RETENTION PREVIEWED AT THE AUGUST WORKSHOP HAVE BEEN TO TEACHERS IN HELPING RETAINEES. N & % WITHOUT "DID NOT SEE" SHOWN IN INK

			1	2	3	4	5	6
34.	DIAGNOSIS	N=34	2.9	38.2	44.1	5.9	0.0	9.8
		N=31	3.2	41.9	48.4	6.5	0.0	
35.	SELF-CONCEPT	N=34	11.8	23.5	50.0	5.9	0.0	8.8
		N=31	12.9	25.8	54.8	6.5	0.0	
36.	DIRECT INSTRUCTION	N=34	14.7	35.3	35.3	5.9	0.0	8.8
		N=31	16.1	38.7	38.7	6.5	0.0	
37.	SUMMARIES OF STRATEGIES USED BY TEACHERS IN ASSISTING RETAINEES	N=34	11.9	38.2	41.2	2.9	0.0	5.9
		N=32	12.5	40.6	43.8	3.1	0.0	

HOW USEFUL COULD THE FOLLOWING BE TO TEACHERS IN HELPING RETAINEES?

EXTREMELY USEFUL 1 | VERY USEFUL 2 | USEFUL 3 | NOT VERY USEFUL 4 | USELESS 5

		1	2	3	4	5
38.	THE NEW VIDEOTAPE ON DIFFICULT PARENT-TEACHER CONFERENCES N=34	17.6	38.2	41.2	2.9	0.0
39.	TRAINING IN WORKING WITH PARENTS TO ACCEPT THE DECISION AND HELP THE STUDENT AT HOME N=35	20.0	51.4	22.9	2.9	2.9
40.	TRAINING IN INDIVIDUALIZING INSTRUCTION N=35	22.9	34.3	28.6	11.4	2.9
41.	ANNUAL SUMMER SCHOOL FOR THOSE TO BE RETAINED THE FOLLOWING YEAR ONLY N=35	28.6	40.0	22.9	8.6	0.0
42.	ANNUAL SUMMER SCHOOL FOR ALL 5-6-7-YEAR-OLD POTENTIAL RETAINEES N=34	38.2	26.5	20.6	14.7	0.0
43.	SPECIAL SUPPLEMENTAL MATERIALS AND ACTIVITIES N=35	34.3	31.4	28.6	5.7	0.0

44.	MORE DIRECT ASSISTANCE FROM INSTRUCTIONAL COORDINATORS N=35	22.9	54.3	17.1	5.7	0.0
45.	SPECIAL TRANSITIONAL CLASSES AT THE PRIMARY LEVEL (E.G. TRANSITIONAL FIRST GRADE COVERING K-1 MATERIAL) N=35	40.0	28.6	25.7	5.7	0.0

CENTRAL ADMINISTRATORS

152 of 162 responded (94%)

PLEASE CIRCLE THE NUMBER INDICATING YOUR LEVEL OF AGREEMENT WITH THE FOLLOWING STATEMENTS USING THE SCALE BELOW:

1 = STRONGLY AGREE
2 = AGREE
3 = NEUTRAL
4 = DISAGREE
5 = STRONGLY DISAGREE
6 = DON'T KNOW

		% 1	% 2	% 3	% 4	% 5	% 6
4.	RETENTION OF STUDENTS WITH SERIOUS ACHIEVEMENT DEFICIENCIES IS BENEFICIAL. N=40 (40 received items)	15.0	37.5	12.5	12.5	7.5	15.0

Retention/Promotion

Appendix F

ATTENDANCE REGISTERS

Instrument Description: Attendance Registers

Brief description of the instrument:

The instrument is a computer-generated form by school with the list of students to be checked at that school and space to record the number of days enrolled and the number of days absent for each of five six-week periods and overall. The information was taken from the attendance registers at each of the schools in the sample.

To whom was the instrument administered?

The instrument was administered by ORE staff with the help of the person in charge of keeping the attendance registers at the school.

How many times was the instrument administered?

Once.

When was the instrument administered?

The last week in April and the first week in May.

Where was the instrument administered?

At Allan, Barrington, Brown, Brentwood, Oak Hill, Pecan Springs, Rosewood, Zilker, Cook, Sunset Valley, and Maplewood.

Who administered the instrument?

The evaluation assistant for District Priorities.

What training did the administrators have?

Verbal instructions.

Was the instrument administered under standardized conditions?

No, although all registers are to be kept in a standard way.

Were there problems with the instrument or the administration that might affect the validity of the data?

No.

Who developed the instrument?

District Priorities' evaluator.

Are there norm data available for interpreting the results?

No.

What reliability and validity data are available on the instrument?

Reliability could be checked by double-checking attendance register. Validity is not applicable.

Attendance Registers

Purpose

The purpose of this appendix is to provide information to answer the following decision and evaluation questions from the 1982-83 Retention/Promotion Evaluation Design:

> Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued and/or modified?
>
> > Evaluation Question D2-3: What were the attendance rates of 1981-82 retainees who attended summer school during 1981-82, summer school, and 1982-83?

TEA requested this information to determine whether summer school attendance had any impact on retainees' attendance.

Procedure

The study started with the random selection of ten schools. The schools selected were Allan, Barrington, Brown, Brentwood, Graham, Oak Hill, Pecan Springs, Rosewood, Summitt and Zilker. Sunset Valley, Cook, and Maplewood were later added to the sample. Once the schools were chosen the next step was to find retainees for whom the needed attendance information was available. The students selected met the following criteria: they attended one of the schools selected in April 1983, and they had summer school attendance data and attendance data for 1981-82 available from summer school records.

Graham and Summitt had no summer school retainees who had complete attendance data available. Sample sizes at the other schools were also reduced because of this. Information from 1981-82 was often missing. A small number of students had also left AISD by April 1983. The total number of students checked was 84.

The form used to gather the data was developed by a District Priorities evaluator and generated by the AISD computer. The forms are by school with the list of students to be checked at that school and space to record the number of days enrolled and the number of days absent for each of the five six weeks and for the total number of days enrolled and absent (see Attachment F-1).

The procedure for getting the information was to have the evaluation assistant for District Priorities call each of the schools and either arrange a time when she could come out to the schools and gather the information or get the information over the telephone. Getting the information by telephone was done when there were three or less students per school. In one case the list was sent to the school and the person in charge of the attendance register filled in the information and sent it back to the office. If a student had just transferred, we called the previous school if the school registrar knew what it was.

Results

The average number of days enrolled and absent for retainees in the sample schools are shown in Figure F-1. The average absence rates were 5.1% for 1981-82, 5.2% for summer school, and 4.9% for the first five six weeks of 1982-83.

Another check was made to see how many students' attendance had increased or decreased by more than 1% from 1981-82 to 1982-83. The number of absences went up for 33 students (39.3%), down for 33 students (39.3%), and did not change more than 1% for 18 students (21.4%). (See Figure F-2).

Thus, summer school appeared to have little impact on the attendance of these students. Average attendance rates changed only slightly from 1981-82 to 1982-83, and equal numbers of students' attendance increased and decreased. These results must be interpreted in light of District attendance rates. The average absence rates were 6% in 1981-82 and 5.4% in 1982-83. Thus, the retainees who attended summer school appeared to have average attendance -- they did not miss school any more often than other AISD students.

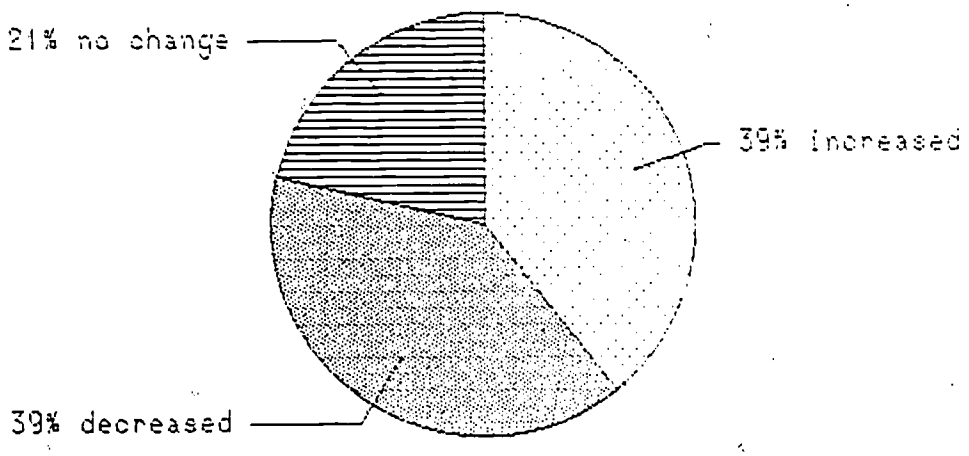

Figure F-2. PERCENT OF STUDENTS FOR WHOM THE NUMBER OF ABSENCES VARIED OR STAYED THE SAME FROM 1981-82 TO 1982-83.

Figure F-1. ATTENDANCE OF SUMMER SCHOOL RETAINEES: 1981-82, SUMMER 1982, 1982-83. Schools were randomly selected for the sample. All retainees with complete attendance data available were included.

SCHOOLS		1981-82 DAYS ENROLLED	1981-82 DAYS ABSENT	1981-82 % DAYS ABSENT	SUMMER DAYS ENROLLED	SUMMER DAYS ABSENT	SUMMER % DAYS ABSENT	1982-83 DAYS ENROLLED	1982-83 DAYS ABSENT	1982-83 % DAYS ABSENT
Allan	N=26	166.1	5.8	3.5	23.1	0.7	2.8	145.9	6.7	4.6
Barrington	N=1	175.0	5.0	2.9	24.0	0.0	0.0	146	4.0	2.7
Brentwood	N=2	172.5	1.0	0.6	24.0	0.5	2.1	146	2.5	1.7
Brown	N=9	137.4	6.3	4.6	23.2	1.2	5.3	146	6.8	4.7
Cook	N=15	165.4	11.1	6.7	24.0	1.2	5.0	145.9	9.9	6.8
Maplewood	N=2	168.0	17.5	10.4	24.0	2.5	10.4	146	8	5.5
Metz	N=9	163.6	13.3	8.2	21.6	2.9	13.4	110.1	6.2	5.6
Oak Hill	N=2	172.5	3.0	1.7	24.0	0.5	2.1	146	7.5	5.1
Pecan Springs	N=3	146.7	3.7	2.5	21.3	1.7	7.8	115	2.3	2.0
Rosewood	N=4	175.0	6.8	3.9	24.0	0.8	3.1	144.5	2.8	1.9
Sunset Valley	N=10	170.4	11.1	6.5	22.6	1.3	5.8	145.5	8.1	5.6
Zilker	N=1	79.0	2.0	2.5	24.0	1.0	4.2	146.0	8.0	5.5
GRAND TOTAL	N=84	162.3	8.3	5.1	23.1	1.2	5.2	140.9	6.8	4.9

AUSTIN INDEPENDENT SCHOOL DISTRICT
OFFICE OF RESEARCH AND EVALUATION

ATTENDANCE - 1ST 5 6 WEEKS

E = ENROLLED
A = ABSENT

SCHOOL:
TEACHER:

NAME (LAST, FIRST)	ID#	GRADE	1		2		3		4		5		TOTAL	
			E	A	E	A	E	A	E	A	E	A	E	A

SCHOOL:
TEACHER:

NAME (LAST, FIRST)	ID#	GRADE	1		2		3		4		5		TOTAL	
			E	A	E	A	E	A	E	A	E	A	E	A

Retention/Promotion

Appendix G

TEACHER CHECKLIST

INSTRUMENT DESCRIPTION: Teacher Checklist

Brief Description of the instrument:

The teacher checklist rates retainees' reading and math skills and behavior in the classroom. It includes five items related to academic skills, one related to strengths and weaknesses sheets, and 12 related to behavior. Teachers rated selected retainees compared to other students in their fall 1982 classrooms. A memorandum to the principals asked whether the school had placed any students in a lower grade in the fall.

To whom was the instrument administered?

The teachers of a total of 300 retainees from 1980-81 and 1981-82 - - 150 who attended summer school and 150 who had not. Equal numbers of 1980-81 and 1981-82 retainees were chosen.

How many times was the instrument administered?

Once with a reminder.

When was the instrument administered?

October 20, 1982 with a reminder November 1, 1982.

Where was the instrument administered?

Surveys were sent to the principals of the students' 1982-83 school for delivery to teachers. Teachers generally completed surveys in their classrooms.

Who administered the instrument?

Self-administered.

What training did the administrators have?

Written directions on checklist.

Was the instrument administered under standardized conditions?

No.

Were there problems with the instrument or the administration that might affect the validity of the data?

None that are known.

Who developed the instrument?

Office of Research and Evaluation staff with input from elementary administrators.

What reliability and validity data are available on the instrument?

The "behavior" section is based on the Behavior Rating Checklist. Its reliability based on Cronback Alpha Coefficients of internal consistency is .87 and .94 for the two factors measured. Test-retest reliabilities between October and May were .71 and .70. A validity study showed that the scale can distinguish between students of different types.

Are there norm data available for interpreting the results?

No.

TEACHER CHECKLIST

Purpose

The Teacher Checklist supplied information for the following decision and evaluation questions in the retention/promotion design:

Decision Question D1: What effects has the District policy on retention/promotion had on achievement? on retention rates? Should the District policy be altered?

Evaluation Question D1-4: How many students recommended for retention in June of 1982 were listed as retainees as of October 1982? as of April 1983? How many students not recommended for retention in spring 1982 were placed in lower grades in fall 1982?

Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued and/or modified?

Evaluation Question D2-1: Did the fall teachers of retainees receive skills and weaknesses sheets filled out by the previous teachers? Were they helpful?

Decision Question D3: Can students who will benefit from retention be identified?

Evaluation Question D3-1: What characteristics of students who benefit from retention can be identified?

*This first part of Evaluation Question D1-4 is addressed in the Retainee Characteristics: Student Master File appendix of this report (Appendix C).

Procedure

Complete procedures are shown in Appendix K of the Summer School Pilot 1982: Second Report to the Texas Education Agency (ORE Pub. No. 82.25).

Basically, 300 retainees - - 150 from 1980-81 and 150 from 1981-82 - - were selected for the sample. Half had attended summer school while the other half had not. The fall teachers of these students were sent a Retainee Checklist in which they rated the reading skills, math skills, and behavior of the student compared to the other students in the class. One item asked whether teachers had received a sheet showing students' strengths and weaknesses and whether this was helpful.

