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Austin Independent School District TX

The Office of Research and Evaluation (ORE) has been evaluating compensatory education programs in the Austin Independent School District for 10 years. This volume is an attempt to pull together many of those useful, intermittently timely findings into a handy reference volume. The contributions to this volume actually span the 10-year history of the ORE and are identified by name in the reference lists provided for each entry. Topics covered include major findings from 1982-83, impact on students, early childhood education, curriculum/techniques, parent involvement, and staff considerations. The final section of this volume discusses the role of evaluation in compensatory programs. (PN)
WHAT WE KNOW ABOUT COMPENSATORY EDUCATION:
A COMpendium

What Does Work?
What Does Not Work?
What Role Does Evaluation Play?
January 1984

Approved:

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did you ever try to remember where you heard or read a useful bit of information and experience the frustration of not being able to locate it when you needed it? the office of research and evaluation has been evaluating compensatory education programs in AISD for ten years. more and more frequently, requests are made for a finding or report written by a since-departed colleague or by one of us with poor memories. topics of current interest surface and resurface intermittently, causing us to search for the summary we did the last time the same question was asked.

this volume is our attempt to pull together many of those useful, intermittently timely findings into a handy reference volume. the contributors to this volume actually span the ten-year history of ORE and are identified by name in the reference lists provided for each entry. i want to thank the current evaluation staff for setting aside their pressing tasks to compile this volume. i am sure that many hours of searching will be saved over the next few years as a result of their efforts.

in the history of compensatory education, evaluation has been a critical factor: critical in the sense of being essential as well as judgmental. the final section of this volume discusses the role of evaluation in compensatory programs. i particularly encourage the reader to review this section. we in evaluation feel a sense of contribution to and ownership in the programs we have critiqued over the years.

Glynn Ligon
Acting Director, Office of Research and Evaluation
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MAJOR FINDINGS FROM 1982-83

CHAPTER 1 REGULAR

MAJOR FINDINGS:

- In 1982-83, Chapter 1 and Migrant Program Early Childhood (prekindergarten) students made impressive achievement gains that were even larger than in 1981-82.

- The achievement gains of 1982-83 Schoolwide Projects students in reading, math, and language were generally greater than those of comparable students in the Regular Chapter 1 Program schools. A longitudinal examination of Schoolwide Projects students' achievement gains also appears encouraging concerning advantages of participation in the program.

- There is evidence to indicate continued improvement in the Regular Chapter 1 Program. The program met or exceeded its objectives at every grade level.

- There is some evidence that extremely low-scoring Schoolwide Projects students (those few who are more than a year behind grade level) do not gain as much in some cases as comparable students in Regular Chapter 1 schools. If such evidence continues to emerge, other forms of instructional grouping or supplemental instruction should be considered for these students.

BACKGROUND:

The ECIA Chapter 1 (previously Title I) Program in the Austin Independent School District is a continuing program supported by funds from the Department of Education under the Elementary Consolidation and Improvement Act. The purpose of Chapter 1 is to provide for the learning needs of educationally disadvantaged students in school attendance areas having high concentrations of children from low-income families. It is intended to provide supplemental assistance to the regular school program.

Participation of schools in AISD's Chapter 1 Program is determined by both economic and educational criteria. Schools which have a higher concentration of low-income families than the district average are eligible to receive Chapter 1 services. Standardized test results are used to determine which grade levels to serve, which schools to serve, and how many students to serve at each school. Participants are identified by ranking the students at each school and selecting those with the greatest need.

REFERENCES:

MAJOR FINDINGS FROM 1982-83

CHAPTER 1 MIGRANT

MAJOR FINDINGS:

- Chapter 1 and Migrant Program Early Childhood (prekindergarten) students made impressive achievement gains that were even larger than last year's.

- The high school Migrant Program has several weaknesses:
  - little focus on low-achieving students;
  - no discernible impact of the program on achievement;
  - considerable disparity among the number of students served by each teacher; and
  - a lower proportion of eligible students served than at the elementary and junior high levels.