Surveys were sent out October 20 and were checked in as received. Principals were asked to distribute the surveys since teacher codes for each student were not yet known. A reminder was sent November 1 which also asked principals to indicate whether they had placed any nonretainees in earlier grades in the fall. A copy of this memorandum and a survey showing overall results are included in Attachment G-1 and G-2.

Results

Evaluation Question D1-4: How many students not recommended for retention in spring 1982 were placed in lower grades in fall 1982?

The memorandum and attachment shown in Attachment G-3 summarize results for this question.

All of the schools responded except two. The total number of fall placements in lower grades was 44 (compared to 55 last fall). Of the 59 schools reporting, 36 reported no demotions and 23 reported one. The highest number reported was 4 at one school. The grades students were most often returned to were kindergarten, first, and second grades.

The new policy allows these fall changes after several weeks of observation but discourages the practice. Teachers are encouraged to notify parents as soon as possible that retention for the following year is a possibility. It is interesting to note that, in 10 of 31 (32%) cases where previous school was reported, students had transferred in from an Austin private school or another public school. Eight (26%) had transferred from another AISD school, and 13 (41%) had been in the same school.

Evaluation Question D2-1: Did the fall teachers of retainees receive skills and weaknesses sheets filled out by the previous teacher? Were they helpful?

Teachers who recommended students for retention began to fill out "Retention Data" forms in spring of 1981-82 to help the fall teachers understand the children's strengths and weaknesses (see Attachment G-4). Item 6 on the survey asked fall teachers whether they had received this sheet for the retainee in question and whether it was helpful in determining needs and strengths. Of the 138 teachers of 1981-82 retainees surveyed, 105 (76%) said they had received this sheet while 33 (24%) said they had not.

Of the 102 teachers who responded to the question regarding the usefulness of the sheet, 34 (33.3%) said it helped a lot, 56 (54.9%) said it helped a little, and 12 (11.8%) said it did not help.

The fact that nearly one fourth of the teachers said they did not receive this sheet is surprising since they are to go in the students' cumulative folder. Some teachers may not have been sure whether the "Retention Data" sheet was the same as a strengths and weaknesses sheet. Other teachers may not have filled out or filed the form in the cumulative folder.

The fact that only 33% of the respondents felt the forms helped a lot may be the result of the openness of the form and lack of directions. Some teachers may have been much more specific than others in information given. Also, the form does not specifically ask for skill weaknesses, but instead focuses on strengths, interests, learning styles, and parents' reaction to retention. It seems likely that information on areas in which the students need help would focus the teachers' efforts more quickly than some of the other information.

Evaluation Question D3-1: What characteristics of students who benefit from retention can be identified?

The original plan was to include information on students' behavior in the discriminant analysis as a possible predictor of retainee success. However, the sample sizes at each grade were too small to be useful in predicting success. In addition, the pattern of behavior scale scores for 1980-81 and 1981-82 retainees was different, which might affect the usefulness of a prediction based on this variable. This analysis or some alternative might be attempted at a later date.

Complete results for the Teacher Checklist items can be found in appendix K of the Summer School Pilot 1982: Second Report to the Texas Education Agency (ORE Pub. No. 82.25).

AUSTIN INDEPENDENT SCHOOL DISTRICT
Office of Research and Evaluation

October 29, 1982

TO: Elementary Principals

FROM: Nancy Baenen Schuyler

SUBJECT: Retainee Checklist

We have not yet received surveys for some students. Since we still don't know who their teachers are this fall, we would appreciate it if you could put these surveys in the appropriate teacher boxes. We'd also greatly appreciate your completion of the form below. Thank you!

NBS:rrf

Approved: Freda M Hellen
Director, Office of Research and Evaluation

Approved: Ruth MacAllister
Assistant Superintendent, Elementary Education

SCHOOL_____

1. Have you had to place any students in an earlier grade this fall than indicated by their report card last spring?

   Yes_____ No_____

2. If yes, for each child please list:
   a. grade returned to
   b. school attended last year
   c. reason for change

   Child 1: a.
   b.
   c.

   Child 2: a.
   b.
   c.

   Child 3: a.
   b.
   c.

Use reverse side if necessary. Return to: Nancy Schuyler, ORE, Adm. Bldg.

AUSTIN INDEPENDENT SCHOOL DISTRICT
Office of Research and Evaluation

Overall Responses

RETAINEE CHECKLIST

One of the questions addressed in the evaluation of the retention/promotion policy this year is how the retainees are functioning in Austin ISD classrooms this fall. We would appreciate your help in rating the skills and behavior of the retainee listed above compared to other students in your class this fall. Base your ratings on your experiences so far this year.

Your Name: _____

SKILLS: Circle the number indicating this child's skills in the following areas compared to others in your class.

	Extremely Low				Average			Extremely High	
1. Reading comprehension N=207	9	3.9 8	5.3 7	16.4 6	15.5 5	34.3 4	14.0 3	1.4 2	1.0 1
a. Understanding facts N=162 (literal meaning)	4.9 9	3.7 8	14.8 7	16.2 6	15.4 5	19.1 4	4.9 3	2.7 2	1.2 1
b. GRADE 1 ONLY: N=41 Understanding "How and Why"	2.0	2.4	4.9	14.6	41.5	12.2	11.5	4.9	2.0
c. GRADES 2, 5, AND 6 ONLY: Making inferences	4.8 3.6	7.9 6.6	22.2 15.4	14.3 22.3	22.2 24.9	15.9 3.8	7.5 7.7	3.2 0.0	0.0 0.0
d. GRADES 4 AND 5 ONLY: Understanding Cause & Effect	0.0 10.5	7.1 2.6	35.7 23.7	21.4 31.6	35.7 18.4	0.0 5.3	0.0 5.3	0.0 2.6	0.0 0.0
2. Vocabulary N=262	3.1 9	5.0 8	14.5 7	18.3 6	31.3 5	14.1 4	8.0 3	1.9 2	0.8 1
3. Math concepts N=259	1.5 9	6.9 8	12.9 7	18.9 6	27.3 5	13.5 4	13.5 3	3.7 2	1.5 1
4. Math problem solving N=258	3.9 9	9.3 8	15.5 7	23.2 6	23.1 5	12.9 4	8.9 3	3.1 2	1.2 1
5. Math computation N=260	0.8 9	5.4 8	15.0 7	15.4 6	23.5 5	14.2 4	14.9 3	6.5 2	2.3 1

Grade 2 N=63
Grade 3 N=26
Grade 4 N=14
Grade 5 N=4
Grade 6 N=38

Check the appropriate answer:

6. Did you receive a skill strengths and weaknesses sheet N=260 on this retainee filled out by the 1981-82 teacher? 58.1 YES 41.9 NO

If so, did you find it useful in determining this N=147 child's needs and strengths this fall?
30.6 YES, a lot
59.9 YES, a little
9.5 NO

BEHAVIOR: Rate each behavior according to the frequency with which the student exhibits that behavior. Circle a number from 1 to 9 for each behavior description.

	There has been no evidence of this behavior				This behavior occurs occasionally				This behavior is frequent and typical
1. Student demands extra time from the teacher for help. N=269	14.1 1	7.1 2	10.4 3	8.6 4	26.8 5	5.6 6	9.7 7	9.7 8	8.2 9
2. Student understands and follows directions. N=266	1.9 1	2.2 2	9.0 3	9.3 4	11.7 5	9.7 6	20.5 7	24.3 8	7.5 9
3. Student quits or gives up on assignments before completion. N=269	30.5 1	12.3 2	10.8 3	5.6 4	14.0 5	4.8 6	7.4 7	6.7 8	5.9 9
4. Student bothers others while they are working. N=269	22.3 1	14.9 2	10.0 3	7.4 4	16.4 5	5.2 6	5.9 7	10.4 8	2.4 9
5. Student brings things to class, initiates discussions, shows imagination. N=267	20.6 1	13.9 2	12.7 3	7.9 4	22.5 5	4.5 6	9.2 7	5.2 8	4.5 9
6. Student breaks classroom or school rules. N=268	16.8 1	13.8 2	9.7 3	9.2 4	18.7 5	5.6 6	12.3 7	6.3 8	5.6 9
7. Student must be reprimanded during class time. N=268	19.0 1	16.4 2	10.4 3	10.1 4	10.4 5	4.1 6	12.7 7	7.5 8	8.6 9

82.25

	There has been no evidence of this behavior				This behavior occurs occasionally			This behavior is frequent and typical	
8. Student does what the teacher asks without complaint or delay. N=250	6.0 1	4.8 2	6.8 3	6.8 4	13.2 5	6.4 6	18.4 7	20.8 8	16.8 9
9. Student is prepared and able to participate in class activities, lessons, discussion, etc. N=251	3.6 1	4.4 2	6.4 3	8.4 4	16.7 5	14.2 6	17.1 7	19.5 8	10.8 9
10. Student completes work on time and in good order. N=251	3.6 1	5.6 2	8.4 3	10.4 4	18.0 5	18.0 6	15.7 7	16.3 8	14.3 9
11. Student complains that other students tease him/her. N=250	39.6 1	20.0 2	9.2 3	4.8 4	14.4 5	3.6 6	1.6 7	4.0 8	2.8 9
12. Student provides leadership voluntarily in some class activities. N=251	15.9 1	13.5 2	10.8 3	9.2 4	12.9 5	7.2 6	9.6 7	11.6 8	4.4 9

Thank you! Please fold this form so the return address shows and put in the school mail as soon as possible.

MAIL TO:

NANCY B. SCHULTZER
ADMINISTRATION BUILDING
ORE, BOX 79

82.42

AUSTIN INDEPENDENT SCHOOL DISTRICT
Office of Research and Evaluation

December 1, 1982

TO: Ruth MacAllister
Timy Baranoff
Hermelinda Rodriguez

FROM: Nancy Baenen Schuyler

SUBJECT: Changes in Fall Placements

A summary of the information reported by schools on fall demotions is provided on the attached sheet. Only two schools did not report.

The total number of fall placements in lower grades than expected was 44 (55 cases were reported last fall). Of the 61 schools, 36 reported no demotions this fall with 23 reporting at least one. The average number listed across all reporting schools was less than one (.61). The highest number of fall demotions reported was four. The grades students were most often returned to were kindergarten, first, and second grade.

The school the students attended last year was listed in 31 cases. Ten students (32%) had transferred into AISD from a private school or another public school system. Eight students (26%) had transferred from another AISD school (some from paired schools). The other 13 students (41%) were in the same school last year and this year.

Schools reported the following reasons for changes in placement:

- Could not handle academic work (16)
- Parent request (10)
- Teacher recommendation (6)
- Principal recommendation (1)
- LST recommendation (1)
- Immaturity (5)
- Attendance (this year and last), late entry (3)
- Frustration, inattentiveness, failure to follow directions on the part of the child (3)
- Child unable to speak English (1)
- Child double-promoted last spring--parent decided it was not a good idea (1)

Please let me know if you would like the complete set of surveys.

NBS:rrf
Attachment

Approved: _____
Director, Office of Research and Evaluation

SCHOOL	CHILDREN DEMOTED? YES	NO	HOW MANY? (YES ONLY)	GRADE RETURNED TO: K	1	2	3	4	5
ALLAN		X							
ALLISON		X							
ANDREWS	X		3		(2)		X		
BARRINGTON		X							
BARTON HILLS	X		2		X	X			
BECKER		X							
BLACKSHEAR		X							
BLANTON		X							
BRENTWOOD		X							
BROOKE		X							
BROWN	X		4			(2)	X	X	
BRYKER WOODS	X		2	(2)					
CAMPBELL		X							
CASIS	X		2	(2)					
COOK		X							
CUNNINGHAM		X							
DAWSON		X							
DOSS	X		1		X				
GOVALLE	X		2		X	X			
GRAHAM		X							
GULLETT		X							
HARRIS		X							
HIGHLAND PARK	X		1	X					
HILL	X		3		(2)		X		
HOUSTON	X		1	X					
JOSLIN	X		3						
LANGFORD	X		3	X		X	X		
LEE	X		1		X				
LINDER	X		1	X					
MAPLEWOOD	?								
MATHEWS		X							
MENCHACA	X		2		X			X	
METZ	X		1		X				
NORMAN		X							
OAK HILL		X							
OAK SPRINGS	X		1			X			
ODOM		X							
ORTEGA		X							
PEASE		X							
PECAN SPRINGS		X							
PILLOW	X		2		X		X		
PLEASANT HILL		X							
READ		X							
REILLY		X							
RIDGETOP		X							
ROSEDALE		X							
ROSEWOOD	X		1		X				
ST. ELMO	?								
SANCHEZ	X		3	X					
SIMS		X							
SUMMITT		X							
SUNSET VALLEY		X							
TRAVIS HEIGHTS		X							
WALNUT CREEK		X							
WEBB		X							
WILLIAMS	X		3		(2)	X			
WINN	X		1			X			
WOOLDRIDGE		X							
WOOTEN		X							
ZAVALA		X							
ZILKER	X		1	X					

RETENTION DATA

(Policy 5121
guideline #13)

Skills to be mastered in READING AND MATH:

See ITBS skills analysis individual sheet in cumulative folder

Special strengths:

Special interests:

Learning styles:

Parental statement regarding retention:

Retention/Promotion

Appendix H

COORDINATOR/TEACHER STUDY

Instrument Description: Coordinator/Teacher Study

Brief description of the instrument:

The coordinator/teacher study was designed to focus attention on retainees and former pre-k students in first-grade classrooms. Nine primary instructional coordinators were given randomly chosen teachers to work with (usually five teachers each.) Coordinators were interviewed at the end of the school year to see what they had done and to obtain ideas on possible future interventions for these students. The form used to guide the interviews included six questions.

To whom was the instrument administered?

Eleven primary instructional coordinators.

How many times was the instrument administered?

Once.

When was the instrument administered?

May 1983.

Where was the instrument administered?

In ORE or instructional coordinator offices.

Who administered the instrument?

Two ORE evaluators and the Director of ORE.

What training did the administrators have?

Administrators discussed the survey questions and the study prior to interviews.

Was the instrument administered under standardized conditions?

No.

Were there problems with the instrument or the administration that might affect the validity of the data?

None that are known.

Who developed the instrument?

ORE evaluator.

What reliability and validity data are available on the instrument?

Not available.

Are there norm data available for interpreting the results?

No.

COORDINATOR/TEACHER STUDY

Purpose

The coordinator/teacher study supplied information relevant to the following retention decision and evaluation questions:

> Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued and/or modified?
>
> > Evaluation Question D2-10: Does focusing special attention on retainees have an impact on their achievement?
> >
> > Evaluation Question D2-11: If so, what methods seem most effective in meeting the needs of the retained child?

This study was motivated by a desire to see whether having coordinators focus special attention on retainees and former pre-k students in first-grade classrooms could have an impact on student achievement. These groups have special needs - - pre-k students often make gains which do not seem to be maintained in kindergarten and first-grade and students are most often retained at the first-grade level.

Procedure

Development

The Director of ORE suggested the study in October 1982 to the Director of Elementary Curriculum. She liked the idea and invited the Director and evaluators for the retention and Chapter 1 evaluations to meet with the coordinators at their first November meeting to discuss the proposal. The ORE Director and evaluator for retention met with the coordinators November 4. The discussion guide for the meeting is included as attachment H-1. Decisions made at the meeting were that:

- -Primary coordinators were willing to participate.
- -ORE would determine how many classrooms included pre-k and retained students and randomly assign each primary coordinator a maximum of five teachers to work with.
- -Coordinators would only be required to provide the lists to the teachers and offer their help in dealing with the students as a group or on an individual basis. Beyond this, coordinators would keep notes of further contacts made and help provided through the rest of the school year.
- -The Project PASS coordinator said she and her trainers would like to participate. These classes were also served by regular instructional coordinators.

-Most coordinators felt they had ideas on what to recommend for retainees but that a list of ideas on helping pre-k students would help. The Director of Elementary Curriculum said she would try to develop a list with the help of a coordinator committee if she had time (this was not accomplished during the 1982-83 school year).
-Three coordinators volunteered to meet with the evaluators again to finalize details once the number of pre-k and retainee classes was known.

The programmer for the retention study then developed a computer listing by school and class of all retainees and/or pre-k students. A problem was discovered at this point - - teacher assignments for students were only available for those students who had taken the Metropolitan Readiness Test (MRT) in the fall (an optional test). The only information available for the rest of the students was school assignments. This necessitated calling or visiting approximately 30 schools to find out which classrooms the students were in. Schools were called if a small number of students were unassigned (the MRT was given at the school but the students were absent or the teacher code was missing) and visited if none of the students were assigned to classes. The evaluation assistants for Chapter 1 and Retention completed this task. The evaluators and the coordinator subcommittee met and finalized details of the study once an approximate number of classes had been established.

A total of 45 of the 61 elementary schools had retainees or pre-k students in their first-grade classrooms. About 200 classrooms included retainees and/or pre-k students, 132 included both types of students. The sample was drawn from the 132 classes which included both types of students. A random sample of 5 classes was then drawn for each of the 9 regular coordinators. Some had larger pools of classes to choose from than others because of the distribution of retainees and pre-k students in the District. Seven classes were randomly chosen for the regular coordinators that were also served by one of the four Project PASS trainers.

Distribution

The primary coordinators were sent final study details, lists of classes, and an optional recording form on December 1st (see attachment H-2). Coordinators were asked to contact the teachers just after the winter break. Class lists showed the teachers' name and school and those students who were retained and/or pre-k students in each class. Two coordinators called about classes on their list that were really served by other coordinators, appropriate adjustments were made. This resulted in the addition of one coordinator to the study, for a total of 11 coordinators. A master list of coordinators and class assignments is included as Attachment H-3.

Part I - Interviews

The survey form was developed by the evaluator for the retention study, discussed with the Project PASS and Chapter 1 evaluators and Director, and finalized early in May (see attachment H-4). Coordinators were randomly split into two groups of six and five for interviews. The Director interviewed six coordinators and District Priorities evaluators interviewed five

(the retention evaluator interviewed four and the Project PASS evaluator one). Responses were then discussed in a meeting June 6.

Analyses and Results

There was a wide variety in the types of answers or comments which were given in response to the interview form. In addition, three different individuals conducted interviews. Thus, mathematical "tallying" of the results was difficult on some items. Quantitative data were available and of special relevance to the study on the topics noted below. Of the eleven coordinators that were interviewed, eight reported that they had supplied the targeted teachers with the list of former pre-kindergarten and retained students. One of the three remaining coordinators reported that she did no additional intervention with these teachers (and did not provide the lists because she was not certain whether or not she was supposed to do so). The students of those teachers were omitted from the analyses. The Project PASS coordinator reported that the trainers did not provide their teachers with lists of retainees and former pre-kindergarten students, although these lists were available from the regular coordinator. Trainers did work on special plans for all Black retainees but not as part of this study. A third coordinator did not provide lists, but asked teachers if they knew which students in their class were retainees or former pre-kindergarten students. In addition, she reported several other special activities with these teachers, and students in those classes were included in the analyses.

Only one coordinator actually reported that she worked with the targeted teachers *more* than she usually would. Four coordinators reported that they discussed with teachers ways to work with parents of retainees. Three coordinators discussed with teachers ways to improve retainees' self-concept and attitude toward school, while the same number discussed "special skill" work with these students. Two coordinators referred teachers to the tapes available on diagnosis, direct-instruction, and self-concept of retainees.

The coordinators who were interviewed as part of this study had several suggestions and comments about working with these two student populations. In general, they felt that calling teachers' attention to these students was helpful, and that more specific suggestions and/or a more structured intervention would be useful. It was felt that there was a need for this "focusing" to occur at the beginning of the school year, with some individualized instructional or enrichment activities considered for these children. For example, retainees might benefit from using a different basal reader when they repeat a grade level. It was suggested that lists of these students, or all low-achieving students, could be given to both teachers and coordinators. Finally, teachers need to be made aware of the curriculum covered in kindergarten and pre-kindergarten classes.

There were also some recurring comments about teaching methods for retainees. One concern was the need for smaller class sizes and more awareness of the needs of retainees by teachers of these students. There is a need to avoid teaching the same material twice in the same way. New teachers appeared to have greater difficulty in the area of working with retainees. Teachers appeared to be more aware of who the retainees were than of former pre-k students. Also, the coordinators seemed to find it easier to give suggestions for helping retainees

than for helping former pre-k students. More suggestions and comments are included in Attachment H-5.

Part II - ITBS Information

Analyses

Since many of the students on the original list did not have teacher assignments, the District Priorities' data analyst first determined class assignments by a match with the student Master File. This was necessary to divide the students into a treatment and control group--the process basically duplicated what was done by hand in the fall.

Regression analyses were then run using Jenning's MODEL program and AISD's IBM 4341 computer. In math, Math Total ITBS scores for spring 1982 and spring 1983 were compared. In reading, Reading Total scores for the two years were used for the retainees. However, Language Total scores had to be used as a pretest for former pre-k students since kindergarteners do not take a reading test. The regression analyses tested whether there was any difference in the achievement of former pre-k and retained students who were in classes where "target" lists were distributed and those classes where they were not. The coordinator who did not distribute the lists to her teachers or do additional intervention with the teachers was not included in either group. One regression analysis was run for reading and one for math with both groups (former pre-k and retainees) combined. Means were also calculated for former pre-k students, retainees, and former pre-k retained students in both reading and math.

Results

No significant differences were found in the achievement of students in target classes compared with controls. This was true both in reading and math. A linear relationship was found between pre- and posttest scores in math with a curvilinear relationship in reading. The correlation between pre- and posttest scores was .38 in reading and .53 in math.

Mean pretest and posttest scores are shown for former pre-k, retained, and former pre-k students who were also retained in Figures H-1 through H-4. There figures reveal very little difference in gains or achievement patterns for either pre-k or retained students.

Overall, it appears that this intervention was not sufficient to impact student achievement. It could be that a more structured intervention provided earlier in the school year might be helpful. Some alternative strategies might also be considered. On the administrator survey, administrators indicated that more direct help from instructional coordinators to the teachers of retainees might be very helpful.

	N	Pretest*(K)	Posttest(1st)	Gain
Treatment	63	.5143	1.8889	*
Control	167	.4641	1.6467	*

Figure F-1. SCORES FOR FORMER PRE-K STUDENTS IN GRADE 1 (PRETEST: LANGUAGE GRADE EQUIVALENT, POST-TEST: READING TOTAL GRADE EQUIVALENT.)

*No gain computed, since a reading pretest score was unavailable.

	N	Pretest(K)	Posttest(1st)	Gain
Treatment	68	.3515	1.6706	1.3191
Control	184	.4016	1.6402	1.2386

Figure F-2. SCORES FOR FORMER PRE-K STUDENTS IN GRADE 1 (MATH GRADE EQUIVALENT SCORES, SPRING 1982 AND 1983.)

	Group	N	Pretest	Posttest	Gain
Retainees	Treatment	51	1.0078	1.8056	0.7980
	Control	138	1.0400	1.9200	0.8775
Retainees w/ Pre-K	Treatment	9	1.2000	1.8222	0.6222
	Control	25	1.0360	1.7600	0.7240

Figure F-3. READING SCORES FOR RETAINEES AND RETAINEES WITH PRE-K. (READING TOTAL GRADE EQUIVALENTS, SPRING 1982 AND 1983.)

	Group	N	Pretest	Posttest	Gain
Retainees	Treatment	52	1.1673	1.8519	0.6846
	Control	152	1.1757	1.8257	0.6500
Retainees w/ Pre-K	Treatment	9	1.4222	1.9778	0.5556
	Control	31	1.2387	1.8226	0.5839

Figure F-4. MATH SCORES FOR RETAINEES AND RETAINEES WITH PRE-K. (MATH TOTAL GRADE EQUIVALENTS, SPRING 1982 AND 1983.)

82.42

Discussion Guide
November 4, 1982
3:00-4:00

COORDINATOR STUDY

1. What is the study designed to do?

   - to determine whether calling teacher attention to first-grade students with special needs (retainees and former pre-K students) and offering help in dealing with these students makes a difference to student achievement.

   - to determine what coordinators did with teachers that might account for this difference (advice given, actions taken, etc.)

2. What must coordinators do for the study?

   - The study is designed to be "naturalistic," and capture normal coordinator interaction with teachers as much as possible. The only things coordinators must do are:

     A. Call selected teachers' attention to retainees and former pre-K students in their classrooms.
     B. Offer to help the teacher on request with addressing the needs of these students (individually or as a group).
     C. Report to ORE on visits made and advice given (through calendar notes, observation forms, other forms, and/or interview).

   - Coordinators do not have to:

     A. Assess individual student problems through testing or other means unless they normally would.
     B. Visit a set number of times beyond the first contact.

Meeting Questions

1. How many classes should coordinators be assigned?
2. Should Project PASS schools be treated separately? Are Project PASS and regular coordinators working with the same classes?
3. Do the efforts of regular coordinators overlap with those of Special Ed and special program coordinators at the first-grade level?
4. Do coordinators need a form to record advice given and visits? If so, of what type? Should use be optional? Would April interview be sufficient? Should a checklist of possible interventions be created?
5. Do coordinators need or want advice past that given through the retention tape script?
6. Will coordinators know what to suggest to do for pre-K students? Should a list of suggestions be developed?

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AUSTIN INDEPENDENT SCHOOL DISTRICT
Office of Research and Evaluation

December 1, 1982

TO: Primary Coordinators Addressed

FROM: Nancy Baenen Schuyler, Karen Carsrud

SUBJECT: Working with First-Grade Teachers

We met with the subcommittee (Rita Gibbs, LaVonne Rogers, Etta Hollins) set up to work out details on the coordinator/teacher study. We made some decisions about how coordinators should work with the teachers of first-grade retainees and former pre-K students. I'm sorry it has taken this long to get all the materials together, but you know how it goes sometimes!

Attached are a summary guide, your list of five classes to work with and an optional recording form which you can use if you want. The committee decided the retention scripts and your own experience and research were sufficient to give you ideas on how to work with retainees. The group felt some ideas on working with pre-K students might be helpful, and Timy may have contacted some of you about developing a list. You can recommend any techniques you think will be effective to the teachers.

Start contacting your teachers right after the winter break. The lists provided should be right, but don't be too surprised if a child has transferred in or out of a class.

NBS:KC:rrf
Attachments

Persons Addressed: Cecile Banks
Rita Gibbs
Yolanda Leo
Maria Elena Martinez
Graciela Morales
LaVonne Rogers
Ana Salinas
Graciela Zapata
Paola Zinnecker
Etta Hollins

Approved: _____
Director, Office of Research and Evaluation

cc: Ruth MacAllister, Timy Baranoff

What is the purpose of the study?

The general purpose is to find out whether calling teacher attention to first-grade students with special needs (retainees and former pre-K students) and offering help in dealing with them makes a difference to the students' achievement. If so, the advice given and actions taken by coordinators will be examined to see if effective techniques can be identified.

What must coordinators do for the study?

The study is designed to be "naturalistic" and capture normal coordinator interaction with teachers as much as possible. The only things you must do are:

1. Visit the classroom of the five selected teachers at least once. Call their attention to the retainees and former pre-K students in their classrooms.

2. Offer to help the teacher address the needs of these students individually or as a group on request.

3. Keep track of advice given to teachers on students individually or in general, on the number of visits made, and on any evidence that the teacher followed through (from self-report or observation). You can keep notes on your calendar, observation forms, the optional form attached, or in another convenient way. Just have the information available in April or May when you will be interviewed by an ORE evaluator.

What is optional? What do coordinators not have to do?

1. Coordinators do not have to visit a set number of times past the first contact. Do what you normally would and respond to teachers' requests for help.

2. Coordinators do not have to assess individual student problems through testing or other means unless they normally would do so.

3. Ideas can be taken from the "Focus of Instruction" sheets for retainees based on the tapes but don't have to be. Suggest whatever techniques you think are appropriate.

What about classes also served by special area coordinators?

You may have classes also served by special education or Chapter I coordinators or a Project PASS specialist. Serve these classes as you normally would. Special Education and Chapter I coordinators will not receive the list of students but the Project PASS specialist will. Coordinate your efforts with her to the extent you normally would. We will ask how this worked out next spring in the interview.