- Students in grades 2-12 who have been served from one to four years by the Migrant Program did not make greater achievement gains from 1981 to 1982, or 1982 to 1983, than did other migrant students who have not been served.

REFERENCES:


MAJOR FINDINGS FROM 1982-83

STATE COMPENSATORY EDUCATION

ORE Pub. No. 82.76

MAJOR FINDINGS:

- The greater coordination provided by the elementary compensatory reading coordinators seems to have contributed to better student achievement gains.

- The gains made by students served by SCE teachers this year were larger than the gains made by students served by SCE teachers last year.

- The writing labs contributed to increases in the language skills of low-achieving students in junior and senior high school.

- The efforts made to encourage low-achieving students to attend the labs should be continued.

- A follow-up plan, i.e., target on some students and work with them at least a minimum number of ten times, as it was done with low achievers last year, should be considered for the average achievers.

BACKGROUND:

A more careful assignment of bilingually certified SCE teachers would allow serving LEP students who otherwise would not have access to a bilingually certified teacher at their school and/or grade.

Most of the students served by the writing labs were average or above-average achievers. These students did not show as much improvement as the low-achieving students served.

REFERENCES:

IMPACT ON STUDENTS

SUSTAINING EFFECTS STUDY: TITLE I

MAJOR FINDINGS:

- In the 214 Title I districts studied, Title I students progressed over the course of a school year more than would be expected for them without the program in grades 1-6 in math and 1-3 (but not 4-6) in reading.

- Title I effects were found to persist over the next summer and school year even after services had ended.

- Several factors were found to be related to the one-year student gains. These were greater teacher experience, greater amounts of regular instruction, work with a tutor, lack of disruptions to instruction, frequent feedback on student progress, and teacher effort in planning and evaluation. The amount of instruction by special teachers, aides, and assistants, or in very small groups, does not often have detectable effects; when it does, the effects are generally negative. These findings are not definitive and are being pursued.

BACKGROUND:

In September 1978, the National Institute of Education updated the results of its major study of the effects of services on students, the Instructional Dimensions Study (NIE 1978). The IDS examined the academic achievement in reading and math of thousands of compensatory students, all of whom attended Title I eligible or participating schools. The students studied were in first and third grades and were measured with the Comprehensive Tests of Basic Skills.

In general, the results were encouraging. First grades made average gains of 12 months or 12 percentile points in reading and 11 months or 14 percentile points in math. Third grades made average gains of seven months or nine percentile points in reading and 12 months or 17 percentile points in math.

The Sustaining Effects Study is a major ongoing evaluation of compensatory education, conducted by System Development Corporation under contract to the U.S. Department of Education.

REFERENCES:


IMPACT ON STUDENTS

SCHOOLWIDE PROJECTS RESULTS

MAJOR FINDINGS:

- On the average, SWP schools did better than regular Title I at every grade in the 1980-81 school years. Average gains at SWP schools were one-year better than expected for low-achieving, low-income students. Achievement gains of low-achieving students in SWP schools were 25% greater than those of similar students in regular Title I schools.

- The clear advantage for SWP in 1980-81 was no longer as clear in the 1981-82 school year. SWP was more effective than regular Title I at K-3, but not in higher grades. Part of the reason may be the increased effectiveness of regular Title I. Thus, the standard of comparison for SWP's is more rigorous. However, means gains for SWP students in 1981-82 were not as large as last year.

- SWP students on the average gained more in reading than regular Chapter 1 students with the same pretest scores in the 1982-83 school year.

- A three year analysis showed there was no significant difference in Reading between the regular Chapter 1 students and those in schoolwide projects. The comparison group was composed of students from traditional Title I areas, matched on ethnicity, low-income status, grade, sex, pretest score, age, and retainee status.

BACKGROUND:

Two AISD elementary schools, Allison and Becker, have a sufficient concentration of low-income students to qualify as Chapter 1 Schoolwide Projects. In these schools Chapter 1 and extra local funds are used to hire extra classroom teachers and lower the pupil/teacher ratio. All students in the schools are considered Chapter 1 students.