COORDINATOR/FIRST-GRADE TEACHER STUDY

OPTIONAL RECORDING SHEET

DATE OF VISIT:
TEACHER:
STUDENT(S):

AREA OF NEED:

PROPOSED SOLUTION:

FOLLOW-UP

DATE OF VISIT:
PROGRESS REPORT:

COORDINATOR: LA VONNE ROGERS

TEACHER	SCHOOL	No. Retained	No. Pre-K
WILLIAMS, MARY	ROSEWOOD	2	6
FELL, ANNA	SIMS	1	6
ACOSTA, IMELDA	RIDGETOP	1	5
CAROLYN CLEMONS	TRAVIS HEIGHTS	2	1
NINA ARNOLD	TRAVIS HEIGHTS	1	2

COORDINATOR: GRACIELA, ZAPATA

TEACHER	SCHOOL		
SEPULVEDA, DELORES	ZILKER	1	2
JACKSON, ALICIA	ZILKER	1	1
MYERS-ORTIZ, CATHY	LINDER	1	1
SAENZ, SYLVIA	SANCHEZ	1	4
ZOCH, JERRILYN	LINDER	4	1

COORDINATOR: RITA GIBBS

TEACHER	SCHOOL		
LOPEZ, DORA	BECKER	1	3
OLVERA, MARTHA	CASIS	4	4
GIL, RICHARD	DAWSON	3	5
SANCHEZ, CYNTHIA	BECKER	2	4
MACARI	ODOM	2	1

COORDINATOR: ANA SALINAS

TEACHER	SCHOOL		
KELSO, BEULAH	HIGHLAND PARK	3	5
REED, JAYNE	ANDREWS	3	1
ALLEN, JEAN	ANDREWS	3	3
POWERS, ROSE	HIGHLAND PARK	3	3
BROWN, AVENELL	MAPLEWOOD	1	1

COORDINATOR: PAOLA ZINNECKER

TEACHER	SCHOOL		
YAZDANPANAHI, RUBY	HARRIS	1	1
MC SHEA, ELLEN	METZ	4	5
RAMSEY, REBECCA	HARRIS	2	1
HARTENSTEIN, JOYCE	PECAN SPRINGS	2	1
BURSTYN, ADALINE	METZ	5	2

COORDINATOR: GRACIELA MORALES

TEACHER	SCHOOL	Retained	Pre-K
ROBLES, VICKI	ALLAN	3	1
BROWN, MARY	ALLAN	7	2
NELSON, JUDITH	ALLAN	2	3
NEWMAN, LUDESSA	GOVALLE	1	3
HERNANDEZ, MARY	ALLISON	3	4

COORDINATOR: YOLANDA LEO

TEACHER	SCHOOL		
MISENHEIMER, ELIZABETH	JOSLIN	1	1
RUST, LORI	OAK SPRINGS	2	6
MILLER, BETTY	WILLIAMS	2	2
HOLEKAMP, GEORGE	LANGFORD	3	1
COURTNEY, TERESA	LANGFORD	2	1

COORDINATOR: ANITA UPHAUS

TEACHER	SCHOOL		
KINGSBURY, MARY	SUNSET VALLEY	3	4
GUNTER, GLORIA	SUNSET VALLEY	2	2
LUCCHESE, MARGARET	SUNSET VALLEY	1	1

COORDINATOR: MARIA ELENA MARTINEZ

TEACHER	SCHOOL		
ANDERSON, LINDA	BROWN	2	9
FREDLEY, PHYLLIS	BROWN	4	4
DEUSER, CAROLE	BROWN	2	4
HOUSTON, GOLDIE	ST. ELMO	3	2
BRYANT, MARY	NORMAN	7	3

COORDINATOR: CECILE BANKS

TEACHER	SCHOOL		
MARTINEZ, JANIE	HOUSTON	4	1
SMOTHERMON, DIANE	HOUSTON	2	2

COORDINATOR: ETTA HOLLINS

TEACHER	SCHOOL		
GUNTER, G.	SUNSET VALLEY	2	2
LUCCHESE, M.	SUNSET VALLEY	1	1
KINGSBURY, M.	SUNSET VALLEY	3	4
WILLIAMS, M.	ROSEWOOD	2	6
FELL, A.	SIMS	1	6
BRYANT, M.	NORMAN	1	5
HOUSTON, G.	ST. ELMO	3	2

INTERVIEWER _____

COORDINATOR/TEACHER STUDY--COORDINATOR INTERVIEW COORDINATOR _____

1. WERE YOU ABLE TO PROVIDE THE LIST OF PRE-K AND RETAINED STUDENTS TO THE TEACHERS IN YOUR GROUP? DID YOU TALK WITH THEM ABOUT GENERAL INTERVENTIONS WITH PRE-K AND RETAINED STUDENTS? ABOUT SPECIFIC INTERVENTIONS FOR SOME STUDENTS? WHICH TEACHERS REQUESTED SPECIAL HELP DURING THE YEAR? HOW OFTEN?

TEACHER	CHECK OFF: SUPPLIED LIST	GENERAL TALK	REQUESTED SPECIAL HELP	NO. RET. OR PRE-K SPECIAL VISITS	SPECIAL HELP PROVIDED (BRIEFLY DESCRIBE)
1.					
2.					
3.					
4.					
5.					
6.					
7.					

2. WHAT SPECIFIC HELP DID YOU PROVIDE TO TEACHERS DURING THE YEAR? DID HELP VARY BY TEACHER (IF SO, NOTE SPECIAL INTERVENTIONS GIVEN TO ONLY SOME TEACHERS ABOVE)?

RETAINEES

TAPES:
_____diagnosis
_____direct instruction
_____self-concept
_____parent-teacher conference

DISCUSSED:
_____working with parents
_____ways to improve self-concept/attitude toward school
_____specific skill work (what areas, materials?)

OTHER & COMMENTS:

PRE-K STUDENTS:
_____special assignments to maintain skills
_____ways to check status and progress
_____what pre-K curriculum covers

OTHER AND COMMENTS:

3. FOR THOSE CLASSES ASSIGNED TO A PROJECT PASS AND REGULAR COORDINATOR: DID YOU WORK INDEPENDENTLY OF THE OTHER COORDINATOR ASSIGNED TO THESE CLASSES? DID YOU COORDINATE EFFORTS? IF SO, HOW?

4. DID YOU END UP WORKING WITH THESE TEACHERS MORE THAN YOU USUALLY WOULD?

____YES ____NO

5. WHAT CAN BE DONE THAT WILL BENEFIT PRE-K AND RETAINED STUDENTS THE MOST? WHAT DIRECTION SHOULD WE MOVE IN? WHAT INTERVENTIONS HAVE THE BEST CHANCE FOR SUCCESS?

RETAINEES:

PRE-K:

6. REFLECT ON YOUR PARTICIPATION IN THIS EXPERIENCE. WAS IT HELPFUL TO TEACHERS AND STUDENTS? WHAT PROBLEMS DID YOU ENCOUNTER? DID THE LISTS HELP TO FOCUS ATTENTION ON THESE STUDENTS? DID TEACHERS WANT HELP? SHOULD THE INTERVENTION BE MORE STRUCTURED?

This list represents a compilation of ideas taken from the interviews. Comments are paraphrased and meant to act as a starting point for possible brainstorming of ideas in the fall.

Retainees

- Recommend additional enrichment activities for students (e.g. word cards, sentence strips, supplemental books, things to do at home).
- "Centers" to work in when regular work is finished.
- Use teacher's voice on instructional tapes.
- Build student's self concept.
- Do not retain a child and make him Special Education at the same time.
- Continue special services to low achievers regardless of "financial" status of campus student is assigned to!
- Increase communication between paired schools--standardize curriculums.
- Teach alphabets and sounds to all kindergarteners--some teachers lower their expectations for 1st graders who don't know the alphabet.
- Capitalize on and nuture love of learning students exhibit entering first grade.
- Special meetings with first-grade teachers.
- Staff Development.
- Consider placing retainees with more experienced teachers rather than new teachers.
- Publish newsletter for teachers of retainees.
- Place in group other than low. This will enhance student's chance for challenge and success.
- Change basals if students move laterally.
- Do not cover same material twice.
- Smaller class sizes.
- Stronger parental support.
- Develop greater sensitivity in teachers working with retainees (guard identity of retainees, treat them as normal as possible, etc.).
- Adapt child to academic program rather program to child.
- Create a list of at-home activities for retainees.
- Make sure students know the purpose behind lessons and assignments.
- Look at learning styles early in year to prevent problems.
- Mixed emotions about retention -- not big on retaining kindergarteners. I know and parents know first-grade retention is best because of basic reading and math instruction.

Prevention

- Kindergarten curriculums need to be standardized across schools -- especially in paired schools. Some students are better prepared for 1st grade than others and teachers sometimes give up on those already behind.
- Cater to child without singling him out too often.

- Provide direct instruction and practice with minimal independent work.
- Concentrate on reading and math and teach these basics during science and social studies as well--1st and 2nd are last chance for these basics.

Former Pre-K

- Continue in current direction.
- More structured situation building on known skills.
- Provide more direct teaching.
- Monitor centers students use during kindergarten to detect whether academics centers are being avoided.
- Don't just focus on volunteers, call on those who do not raise hands or ask questions.
- Provide staff development in individualized instruction.
- Kindergarten teachers should raise their expectations.
- Assess at first--don't teach again.
- Criteria should be followed in identifying children to be served by pre-k and teachers should be told who had pre-k.
- Increase kindergarten teachers' awareness of pre-k classes.
- Higher level things need to go on in kindergarten--only tool to help teachers in form of seminar to enhance kindergarten.
- Alphabets and sounds should be taught systematically in kindergarten.
- Kindergartens across the District need to standardize what they teach more--new guide may help.
- Capitalize on and nurture the love of learning that kids come into first grade with.
- Use new DLM materials being used at Gullett--balanced analytic and experience approach.
- Use grouping in kindergarten (e.g. like at Campbell).

Other Comments

- Teachers new to AISD seem to have difficulty coping with retainees and pre-k.
- These students should be placed with more experienced teachers.
- Kids' attitude must be kept positive. Some kids get very negative, especially retainees, who can't understand the purpose of working on the same thing. Change kids' attitudes from "I can't" to "I can."
- Closely monitor students' progress. Use different series and forms of reinforcement.
- Let teachers enter information on special activities done with students on cumulative folders.
- Black kids only--didn't make much difference if pre-k or not--most frequent topic was language--sometimes dialect problem--other times communication suggested teacher use tape recordings and have child listen--suggested teachers use poetry to help develop students' language skill. Tried not to focus on just coordination of pre-k skills. Tried to use holistic rather than linear approach.

- If students do not learn by traditional method, teacher should develop alternate method of teaching.
- Staff development workshop could be held to help teachers in selecting and preparing materials for alternate teaching methods.
- Not sure some teachers are aware of the difference between former pre-k and regular students.

READING TOTAL

FTEST-FTEST 2

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	1	0.1603	212.1785	0.4553	3.0776	0.0469
REST	3	0.1492	214.9810			
DIFF.		0.0111	2.8025	1.4013	DF1= 2. DF2=	456.

FTEST-FTEST 1

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	1	0.1603	212.1785	0.4553	1.2548	0.2625
REST	2	0.1581	212.7498			
DIFF.		0.0023	0.5713	0.5713	DF1= 1. DF2=	456.

FTEST-FTEST 3

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	2	0.1581	212.7498	0.4556	-0.0054	1.0000
REST	3	0.1581	212.7474			
DIFF.		-0.0000	-0.0024	-0.0024	DF1= 1. DF2=	457.

FTEST-FTEST 5

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	3	0.1581	212.7474	0.4546	1.1128	0.2915
REST	4	0.1561	213.2533			
DIFF.		0.0020	0.5059	0.5059	DF1= 1. DF2=	468.

MATH TOTAL

FTEST=FTEST 2

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	1	0.2887	105.0236	0.2143	1.3463	0.2614
REST	5	0.2848	105.6007			
DIFF.		0.0039	0.5771	0.2886	DF1= 2. DF2=	490.

FTEST=FTEST 6

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	5	0.2848	105.6007	0.2146	0.3454	0.5567
REST	6	0.2843	105.6748			
DIFF.		0.0005	0.0741	0.0741	DF1= 1. DF2=	492.

FTEST=FTEST 7

MODEL		RSQ.	SS(ERROR)	MEAN SQUARES	F	PROB
FULL	6	0.2843	105.6748	0.2144	1.0505	0.3059
REST	7	0.2828	105.9021			
DIFF.		0.0015	0.2273	0.2273	DF1= 1. DF2=	493.

Retention/Promotion

Appendix I

DISCRIMINANT ANALYSIS

INSTRUMENT DESCRIPTION: Discriminant Analysis

Brief description of the data file: Discriminant analyses were done to see if any characteristics that differed for successful and unsuccessful retainees could be discovered. Variables considered included age, sex, income, number of transfers, number of siblings, Title I and Title I Migrant participation, special education (resource), retention rate of school for year retained, desegregation impact and reassignment status, summer school participation, and ethnicity.

Which students or other individuals are included on the file?

Students recommended for retention at the end of 1980-81 and 1981-82 school year with pre- and posttest scores. Successful retainees were those who gained .8 of a GE year or more over a one-year period in reading on the ITBS.

How often is information on the file added, deleted, or updated?

Information was all added to the file at one time--after spring 1983 ITBS results were available.

Who is responsible for changing or adding information to the file?

District Priorities' Data Analyst.

How was the information contained on the file gathered?

Information was taken from the Student Master File, project files, retention files, and ITBS files.

Are there problems with the information on the file that may affect the validity of the data?

None that are known.

What data are available concerning the accuracy and reliability of the information on the file?

Information can be double-checked with the original files.

Are there normative or historical data available for interpreting the results?

Results for 1980-81 retainees were used to decide what factors were important in looking at 1981-82 retainees.

Brief description of the file layout:

Individual records include students' names, identification numbers, school, grade, Reading Total ITBS scores, and information on all variables considered in the analysis.

Purpose

The discriminant analyses were designed to provide information relevant to the following decision and evaluation questions:

Decision Question D3: Can students who will benefit from retention be identified?

Evaluation Question D3-1: What characteristics of students who benefit from retention can be identified?

Procedure

The discriminant analyses were designed to see if any characteristics of students who benefit or do not benefit from retention could be identified. The discriminant package of SPSS was used and analyses were run at the University of Texas.

The first step taken was to separate the 1980-81 retainees into two groups--successful and unsuccessful. Students who gained .8 of a GE year or more between spring 1981 and spring 1982 on the Reading Total section of the ITBS were considered successful.

The following variables were added to the file to be used as predictors: age in months, sex, ethnicity, free or reduced lunch received by student or sibling, desegregation status (impacted schools and reassignment status of student), number of transfers during the school year, number of children in the family, 1980-81 retention rate of the 1981-82 school, summer school participation, 1981-82 Title I, Title I Migrant participation (of any type), and special education status. All data was based on 1981-82 information except as noted. Frequency distributions were run to make sure variables were properly coded and to obtain descriptive statistics on the overall groups.

The discriminant analyses were then run using two methods at each grade level--the direct method in which all variables enter the analysis at once, and stepwise regression in which variables are added if they significantly improve prediction beyond the first variable chosen. Once the regression analyses were run, the results for 1980-81 retainees were reviewed for consistency in variables contributing to success.

The pattern of predictors was not very consistent for the 1980-81 retainees so the same direct and stepwise discriminant analyses were done for the 1981-82 retainees. Results were again reviewed to see which variables contributed to success for retainees.

A sample set of control statements is shown in Attachment I-1.

Results

Attachments I-2 and I-3 show variables significantly impacting success based on the stepwise analyses for the 1980-81 and 1981-82 retainees. In interpreting the charts, it is important to remember that students with these characteristics were simply more likely to be successful--some students who did not share one or more of these characteristics were successful. Variables are listed in order of importance at each grade level. The percentage of cases in which success could be accurately predicted based on variables included for each grade is shown in the "Prediction Success" column. The percent which could be successfully predicted by chance is about 50%. The stepwise results seemed to provide more useful information than the direct method and will be the only ones discussed here. Printouts are available showing complete results of the direct analyses.

1980-81 Retainees

The 1980-81 retainees were retained after the new elementary retention policy was issued but before it went into effect. Efforts to help teachers deal with the process of retention and the needs of retainees were not yet implemented.

As Attachment I-1 illustrates, the factor which impacted retention success the most varied at each grade level. None of the variables included in the analyses significantly helped predict success at grades one or four. The variables which were significant at more than one grade level included:

- Title I Migrant Service (Grades 2, 3, 5)
- Number of transfers (grades 2, 3, 5)
- Low income status (grades 3, 5)
- Sex (grades 3 and 5)
- Black ethnicity (grades 3 and 6)
- Title I service (grades 3 and 5).

Grade six results must be interpreted with caution because of the small sample size (n=18).

Students served by Title I Migrant during the year they repeated a grade were consistently less likely to be successful when retained in grades 2, 3, and 5. Students served by Title I, on the other hand, were more likely to succeed at grades 3 and 5. Black students were less likely to be successful at grades 3 and 6. The other variables did not show a consistent pattern. Students who transferred less often during the year repeated were more likely to be successful at grades 2 and 5; those who transferred more often were more successful at grade 3. Low income students were more successful at grade 5, higher income students were more successful at grade 3. Girls were more successful at grade 3 but boys were at grade 5.

Attachment I-1 also shows mean values for successful and unsuccessful retainees for each variable.

1981-82 Retainees

The 1981-82 retainees were retained the first year the new retention policy went into effect. Some help was provided to principals and teachers in helping parents see the positive side of retention and in dealing with the students' needs.

As Attachment I-2 illustrates, the most important variable impacting success again varied by grade. None of the variables significantly contributed to success at grade five. Variables significant at more than one grade level include:

- Schools impacted by desegregation (grades 1, 2, 3, 4)
- Age (grades 1, 3, 4, 6)
- Low income status (grades 1, 3, 4)
- Chapter 1 service (grades 1, 2, 4)
- Special education status (grades 1, 2, 4)
- Hispanic ethnicity (grades 1, 3, 6)
- Chapter 1 Migrant service (grades 2 and 3)
- Transfer rates (grades 3 and 4)
- Summer school participation (grades 3 and 6)

The two variables which showed a consistent pattern for the grades at which they were significant were low income status and Chapter 1 Migrant service. Low income retainees at grades 1, 3, and 4 were less likely to be successful. Students served by Chapter 1 Migrant during the year a grade was repeated were less likely to succeed.

Relationships between success and the other variables were not as consistent across grades. Students in schools not impacted by desegregation were more likely to be successful at grades 1, 2, and 4; students in schools impacted by desegregation were more successful at grade three. Younger retainees were more successful at grades 1, 4, and 6 but less successful at grade three. Students served by Chapter 1 were not successful at grades one and four but less successful at grade two. Special education students were less likely to be successful at grades one and two but more likely to be successful at grade four. Hispanic retainees were more likely to be successful at grades three and six and less likely at grade one. Students with a lower number of transfers were more successful at grade three but less successful at grade four. Finally, sixth graders who attended summer school were more likely to succeed, but third graders were a little less likely to succeed than other retainees.

Attachment I-2 also shows mean values for successful and unsuccessful retainees on each variable.

Summary

It was hoped that the discriminant analyses would reveal some characteristics which would predict whether students would benefit from retention. Although none of the variables consistently predicted success at every grade, a few were significant at several grade levels.

- Students served by Title I Migrant were less successful in five of twelve cases--at grades two and three for both 1980-81 and 1981-82 retainees and also at grade five for the 1981-82 group.

- Students served by Title I during the year leading to retention, on the other hand, were more likely to be successful at four of twelve grades checked and less likely only at one grade.

- Low income students were less likely to be successful at four grades but more likely at one grade.

- Special education students retained were less likely to be successful at three grades but more likely at one grade.

- Age and desegregation impact were only important for 1981-82 retainees. Younger retainees were more likely to succeed at three grades but not at one grade. Likewise, retainees in schools not impacted by desegregation were more successful at three grades and less successful at one grade.

The percentage of cases which could be predicted as successful (gaining eight months or more in grade equivalents after one year) or not successful ranged from 61 to 85% at the various grade levels. The analyses thus did predict better than chance, but not equally well at every grade level.

While it is impossible to draw any firm conclusions from this data, it seems that Title I Migrant, special education, and low income students may be less likely to benefit from retention. On the other hand, those served by Title I, younger students, and those in schools not impacted by desegregation may be more likely to benefit.

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S P S S - - STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES

CDC 6000/CYBER-VERSION 8.3  -  LOCAL RELEASE 1.0

376000 CM MAXIMUM FIELD LENGTH REQUEST

PAGESIZE        NOEJECT
RUN NAME        DISCRIMINANT ANALYSES BY ACHIEVEMENT -- 81-82 RETAINEES GRADE 1
VARIABLE LIST   GRADE AGE SEX ETHNIC LOWIN DESEG TRANS SIBS TITLE1 MIGRANT SPED
                RRATE PRE POST SUMMER
INPUT FORMAT    (20X,F2,T56,F4,5F1,F2,10X,3F1,F4.1,T69,F4.1,1X,F4.1,T55,F1)

ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

VARIABLE  FORMAT  RECORD   COLUMNS     THE INPUT FORMAT PROVIDES FOR 15 VARIABLES.  15 WILL BE READ.
                                       IT PROVIDES FOR  1 RECORDS (*CARDS*) PER CASE.
GRADE     F 2. 0    1      21-  22     A MAXIMUM OF   83 *COLUMNS* ARE USED ON A RECORD.
AGE       F 4. 0    1      56-  59
SEX       F 1. 0    1      60-  60
ETHNIC    F 1. 0    1      61-  61         VAR LABELS    AGE,AGE IN MONTHS/
LOWIN     F 1. 0    1      62-  62                       SEX,SEX/
DESEG     F 1. 0    1      63-  63                       ETHNIC,ETHNICITY/
TRANS     F 1. 0    1      64-  64                       LOWIN,FREE LUNCH STATUS/
SIBS      F 2. 0    1      65-  66                       DESEG,DESEGRATION CODE/
TITLE1    F 1. 0    1      77-  77                       TRANS,# TRANSFERS IN 82-83/
MIGRANT   F 1. 0    1      78-  78                       SIBS,# KIDS IN FAMILY/
SPED      F 1. 0    1      79-  79                       TITLE1,SERVED BY TITLE I/
RRATE     F 4. 1    1      80-  83                       MIGRANT,SERVED BY MIGRANT TEACHER/
PRE       F 4. 1    1      68-  71                       SPED,SPECIAL ED STUDENT/
POST      F 4. 1    1      73-  76                       RRATE,81-82 RETENTION RATE OF 82-83 SCHOOL/
SUMMER    F 1. 0    1      55-  55                       PRE,4-82 READING TOTAL G.E./
                                                         POST,4-83 READING TOTAL G.E./
                                                         GRADE,81-82 GRADE/
                                                         SUMMER,82 SUMMER SCHOOL/
```

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Attachment I-1
(Page 1 of 2)

```
                SELECT IF       (GRADE EQ 1)
                IF              (LOWIN GT 0) LOWIN=1
                IF              (TITLE1 GT 0)TITLE1=1
                IF              (MIGRANT GT 0)MIGRANT=1
                COMPUTE         GAIN=POST-PRE
                COMPUTE         IMPACT=0
                COMPUTE         REASSGN=0
                COMPUTE         BLACK=0
                COMPUTE         HISPAN=0
                COMPUTE         ANGLO=0
                COMPUTE         SUCCESS=1
                IF              (DESEG EQ 2 OR 3)IMPACT =1
                IF              (DESEG EQ 3 OR 4)REASSGN=1
                IF              (ETHNIC EQ 3)BLACK=1
                IF              (ETHNIC EQ 4)HISPAN=1
                IF              (ETHNIC EQ 5 OR 1 OR 2)ANGLO=1
                IF              (GAIN GT 0.4 OR GAIN = 0.4)SUCCESS=2
                VAR LABELS      IMPACT,DESEG IMPACT STATUS/
                                REASSGN,DESEG REASSIGNMENT STATUS/
                                BLACK,BLACK/
                                HISPAN,HISPANIC/
                                ANGLO,ANGLO OR OTHER/
                                GAIN,82-83 READING TOTAL GAIN IN G.E./
                                SUCCESS,SUCCESS=2 ELSE 1/

CPU TIME REQUIRED..      .120 SECONDS

                DISCRIMINANT    GROUPS=SUCCESS(1,2)/
                                VARIABLES=AGE SEX LOWIN TRANS TO RRATE SUMMER IMPACT TO ANGLO/
                                ANALYSIS=AGE,SEX,LOWIN,TRANS TO RSATE,SUMMER,IMPACT TO ANGLO/
                                METHOD=DIRECT/
                OPTIONS         5,7,10,11,12
                STATISTICS      ALL

        00103100 CM REQUIRED FOR DISCRIMINANT ANALYSIS
        00101500 CM REQUIRED FOR DISCRIMINANT CLASSIFICATION

        OPTION -1
        IGNORE MISSING VALUE INDICATORS
        (NO MISSING VALUES DEFINED...OPTION 1 MAY HAVE BEEN FORCED)