REFERENCES:


IMPACT ON STUDENTS:

GROUP SIZE

MAJOR FINDINGS:

- Several studies indicate that teachers of low-SES students could profitably spend from 1/3 to 1/2 of their time in teaching groups of eight or more as well as the whole class.

BACKGROUND:

It is suggested that low-SES students need relatively more help and supervision than middle-SES students and that the teacher can effectively teach each child more thoroughly by using larger groups.

REFERENCES:

IMPACT ON STUDENTS
"PULLOUTS" AND "OVERLAPS"

MAJOR FINDINGS:

- In 1976-77, AISD students who were served by both Title I and a bilingual program spent significantly less time in reading instruction than did the other groups.

- In 1976-77, AISD students involved in only one pull-out program received approximately the same amount of instructional time as students not served by a pull-out program.

- In 1976-77, students in AISD participated in as many as five special programs concurrently. By 1980-81, the number of students served by more than two compensatory programs had been reduced by 75%.

BACKGROUND:

A larger percentage of Title I students were served primarily in the classroom for 1981-82 than in previous years. It is possible that this change is partially responsible for the program having met or exceeded the objectives at all grade levels except for grade 4.

Glass and Smith (1977) concluded that pull-out programs for Title I students were universal, and that there were no clear academic or social benefits to students from such programs. Such programs "may, in fact, be detrimental to pupil's progress and adjustment to school," the authors concluded.

REFERENCES:


IMPACT ON STUDENTS

"PULLOUT" VS. "MAINSTREAM" COMPENSATORY EDUCATION

MAJOR FINDINGS:

- Pullout has neither academic or social benefits, may be detrimental, and is used to ensure compliance with Title I regulations concerning supplementing as opposed to supplanting regular instruction.

- Pullout appears to be particularly dangerous to children served by multiple programs.

- Children pulled out several times a day are confused by multiple demands and expectations and lose instructional time.

- Students in pullout programs may also suffer from conflict or lack of coordination with the core local program.

BACKGROUND:

In 1978, the National Institute of Education submitted to Congress the final report of a landmark study of the effectiveness of compensatory education programs (NIE 1978). One aspect studied was the relative effectiveness of "pullout" programs, in which children are taken out of their regular classroom to receive supplemental help, and "mainstream" programs, in which they receive this help within the regular classroom.

The study involved 400 classrooms, 100 schools, and 14 districts ranging in size from 5,000 to 240,000 students. The districts were urban, rural, and suburban, contained 4-76% minority students and 42-100% Title I enrollment. Students were measured in reading and math in first and third grades. Findings favored the mainstream setting for all but third grade math, where no difference was found.

A review by the Northwest Regional Educational Laboratory (1981) concluded that

"Homogenous ability grouping has a negative effect on the achievement, school attitudes, and self-concepts of low-ability students; conversely, heterogenous grouping of these students has a positive effect on these outcomes. The evidence in support of this hypothesis is very strong."

While the NREL review did not look at pullout vs. mainstream progress per se, it does suggest that schools should be cautious in singling out low achievers in a conspicuous way.
REFERENCES:


MAJOR FINDINGS:

- Title I instructional services, and probably those of other compensatory programs, are not supplementary (i.e., in addition to) to regular instruction. Instead instructional time provided by the regular program is supplanted by the instructional time provided by the Title I Program. In other words, the quantity of instruction received by a Title I student is not greater than the quantity received by a non-Title I student.

- Students served by more than one compensatory program during a school year actually receive less instructional time than those served by only one or none.

- A typical student receives instruction in reading/language arts, math, science, and social studies for 52% of an average school day. If the 15-16 minutes of off-task time during instruction are subtracted, the percentage of the school day that a student is actively engaged in basic skills instruction is 48%.

- A typical student receives instruction directly from a teacher about 22% of the school day. During almost half of the time that a student spends in basic skills instruction, a teacher is personally delivering that instruction.