        OPTION - 5
        PRINT CLASSIFICATION RESULTS TABLE

        OPTION - 7
        PRINT A SINGLE PLOT OF CASES

        OPTION -10
        PRINT TERRITORIAL MAP

        OPTION -11
        PRINT UNSTANDARDIZED DISCRIMINANT FUNCTION COEFFICIENTS

        OPTION -12
        PRINT CLASSIFICATION FUNCTIONS

        FILE ON FILE DISCRM2
        READING   604 CASES FROM SUBFILE NONAME
```

Attachment I-2

RESULTS OF 1980-81 RETAINEES'
DISCRIMINANT ANALYSES

MEANS FOR EACH VARIABLE
SUMMARY TABLE OF
SIGNIFICANT PREDICTORS

BY GRADE

12 PAGES

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

DISCRIMINANT ANALYSIS

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

250 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
250 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	118	118.0	
2	132	132.0	
TOTAL	250	250.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	97.03390	1.86441	.83051	.13559	2.30508	.33898	.05085	.19644
2	96.74242	1.77273	.76515	.12879	2.38636	.35606	.05303	.11364
TOTAL	96.88000	1.81600	.79600	.13200	2.34800	.34800	.05200	.14800

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	7.73220	.16949	.51695	.26271	.33898	.49153	.16949
2	7.47879	.12879	.47727	.25758	.31061	.44697	.23485
TOTAL	7.59840	.14800	.49600	.26000	.32400	.46800	.20400

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82.42

SUMMARY TABLE

STEP	ACTION ENTERED	REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	SPED		1	.989524	.1064	.04214	.1064	1	2	SPECIAL ED STUDENT
2	LOWIN		2	.981747	.1028	.07401	.1028	1	2	FREE LUNCH STATUS

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
LOWIN	5.239513	4.795502
SPED	1.943910	1.325972
(CONSTANT)	-3.050049	-2.603129

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.9817467	4.5592	2	.1029
1*	.01859	100.00	100.00	.1351047					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
LOWIN	.65818
SPED	.80559

DISCRIMINANT ANALYSES BY ACHIEVEMENT -- 83-84 RETAINEES GRADE 2 [illegible]

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

DISCRIMINANT ANALYSIS

ON GROUP BY SUCCESS SUCCESS=2 ELSE 1

1 GHTED) CASES WERE PROCESSED.
0 SE WERE EXCLUDED FROM THE ANALYSIS.
118 GHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	51	51.0	
2	67	67.0	
TOTAL	118	118.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	109.45098	1.74510	.98314	.13725	2.98037	.58824	.29412	.21569
2	109.71642	1.74627	.74627	-.02985	2.68657	.40299	.05479	.14925
TOTAL	109.60169	1.74576	.78814	.07627	2.81356	.48305	.17627	.17797

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	9.19314	.27451	.66667	.35294	.27451	.64706	.37255
2	7.29776	.14925	.47761	.25866	.29851	.49254	.20896
TOTAL	8.06695	.20339	.55932	.30508	.29010	.55932	.28294

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82.42

SUMMARY TABLE

STEP	ACTION ENTERED	REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	RRATE		1	.959265	.0265	.17447	.0265	1	2	80-81 RETENTION RATE OF B1-B2 SCHOOL
2	TRANS		2	.924851	.0112	.32549	.0112	1	2	# TRANSFERS IN B1-B2
3	TITLE1		3	.901571	.0079	.43734	.0079	1	2	SERVED BY TITLE I
4	SUMMER		4	.898908	.0094	.45064	.0094	1	2	B2 SUMMER SCHOOL
5	MIGRANT		5	.875199	.0098	.57123	.0098	1	2	SERVED BY MIGRANT TEACHER

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
TRANS	2.252322	.8392869
TITLE1	2.106257	1.328138
MIGRANT	2.687819	1.678289
RRATE	.4142090	.3346205
SUMMER	1.166049	.4813797
(CONSTANT)	-3.652592	-2.271930

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.8751987	15.130	5	.0094
1*	.14260	100.00	100.00	.3532722					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
TRANS	.54837
TITLE1	.51006
MIGRANT	.35667
RRATE	.47784
SUMMER	.36338

82.42

SUMMARY TABLE

STEP	ACTION ENTERED REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	BLACK	1	.877620	.0008	.54533	.0008	1	2	BLACK
2	LOWIN	2	.822812	.0003	.84223	.0003	1	2	FREE LUNCH STATUS
3	TITLE1	3	.791336	.0002	1.03130	.0002	1	2	SERVED BY TITLE I
4	TRANS	4	.772395	.0002	1.15250	.0002	1	2	# TRANSFERS IN 81-82
5	ANGLO	5	.755529	.0003	1.25534	.0003	1	2	ANGLO OR OTHER
6	SEX	6	.735312	.0003	1.40787	.0003	1	2	SEX
7	MIGRANT	7	.725859	.0004	1.47714	.0004	1	2	SERVED BY MIGRANT TEACHER

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
SEX	3.026076	3.422992
LOWIN	7.011054	5.892991
TRANS	.1750878	1.452984
TITLE1	3.105791	4.222493
MIGRANT	4.854404	3.013329
BLACK	3.159940	1.349041
ANGLO	7.938777	9.092192
(CONSTANT)	-8.651953	-9.225217

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.7258587	26.433	7	.[illegible]
1*	.37768	100.00	100.00	.5235851					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
SEX	.32791
LOWIN	-.41748
TRANS	.32050
TITLE1	.46450
MIGRANT	-.22557
BLACK	-.62039
ANGLO	.42159

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FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

DISCRIMINANT ANALYSIS

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

88 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
88 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	43	43.0	
2	45	45.0	
TOTAL	88	88.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	121.32558	1.93023	.81395	.06977	2.68372	.48837	.04651	.15279
2	120.71111	2.15556	.53333	.13333	2.51111	.51111	0	.11111
TOTAL	121.01136	2.04545	.67045	.10227	2.59310	.50000	.02273	.13636

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	7.41163	.13953	.51163	.23256	.41860	.41862	.16277
2	6.78889	.11111	.35556	.20000	.11111	.44444	.44444
TOTAL	7.09318	.12500	.43182	.21591	.26136	.43182	.30682

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

- D I S C R I M I N A N T A N A L Y S I S -

ON GROUPS DEFINED BY SUCCESS. SUCCESS=2 ELSE 1

69 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
69 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	33	33.0	
2	36	36.0	
TOTAL	69	69.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLEI	MIGRANT	SPED
1	134.30303	2.03030	.63636	.27273	2.87879	.24242	.06061	.06061
2	134.83333	1.61111	.75000	.13889	2.63444	.19444	.02778	.11111
TOTAL	134.57971	1.81159	.69565	.20290	2.78261	.21739	.04348	.08696

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	3.96970	.09091	.42424	.18182	.27273	.36364	.36364
2	4.30833	.22222	.41667	.30556	.30556	.41667	.27778
TOTAL	4.14493	.15942	.42029	.24638	.28986	.39130	.31884

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82.42

SUMMARY TABLE

STEP	ACTION ENTERED	REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	SEX		1	.954539	.0706	.18533	.0786	1	2	SEX
2	SUMMER		2	.918976	.0615	.34310	.0615	1	2	82 SUMMER SCHOOL
3	REASSGN		3	.881780	.0413	.52172	.0413	1	2	DESEG REASSIGNMENT STATUS
4	LOWIN		4	.861759	.0464	.62425	.0464	1	2	FREE LUNCH STATUS
5	IMPACT		5	.841421	.0488	.73340	.0488	1	2	DESEG IMPACT STATUS
6	SIBS		6	.827931	.0603	.80875	.0603	1	2	# KIDS IN FAMILY

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
SEX	2.232229	1.604031
LOWIN	1.475397	2.474213
SIBS	.5163782	.7334739
SUMMER	.6766009	1.998276
IMPACT	2.251276	1.427922
REASSGN	-1.689123	.8593199E-01
(CONSTANT)	-5.107413	-4.437126

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CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.8279315	12.035	6	.0601
1*	.20783	100.00	100.00	.4148114	-				

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
SEX	-.67585
LOWIN	.51466
SIBS	-.33862
SUMMER	.53713
IMPACT	-.46417
REASSGN	.85417

DISCRIMINANT ANALYSES BY ACHIEVEMENT -- NO-P1 RETAINEES GRADE 5 07 JUL 83 15:52:22. PAGE 3

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

- D I S C R I M I N A N T A N A L Y S I S -

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

55 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
55 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	19	19.0	
2	36	36.0	
TOTAL	55	55.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	146.84211	1.84211	.52632	.21053	2.31579	.15789	.10526	.36842
2	145.11111	1.61111	.75000	.11111	2.16111	.33333	.0	0
TOTAL	145.70909	1.69091	.67273	.14545	2.34545	.27273	.05636	.12727

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	4.84211	.10526	.42105	.26316	.15789	.57895	.26316
2	4.97222	.16667	.52778	.13889	.22222	.41667	.36111
TOTAL	4.92364	.14545	.49091	.18182	.20000	.47273	.32727

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82.42

SUMMARY TABLE

STEP	ACTION ENTERED	ACTION REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	SPED		1	.723684	.0000	1.62719	.0000	1	2	SPECIAL ED STUDENT
2	TITLE1		2	.686365	.0001	1.94739	.0001	1	2	SERVED BY TITLE I
3	MIGRANT		3	.655051	.0001	2.24420	.0001	1	2	SERVED BY MIGRANT TEACHER
4	SEX		4	.621944	.0001	2.59053	.0001	1	2	SEX
5	TRANS		5	.601203	.0001	2.82692	.0001	1	2	# TRANSFERS IN 81-82
6	LOWIN		6	.581592	.0001	3.06594	.0001	1	2	FREE LUNCH STATUS
7	ANGLO		7	.564052	.0002	3.29380	.0002	1	2	ANGLO OR OTHER
8	AGE		8	.550675	.0003	3.47735	.0003	1	2	AGE IN MONTHS

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
AGE	7.749529	7.650387
SEX	-1.516803	-2.174528
LOWIN	-3.921129	-2.429324
TRANS	-1.380542	-2.950416
TITLE1	-11.58530	-9.708457
MIGRANT	32.61104	27.70305
SPED	-7.173383	-11.80126
ANGLO	-3.164528	-2.009412
(CONSTANT)	-566.1613	-550.9638

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CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS' LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.5506749	29.234	8	.0003
1*	.81595	100.00	100.00	.6703172					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
AGE	.23867
SEX	.33938
LOWIN	-.37243
TRANS	.34135
TITLE1	-.44854
[illegible]	.48362
[illegible]	.71678
ANGLO	-.29462

FILE NONAME (CREATION DATE = 07 JUL 83)

---------- D I S C R I M I N A N T A N A L Y S I S ----------

82.42

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

18 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
18 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	10	10.0	
2	8	8.0	
TOTAL	18	18.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	155.80000	1.60000	.80000	0	2.30001	.30000	0	.30000
2	155.75000	1.50000	.50000	.12500	3.25000	0	0	.12500
TOTAL	155.83333	1.55556	.66667	.05556	2.72222	.16667	0	.22222

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	3.89000	0	.50000	.40000	.40000	.50000	.10000
2	3.80300	0	.50000	.37500	.3	.75000	.25000
TOTAL	3.85000	0	.50000	.38889	.22222	.61111	.16667

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82.42

SUMMARY TABLE

STEP	ACTION ENTERED	ACTION REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	BLACK		1	.771429	.0448	1.06667	.0448	1	2	BLACK
2	LOWIN		2	.697297	.0669	1.56279	.0669	1	2	FREE LUNCH STATUS
3	SIBS		3	.588943	.0536	2.51265	.0536	1	2	# KIDS IN FAMILY
4	SEX		4	.507121	.0509	3.49890	.0509	1	2	SEX

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
SEX	2.662583	1.376796
LOWIN	5.635359	1.502762
SIBS	-.6187845	.5016575
BLACK	3.270718	.6056249
(CONSTANT)	-5.020219	-2.916628

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNICANCE
					0	.5071212	9.5061	4	.0496
1*	.97192	100.00	100.00	.7020533					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
SEX	.69232
LOWIN	1.04797
SIBS	-1.07569
BLACK	.55183

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Attachment I-3

RESULTS OF 1981-82 RETAINEES' DISCRIMINANT ANALYSES

MEANS FOR EACH VARIABLE
SUMMARY TABLE OF SIGNIFICANT PREDICTORS BY GRADE

12 PAGES

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

DISCRIMINANT ANALYSIS

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

308 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
308 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	145	145.0	
2	163	163.0	Successful-2
TOTAL	308	308.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	97.17931	1.84138	.84828	.16552	2.45517	.39621	.02759	.15862
2	96.50920	1.74528	.77914	.12270	2.28221	.50920	.06748	.09816
TOTAL	96.82468	1.81169	.81169	.14286	2.36364	.45130	.04772	.12987

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	7.07586	.38621	.44966	.21379	.38276	.53103	.14621
2	7.23190	.39264	.39264	.17791	.30675	.44785	.24540
TOTAL	7.15844	.38961	.43831	.19481	.34545	.48701	.21753

L-23

SUMMARY TABLE

STEP	ACTION ENTERED	REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	TITLE1		1	.984779	.0304	.03163	.0304	1	2	SERVED BY TITLE I
2	LOWIN		2	.966599	.0056	.13779	.0056	1	2	FREE LUNCH STATUS
3	IMPACT		3	.953737	.0024	.19343	.0024	1	2	DESEG IMPACT STATUS
4	SPED		4	.941963	.0011	.21569	.0011	1	2	SPECIAL ED STUDENT
5	AGE		5	.935922	.0012	.27301	.0012	1	2	AGE IN MONTHS
6	HISPAN		6	.930913	.0014	.29594	.0014	1	2	HISPANIC
7	RRATE		7	.925694	.0015	.32009	.0015	1	2	81-82 RETENTION RATE OF 82-83 SCHOOL
8	SIBS		8	.922518	.0020	.33492	.0020	1	2	# KIDS IN FAMILY

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
AGE	6.211877	6.166851
LOWIN	6.754391	6.000536
SIBS	.8324250	.7391239
TITLE1	1.499712	2.162925
SPED	10.53372	9.714676
RRATE	-.5103462	-.4540894
IMPACT	-2.384523	-3.038350
HISPAN	.8962983	.5651989
(CONSTANT)	-305.4227	-300.3687

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.922518	34.396	8	.0021
1*	.08399	100.00	100.00	.278358					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
AGE	.31185
LOWIN	.51894
SIBS	.21984
TITLE1	-.56776
SPED	.47491
RRATE	-.35743
IMPACT	.55972
HISPAN	.28591

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

- D I S C R I M I N A N T A N A L Y S I S -

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 FLSE 1

155 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
155 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	48	48.0	
2	107	107.0	
TOTAL	155	155.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	STHS	TITLE1	MIGRANT	SPED
1	110.04167	1.70833	.70833	.16667	2.70833	.50333	.33333	.14583
2	109.71028	1.85981	.65421	.12150	2.33645	.42056	.02804	.09346
TOTAL	109.81290	1.81290	.67097	.13548	2.45161	.47097	.26515	.10968

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	8.79375	.50000	.62500	.31250	.18750	.62500	.18753
2	7.87290	.46729	.42991	.23364	.23364	.47664	.23472
TOTAL	8.15806	.47742	.49032	.25806	.21935	.53754	.25496

82.42

SUMMARY TABLE

STEP	ACTION ENTERED	ACTION REMOVED	VARS IN	WILKS LAMBDA	WILKS SIG.	MINIMUM D SQUARED	MINIMUM SIG.	BETWEEN GROUPS	BETWEEN GROUPS	LABEL
1	IMPACT		1	.967441	.0247	.33540	.0247	1	2	DESEG IMPACT STATUS
2	TITLE1		2	.956003	.0327	.21250	.0327	1	2	SERVED BY TITLE 1
3	MIGRANT		3	.943746	.0325	.27523	.0325	1	2	SERVED BY MIGRANT TEACHER
4	SPED		4	.935114	.0383	.32039	.0383	1	2	SPECIAL ED STUDENT

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
TITLE1	2.270697	1.562285
MIGRANT	2.250506	.8172695
SPED	1.847479	1.148384
IMPACT	1.689603	1.232298
(CONSTANT)	-2.111918	-1.351671

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.9351138	10.151	4	.0383
1*	.06539	100.00	100.00	.2547276					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
TITLE1	.62159
MIGRANT	.52520
SPED	.38729
IMPACT	.39984

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

DISCRIMINANT ANALYSIS

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

103 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
103 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	43	43.0	
2	60	60.0	
TOTAL	103	103.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	120.00000	1.79070	.76744	.18605	2.34884	.51163	.09302	.11628
2	121.63333	1.70000	.65000	.08333	2.33333	.55000	.01667	.08333
TOTAL	120.95146	1.73786	.69903	.12621	2.33981	.53398	.03883	.09709

SUCCESS	ARATE	SUMMER	IMPACT	PEASSGN	BLACK	HISPAN	ANGLO
1	7.10698	.53488	.34884	.13953	.39535	.34884	.25581
2	7.17167	.41667	.41667	.20000	.33333	.43333	.23333
TOTAL	7.14466	.46602	.38835	.17476	.35922	.38806	.24272

I-27

82.42

SUMMARY TABLE

STEP	ACTION ENTERED	ACTION REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS	LABEL
1	MIGRANT		1	.943622	.0157	.24091	.0157	1 and 2	SERVED BY MIGRANT TEACHER
2	AGE		2	.905923	.0072	.41873	.0072	1 and 2	AGE IN MONTHS
3	TRANS		3	.880367	.0054	.58793	.0054	1 and 2	# TRANSFERS IN R2-R3
4	HISPAN		4	.864814	.0062	.63039	.0062	1 and 2	HISPANIC
5	SUMMER		5	.855242	.0088	.69225	.0088	1 and 2	R2 SUMMER SCHOOL
6	LOWIN		6	.845723	.0117	.75555	.0117	1 and 2	FREE LUNCH STATUS
7	IMPACT		7	.835524	.0144	.79375	.0144	1 and 2	DESEG IMPACT STATUS
8		SUMMER	6	.842845	.0103	.75183	.0103	1 and 2	R2 SUMMER SCHOOL

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS	1	2
AGE	7.217651	7.332559
LOWIN	-7.848839	-8.487606
TRANS	.1226956	.7043763
MIGRANT	-4.318733	-7.712348
IMPACT	1.242290	1.842515
HISPAN	.6112014	1.176400
(CONSTANT)	-430.8743	-444.4859

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.8429454	16.735	6	.0102
1*	.18646	100.00	100.00	.3954273					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
AGE	.54623
LOWIN	.33850
TRANS	.34354
MIGRANT	.74177
IMPACT	-.33990
HISPAN	-.32105

FILE NONAME (CREATION DATE = 07 JUL 83)

---------- DISCRIMINANT ANALYSIS ----------

82.42

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

114 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
114 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	53	53.0	
2	61	61.0	
TOTAL	114	114.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	135.41509	1.67925	.84906	.07547	2.90566	.28302	.01887	.15094
2	134.19672	1.75410	.72131	.24590	2.49180	.34426	.01639	.26230
TOTAL	134.76316	1.71930	.78070	.16667	2.68421	.31579	.01754	.21053

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	5.27736	.45283	.58491	.39623	.30189	.58491	.11321
2	5.03934	.42623	.39344	.24590	.34426	.50820	.14754
TOTAL	5.15000	.43860	.48246	.31579	.32456	.54386	.13158

I-29

82.42

SUMMARY TABLE

STEP	ACTION ENTERED	ACTION REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	TRANS		1	.958467	.0296	.17113	.0296	1	2	# TRANSFERS IN 82-83
2	SPED		2	.925269	.0134	.31897	.0134	1	2	SPECIAL ED STUDENT
3	IMPACT		3	.898481	.0080	.44623	.0080	1	2	DESEG IMPACT STATUS
4	LOWIN		4	.866547	.0101	.50540	.0101	1	2	FREE LUNCH STATUS
5	TITLE1		5	.871729	.0102	.58112	.0102	1	2	SERVED BY TITLE I
6	AGE		6	.861335	.0122	.63738	.0122	1	2	AGE IN MONTHS

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
AGE	4.569765	4.546115
LOWIN	14.69796	13.82116
TRANS	1.664818	2.915131
TITLE1	-7.782511	-7.087942
SPED	-1.157347	-.7838636
IMPACT	-7.187600	-7.697501
(CONSTANT)	-314.4097	-308.2365

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CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNICANCE
					0	.8610352	16.319	6	.0122
1*	.16139	100.00	100.00	.3727799					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
AGE	-.33663
LOWIN	-.44793
TRANS	.54737
TITLE1	.40711
SPED	.54789
IMPACT	-.31605

SUMMARY TABLE

STEP	ACTION ENTERED	REMOVED	VARS IN	WILKS LAMBDA	SIG.	MINIMUM D SQUARED	SIG.	BETWEEN GROUPS		LABEL
1	ANGLO		1	.966023	.0707	.14600	.0707	1	2	ANGLO OR OTHER
2	LOWIN		2	.945037	.0702	.24141	.0702	1	2	FREE LUNCH STATUS
3	SEX		3	.919717	.0498	.36233	.0498	1	2	SEX
4	SPED		4	.908352	.0627	.41881	.0627	1	2	SPECIAL ED STUDENT
5	TITLE1		5	.896397	.0721	.47975	.0721	1	2	SERVED BY TITLE I

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
SEX	1.873819	1.482910
LOWIN	3.538113	4.451812
TITLE1	1.302191	1.820249
SPED	.4382929	-.6783186
ANGLO	2.640077	4.350401
(CONSTANT)	-4.051556	-4.370580

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNICANCE
					0	.8963765	10.117	5	.0720
1*	.11556	100.00	100.00	.3218749					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
SEX	-.84057
LOWIN	.87282
TITLE1	.37249
SPED	-.35164
ANGLO	.83546

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

---------- DISCRIMINANT ANALYSIS ----------

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

97 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
97 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	37	37.0	
2	60	60.0	
TOTAL	97	97.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	146.32432	1.81892	.70270	.08108	2.70270	.35135	.05405	.00000
2	146.26667	1.60000	.78333	.15000	2.81667	.40000	.05667	.05000
TOTAL	146.28866	1.72165	.75258	.12371	2.77320	.38144	.06186	.06186

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	4.32432	.54054	.54054	.37838	.48649	.45946	.05405
2	4.81833	.51667	.58333	.31667	.38333	.43333	.18333
TOTAL	4.62062	.52577	.56701	.34021	.42268	.44330	.13402

82.42

SUMMARY TABLE

STEP	ACTION ENTERED	ACTION REMOVED	VARS IN	WILKS LAMBDA	WILKS SIG.	MINIMUM D SQUARED	MINIMUM SIG.	BETWEEN GROUPS		LABEL
1	SUMMER		1	.811765	.0238	.96618	.0238	1	2	82 SUMMER SCHOOL
2	AGE		2	.758051	.0360	1.32984	.0369	1	2	AGE IN MONTHS
3	REASSGN		3	.672338	.0253	2.03061	.0253	1	2	OLSEG REASSIGNMENT STATUS
4	HISPAN		4	.601779	.0202	2.75725	.0202	1	2	HISPANIC

CLASSIFICATION FUNCTION COEFFICIENTS
(FISHER'S LINEAR DISCRIMINANT FUNCTIONS)

SUCCESS =	1	2
AGE	-11.12244	-10.80467
SUMMER	-28.37929	-24.93659
REASSGN	58.64501	56.01684
HISPAN	-37.27695	-35.37924
(CONSTANT)	-888.4843	-839.6210

CANONICAL DISCRIMINANT FUNCTIONS

FUNCTION	EIGENVALUE	PERCENT OF VARIANCE	CUMULATIVE PERCENT	CANONICAL CORRELATION	AFTER FUNCTION	WILKS LAMBDA	CHI-SQUARED	D.F.	SIGNIFICANCE
					0	.601779	11.691	4	.0197
1*	.66174	100.00	100.00	.6310473					

* MARKS THE 1 FUNCTION(S) TO BE USED IN THE REMAINING ANALYSIS.

STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS

	FUNC 1
AGE	.91273
SUMMER	-.93745
REASSGN	.80360
HISPAN	-.58274

FILE NONAME (CREATION DATE = 07 JUL 83)

82.42

DISCRIMINANT ANALYSIS

ON GROUPS DEFINED BY SUCCESS SUCCESS=2 ELSE 1

27 (UNWEIGHTED) CASES WERE PROCESSED.
0 OF THESE WERE EXCLUDED FROM THE ANALYSIS.
27 (UNWEIGHTED) CASES WILL BE USED IN THE ANALYSIS.

NUMBER OF CASES BY GROUP

SUCCESS	NUMBER OF CASES UNWEIGHTED	WEIGHTED	LABEL
1	18	18.0	
2	9	9.0	
TOTAL	27	27.0	

GROUP MEANS

SUCCESS	AGE	SEX	LOWIN	TRANS	SIBS	TITLE1	MIGRANT	SPED
1	159.16667	1.55556	.83333	.05556	3.16667	.22222	.05556	.16667
2	156.56556	1.88889	.77778	0	2.44444	.22222	0	.11111
TOTAL	158.29630	1.66667	.81481	.03704	2.92593	.22222	.03704	.14815

SUCCESS	RRATE	SUMMER	IMPACT	REASSGN	BLACK	HISPAN	ANGLO
1	4.25000	.22222	.77778	.44444	.38889	.38889	.22222
2	4.51111	.66667	.77778	.33333	.22222	.44444	.33333
TOTAL	4.33704	.37037	.77778	.40741	.33333	.40741	.29629

I-34

Retention/Promotion

Appendix J

PARENT SURVEY

INSTRUMENT DESCRIPTION: Parent Survey

Brief Description of the instrument:

The "Questions for Parents" survey included 19 questions. The survey was sent to gather information on the attitudes of parents towards retention of their children during 1982-83. All parents received an English and Spanish version of the survey.

To whom was the instrument administered?

To the parents of a random sample of about 35% of the District's retainee students.

How many times was the instrument administered?

Once. A second survey with a reminder note was sent out in an attempt to increase the return rate.

When was the instrument administered?

The survey was sent out through the U. S. Mail on March 21. A second copy was sent to those who had not yet returned the survey on April 5.

Where was the instrument administered?

Through the U. S. Mail to the students' homes.

Who administered the instrument?

Self-administered.

What training did the administrators have?

N/A.

Was the instrument administered under standardized conditions?

No.

Were there problems with the instrument or the administration that might affect the validity of the data? Some questions that were negatively stated were confusing to some of the parents. Although we attempted to review the surveys and correct any responses that were inconsistent with comments made next to these questions, results for these questions are still somewhat suspect.

Who developed the instrument?

The District Priorities' evaluator in charge of Retention and Promotion with assistance from the Assistant Superintendent of Elementary Education, the Director of Elementary School Curriculum, the Evaluation Advisory Committee, and the Director of Research and Evaluation.

What reliability and validity data are available on the instrument?

None.

Are there norm data available for interpreting the results?

No.

Appendix J

"QUESTIONS FOR PARENTS" SURVEY

Purpose

The "Questions for Parents" survey was designed to collect information on the attitudes of parents towards retention. The data was collected to answer the following decision and evaluation questions.

Decision Question D2: How effective have efforts been directed towards retainees? Should they be continued and/or modified?

Evaluation Question D2-9: What are parents' attitudes towards the retention of their children?

Procedure

Instrument. The parent survey included 19 questions dealing with the attitudes of parents towards retention (see Attachment J-1). The instrument was developed by the District Priorities evaluator in charge of the Retention and Promotion evaluation, with input from the Evaluation Advisory Committee, the Director of Research and Evaluation, the Assistant Superintendent for Elementary Education, and the Director of Elementary School Curriculum.

The survey went through several stages of revision especially in the response choices. The response categories finally selected were "Yes," "No," and "Not Sure." Also, in an effort to prevent bias in the questionnaire, some questions were negatively stated (items 3, 6, 9, 11, and 14). However, these questions did create some problems in that some parents did not understand whether to respond "yes" or "no" if they agreed with a statement that was negatively stated. Some parents let us know by writing comments--the rest just responded. Therefore, we cannot be sure that all of the parents who answered the questions without commenting really understood them.

Sample. A random sample of about 35% of those students who met the following criteria was selected:

- students were still enrolled in AISD,
- students were still retainees,
- only one child was selected per family.

Using this method, 407 students were selected for the sample. Out of the 407 surveys sent out, we had 168 (41.3%) returned.

Processing. The students were assigned a number from 1 to 407 and two labels per student were run. Surveys went out through the U. S. mail on March 21 to the parents of the students. The second set of labels was used to check in the surveys. New surveys were sent out April 5 as a reminder to those who had not returned them by that date. Surveys were accepted through about April 22.

Once we received the surveys, we checked them over to make sure that only one response was marked. We also checked the comments written by some of the questions to make sure that the comments agreed with the responses marked. Comments written by parents on the last open-ended question were then grouped and tallied to see which were the most frequent.

Surveys were keypunched and put onto a diskette at the Austin Independent School District Data Services Department. The keypunching format is included as Attachment J-2.

Results

The questions in the survey were basically divided into four categories: how comfortable last year's teacher made the parents feel about retention; how parents feel about their child's progress this year; how parents feel about retention in general; and how they feel about summer school for retained students.

The results for the negatively stated questions (3, 6, 9, 11, and 14) will not be discussed in this section because of the questionable validity of the results. Results are shown in Attachment J-3.

Last Year

About two thirds (61.2%) of the parents said that their child's 1981-82 teacher made them feel comfortable about retention. However, a substantial group (26.7%) said the teacher did not help them feel comfortable with the decision (item 1).

This Year

Parents indicated that they felt very good about their child's teacher (89.7%) this year. A large percentage of the parents felt that their child had a good learning experience (85.5%) and that they worked harder this year than last year (86.6%). A majority of the parents (70.9%) felt that their child had received extra attention and help this year. Only 22% felt that their child was going over the same material as last year. Sixty eight percent of the parents answered "Yes" to the question of whether teachers had sent activities for their child to do at home. (See items 2, 4, 7, 8, 12, and 15.)

Thus, more parents were comfortable with the retention of their child after the child had repeated part of a year than when the decision was first made.

Retention

Over two thirds (69%) of the parents thought it was a good idea to keep their child in the same grade this year. About 60% of the parents agreed that retention decisions are made in a reasonable way in the Austin schools. About 18% said that decisions were not made in a reasonable way, and 22% were not sure whether the methods were reasonable. When asked if other students teased their child about being retained, 29.8% said "Yes," and 55.3% said "No." (items 5, 10, 13)

Summer School

Most parents felt that summer school was a good idea (79.0%). However, only 51.8% of the parents surveyed actually sent their children to summer school last year. When asked how long summer school should last, the top choice was five weeks (42%) and the second choice was six weeks (27%).

Looking at the comments written on question 19, parents commented most frequently on the following:

- Retention was beneficial to the student. (N = 20)
- Retention was unfair in the case of their child. (N = 15)
- The teacher should have informed them earlier about their child's retention. (N = 7)
- Summer school should improve skills and lead to possible promotion to the next grade. (N = 4)
- They did not like the way their child was taught last year and felt it led to retention. (N = 3)

Out of 71 comments written, 36 were negative, 27 were positive and eight were suggestions or comments about their child which were neither positive nor negative. For a complete list of all the comments given, see Attachment J-4.

Overall, parents seemed to feel that their child was having a much better experience this year than last year. In 69% of the cases, they felt it was in the child's best interest to be retained. Most parents thought summer school for retainees was a good idea.

AUSTIN INDEPENDENT SCHOOL DISTRICT OFFICE OF RESEARCH AND EVALUATION

Questions for Parents

We understand that your child was retained this school year. We would like to find out how you feel about this experience. Please answer the following questions and return this form in the enclosed envelope. THANK YOU!

PLEASE CIRCLE THE NUMBER THAT SHOWS HOW MUCH YOU AGREE WITH THE FOLLOWING STATEMENTS.	YES	NO	NOT SURE
1. My child's teacher last year helped me feel comfortable about retention.	3	2	1
2. My child's teacher this year has kept me informed about my child's progress.	3	2	1
3. My child has not learned any more this year than last year.	3	2	1
4. My child has had a good learning experience this year.	3	2	1
5. It was a good idea for my child to have another year in the same grade.	3	2	1
6. My child has not learned enough this year to be successful next year.	3	2	1
7. My child has received extra attention and help this year.	3	2	1
8. My child seems to be going over the same material as last year in the same way.	3	2	1
9. Retention of students is not a good idea.	3	2	1
10. Retention decisions are made in a reasonable way in the Austin schools.	3	2	1
11. If I could do it over again, I would not want my child to be retained.	3	2	1
12. This year's teacher has sent home activities for my child to do at home.	3	2	1
13. Other students tease my child about being retained.	3	2	1
14. My child does not like school this year.	3	2	1
15. My child is working harder this year than last year.	3	2	1
16. I think summer school for retainees is a good idea.	3	2	1
17. Did your child attend last summer's five-week program for retainees?	3	2	1

18. Every time summer school is held, a decision must be made about how long it should be. For future summer schools, how long do you think students should attend? (Circle one)

5 weeks 6 weeks 7 weeks 8 weeks 9 weeks

19. Do you have any other comments on your child's retention or AISD's retention policy?

DISTRITO ESCOLAR INDEPENDIENTE DE AUSTIN OFICINA DE INVESTIGACIÓN Y EVALUACIÓN

Cuestionario Para Padres

Dado que su hijo (o hija) no pasó al siguiente grado escolar este año, nos gustaría saber lo que piensa usted de que esto haya pasado. Por favor conteste las siguientes preguntas y regrese el cuestionario en el sobre que incluimos. Gracias.

Conteste las preguntas encerrando en un círculo el número que representa que tanto está usted de acuerdo con cada afirmación.

	Sí	No	No estoy seguro (a)
1. La maestra de mi niño el año pasado me ayudó a que me sintiera bien de que mi niño no haya pasado al siguiente grado escolar.	3	2	1
2. La maestra de mi niño de este año me tiene informada sobre el progreso de mi niño.	3	2	1
3. Mi niño no ha aprendido mas este año que el año pasado.	3	2	1
4. Mi niño ha tenido una buena experiencia de aprendizaje.	3	2	1
5. Fue una buena idea el que mi niño repitiera el mismo grado.	3	2	1
6. Mi niño no ha aprendido lo suficiente este año para que le vaya bien el año que viene.	3	2	1
7. Mi niño ha recibido mucha atención y ayuda este año.	3	2	1
8. Parece que mi niño está estudiando el mismo material del año pasado en la misma manera.	3	2	1
9. Hacer repetir grado a los estudiantes no es una buena idea.	3	2	1
10. La decisión de quién repite grados se hace en forma razonable en las escuelas de Austin.	3	2	1
11. Si lo pudiera hacer otra vez, no quisiera que detuvieran a mi niño en el mismo grado.	3	2	1
12. La maestra de mi niño ha mandado muchas actividades para hacer en la casa.	3	2	1
13. Los otros estudiantes se burlan de mi niño porque repitió grado.	3	2	1
14. A mi niño no le gusta la escuela este año.	3	2	1
15. Mi niño esta trabajando mas duro este año que el año pasado.	3	2	1
16. Pienso que la escuela de verano para los niños que repiten grado es una buena idea.	3	2	1
17. ¿Asistio su niño el verano pasado al programa de cinco semanas para estudiantes que repitieron grado?	3	2	1

18. Cada vez que se prepara una escuela de verano, hay que decidir cuanto debe durar. Para el futuro, cuanto tiempo le parece que deben durar las clases de verano.

5 semanas 6 semanas 7 semanas 8 semanas 9 semanas

19. ¿Tiene usted otros comentarios sobre el que su niño haya repetido grado o sobre la manera en qué decide el Distrito Escolar que estudiantes deberán repetir grado?

FILE ID A.H.D CARD FILE LAYOUT LOCATION ARE

NAME NANCY SCHLYLER/DISTRICT PRIORITIES DATE 5/29/83

COMMENTS RETAINEE PARENT SURVEY

FIELD	COLUMNS	DESCRIPTION
A	1-3	FILE ID (AHD) ← PUT ON EVERY CARD
B	4-6	SURVEY NUMBER (LISTED IN UPPER-RIGHT-HAND CORNER)
C	7-7	BLANK
D	8-25	(3=3, 2=2, 1=1, BLANK=BLANK) SKIP ANY MARKED WITH
	-	TWO RESPONSES, IGNORE QUESTION 19
18	1-	Mail lunch whatever checked
	-	
	-	
	-	
	-	PLEASE PROVIDE PRICE
	-	ESTIMATE WHEN READY.
	-	113-21-6215.1C-852
	-	
	-	
	-	CALL NANCY AT
	-	EXT. 229 w/questions or when ready.
	-	NEED BY MAY 6.
	-	166 SURVEYS (APPROX.)
	-	
	-	
	-	

82.42

J-8

Attachment J-2

AUSTIN INDEPENDENT SCHOOL DISTRICT

Attachment J-3
OFFICE OF RESEARCH AND EVALUATION

Questions for Parents

We understand that your child was retained this school year. We would like to find out how you feel about this experience. Please answer the following questions and return this form in the enclosed envelope. THANK YOU!

PLEASE CIRCLE THE NUMBER THAT SHOWS HOW MUCH YOU AGREE WITH THE FOLLOWING STATEMENTS.	YES	NO	NOT SURE
1. My child's teacher last year helped me feel comfortable about retention. N=165	61.2	26.7	12.1
2. My child's teacher this year has kept me informed about my child's progress. N=165	89.7	7.3	3.0
3. My child has not learned any more this year than last year. N=166	39.8	49.4	10.8
4. My child has had a good learning experience this year. N=165	85.5	4.8	9.7
5. It was a good idea for my child to have another year in the same grade. N=168	69.0	16.7	14.3
6. My child has not learned enough this year to be successful next year. N=165	42.4	44.2	13.3
7. My child has received extra attention and help this year. N=165	70.9	12.7	16.4
8. My child seems to be going over the same material as last year in the same way. N=166	22.3	62.7	15.1
9. Retention of students is not a good idea. N=164	38.4	43.3	18.3
10. Retention decisions are made in a reasonable way in the Austin schools. N=164	59.8	18.3	22.0
11. If I could do it over again, I would not want my child to be retained. N=164	30.5	55.5	14.0
12. This year's teacher has sent home activities for my child to do at home. N=166	68.1	26.5	5.4
13. Other students tease my child about being retained. N=161	29.8	55.3	14.9
14. My child does not like school this year. N=166	51.2	43.4	5.4
15. My child is working harder this year than last year. N=164	86.6	7.3	6.1
16. I think summer school for retainees is a good idea. N=162	79.0	14.8	6.2
17. Did your child attend last summer's five-week program for retainees? N=168	45.8	51.8	2.4

18. Every time summer school is held, a decision must be made about how long it should be. For future summer schools, how long do you think students should attend? (Circle one) N=149

5 weeks	6 weeks	7 weeks	8 weeks	9 weeks
42.3	26.8	9.4	10.1	11.4

19. Do you have any other comments on your child's retention or AISD's retention policy?

I think retention has been good in the case of my child. (20)

I wish last year's teacher had informed me sooner that my child might be retained. I would have worked with him . (5)

There should be more operating summer sessions not only for retainees, but also to improve other skills.

"I feel very strongly that my child's retention was based on far too narrow an academic reason. The teacher last year told us during the same conference during which we were informed that our child was being retained that there was insufficient time left to help her pass on to the next higher grade. My opinion to avoid future misunderstandings is a much earlier discussion concerning a child's possible problems maintaining grade level and more flexibility in recourse to the parent to assist the child in overcoming their problem."

"The main reason my son needed to be retained is that he was bused ten miles to the heart of the Mexican community. He was the only Caucasian boy in class; in other words, he was a minority all by himself. Now he only walks four blocks to school and is doing well. Busing STINKS!!"

"I know my son is smart but he's too shy to talk."

It is nice that teachers care enough to let the parents know that your child is not ready for the next year.

"Why are there so many Blacks and Mexican Americans that are retained in comparison to Whites? My child was retained without me signing the papers. These rights that you all speak of, where are they? Sign this, sign that, but you type up where they won't be understood. You all say that you understand, but really don't give kick in the butt."

I think a parent should be notified about retention as soon as possible. Six to eight weeks before school is out is too late to seek a tutor to help.

"I think a child's retention should be more carefully scrutinized to determine if they have a learning disability or other circumstance; i.e., personality conflict with the teacher, personal problems at home; then take steps to correct them."

I believe that a teacher should be aware that a child in her class is not meeting the grade qualifications before the last six weeks. The child should be put in a special type (or sp. ed.) class to get more attention to prevent retention.

"A longer summer program would give a child a chance to keep up and work on her weakest abilities."

Retaining a child because of immaturity is wrong.

I do not believe that it is fair for a teacher to retain your child because she does not like him. She was conceited and someone should do something about her.

"I feel the teacher last year (AISD Elementary) didn't like my child for some reason other than her work at school because I know a child who was a lots slower than her and he (past another grade) in her class, the teacher shouldn't hold back a student because of his or her dislikes, I had to be called to the school a lot because of her fighting the teacher said, and this year, not once had I to be called over to (AISD Elementary). My child told me what was happening and the teacher wouldn't do anything."

"One of the main reasons my child was retained was a personality conflict between the teacher and my child. In these situations, I feel the administration should be more willing to move the child to a better environment."

"The reason my child was held back was due to the fact his teacher started the school year seven months pregnant and did not leave proper instructions for all the other teachers to follow. I feel that a teacher should not be allowed to start a school year when she will be out as soon as two months. He had four teachers all year plus substitutes which was not fair. He never had a chance."

If I had it to do over, I wouldn't agree with the AISD's retention program. With great teacher interest my child's progress last year could have progressed at a satisfactory rate.

"My daughter needed to be retained since she wasn't ready, but the way she was taught, I didn't approve of--the teacher didn't work with her often enough--so when she didn't understand her work the teacher put it off on her mother! What are the teachers getting paid for?"

I am not sure that the help my son is getting this year is actually benefiting him.

"I thought it was so wrong for the teacher to keep my child back because we work so hard with her in keeping up and she did good, had an understanding better than some that pass on."

If it weren't for my son's teacher this year, he might be having trouble. His teacher is #1 as a teacher goes. My son has made great progress this year.

"I think the money spent on summer school is to insure a job for teachers. My experience has been that the pupils do not benefit that much from summer school. How can they learn in five weeks what they couldn't learn in 9½ months? They should not be required to attend. The federal government has given AISD $600,000 for summer school for retained students. How much on frills and salaries? Check and break down on next questionnaire for us parents."

"My child learned more in summer school maybe because there were not so many children."

Summer school gave my child a good positive attitude and confidence in himself. He seemed to learn more about his printing, math, and reading than during the regular school term.

"The reason my child did not attend summer school is that her major problem is maturity. Extra schooling would not help this."

I think summer school should be held to teach the basic subjects in which the student did poorly. Also a possible test should be given at the end of summer school, so that the child could go on to the next grade.

"I was given the impression that summer school would allow my child (depending on grades) to move on to the grade she missed. Her grades were very good and so was her attitude about summer school. Her summer school teacher could not move her on and the same grade was repeated. For this reason, I would not want her to go to summer school again."

Tutoring programs should be available throughout the school year.

"I was not happy at all my son flunked first grade and my daughter flunked kindergarten. How is it possible to fail kindergarten?"

I feel my son did not learn anything last year, yet, no special help was offered to him to help him improve so that he could have passed.

"My child was retented (retained) because his last year teacher fail to see or listen to me that my son had a reading problem. Sometimes teachers give up on a child and don't try to help them. This was the case with my child. His last year teacher stop trying to help him at mid-term."

The teacher did not prove to us that it was necessary for our son to spend another year in the same grade. She was not thorough in advising us of his progress throughout the year; she never indicated on the report card that he was below grade level in his learning.

If a child is unable to handle a grade it is better to retain him. Why put him through a grade in which he will have trouble. In the long run, it will be much better for him.

"It's too restricting and denies the teacher, school and parent involved, choices best suitable for the child. My son was told one thing and then another thing done too many times. It confused him. He was told he could attend summer school '82 and be in the 6th grade this year. Then at the end of school he was told he couldn't since only <u>retained</u> students could attend! So he was retained!?"

My child felt embarrassed many times when her schoolmates kept asking her why she had been retained.

My child did not get as much attention last year as she is getting this year. She is also getting more help with this teacher.

"I know perhaps I'm not very cooperative because of a full time job, but I would like an evaluation, either verbal or written as to my child's real progress--it is sometimes very difficult to tell with just the report cards."

"I hope that my child has a chance in the near future to go ahead a grade if his reading problem is concord."

"Reilly has an excellent staff. Good communications is held between teacher(s) and parents. The teachers are also sensitive to the child's matureness and weaknesses. I totally support their advice."

Make a questionnaire simpler to answer, besides yes and no answers. Not all questions can be answered yes or no!

"The Spanish part should be better next time. Do not use double negation in when you make questions in English."

First teacher kept me informed real well but they changed his teacher and I have not been told anything.

My child's teacher told me summer school would not help him that it would be a waste of time.

"My child has a learning disabililaly (disability). This school year he has been evaluated, and this year he is receiving help. I am satisfied with the help and all the personel (personnel) that has helped my son."

"It was our suggestion that one daughter be retained-due to her inability to read in grade level-in fact she was a full year behind in reading- her other grades where average and so we had to convince the teachers and principal to retain her. One would think teachers and educators would realize the importance of reading skills but after our experience, I wonder! They seemed more concerned about our daughter's possible social embarassment due to retention rather than her certain continued lack in her reading skills had she been passed."

"I don't know what went wrong, but on her papers last year, she got good grades so I still don't understand why she was retained."

"The teacher wasn't fair, she tell me he was doing so good, then at the last minute it was another story. I don't think she liked my son."