- Slightly more than half of a student's basic skills instructional time is spent working alone—group size of one—without direct contact with a teacher.

- When a teacher works directly with a student, off-task time is greatly reduced.

- Group size affects on-task behavior very little. The presence or absence of a teacher is the key factor in task orientation.

- If increasing instructional time is emphasized, by a person of authority (e.g., principal, curriculum director, superintendent, etc.), management time can be decreased and instructional time increased by teachers without the expenditure of funds on special programs or projects. In terms of 1982 dollars, the 15 minute per day increase in instructional time from one year to the next was found in Austin's schools as a result of emphasis on time use is worth over $2,000,000. (.25 hours x 180 days + 3.5 hours per instructional day x $95 per day average teacher salary x 1,801 elementary teachers)

- If the emphasis on maximizing instructional time decreases, the gains made in instructional time can be lost.
Lowering a school's pupil/teacher ratio to 15/1 can impact instructional time use.

a. A lower pupil/teacher ratio resulted in a slight increase in the amount of time in basic skills instruction.

b. The quality of instruction probably improved more than did the quantity of instruction. Students in the lower pupil/teacher ratio schools outgained other comparable students on achievement tests.

c. The lower pupil/teacher ratio produced less off-task behavior during instruction.

d. Students spent more time receiving instruction directly from a teacher when the pupil/teacher ratio was lower.

Figure 1 summarizes how the time in a six and one-half hour day was found to be used. This figure summarizes across all types of students in grades 1-5.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30</td>
<td>Total School Day</td>
</tr>
<tr>
<td>3:22</td>
<td>Basic Skills</td>
</tr>
<tr>
<td>2:10</td>
<td>reading, language arts</td>
</tr>
<tr>
<td>:39</td>
<td>math</td>
</tr>
<tr>
<td>:13</td>
<td>social studies</td>
</tr>
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<td>:11</td>
<td>science</td>
</tr>
<tr>
<td>:09</td>
<td>other</td>
</tr>
<tr>
<td>1:38</td>
<td>Management</td>
</tr>
<tr>
<td>:16</td>
<td>Between Classes</td>
</tr>
<tr>
<td>:47</td>
<td>Art, Music, PE</td>
</tr>
<tr>
<td>:30</td>
<td>Lunch</td>
</tr>
</tbody>
</table>

Figure 1. A Typical School Day for an Austin Student in Grades 1-5.
BACKGROUND:

These findings resulted from about 1,000 full-day observations of individual elementary students conducted from 1976-77 through 1980-81 by the Office of Research and Evaluation. The observations are unusual because they were focused on students from the first minute in school in the morning to the last minute in the afternoon in contrast with most studies which have focused on teacher behavior and/or samples of student behavior during instructional periods.

REFERENCE:

The statements above are taken from the following reference which contains a complete bibliography for these observations.

Ligon, G. L., and Doss, D. A. Some lessons we have learned from 6,500 hours of classroom observations. Austin, Texas: Office of Research and Evaluation (81.56), Austin Independent School District, 1982.
DIPACT ON STUDENTS

SUMMER INSTRUCTION

MAJOR FINDINGS:

- A large part of the achievement gap between low-income students and others appears to arise during the summer.

- Summer instruction has traditionally been ineffective in closing the gap, and several possible reasons can be hypothesized.

- Summer instruction holds promise for affecting achievement because it provides instructional experiences at a time when none or few are normally provided.

BACKGROUND:

Summer appears to be a crucial time in the education of children from low-income families. These students generally achieve at a lower level than students from families with higher incomes, and the size of the achievement gap increases with each school year. Work by Heyns (1978) indicates that as much as 80% of the increasing gap can be attributed to differences in achievement growth during the summer. During the school year, the rate of growth is about the same for both groups of students. However, during the summer, higher income students continue to gain, but lower income students tend to maintain the same achievement level. As a result, the gap widens. More recent work by Hoepfner (1980) suggests that the school year is more important in producing the gap than Heyns reported; i.e., less than 80% of the increase in the gap occurs during the summer. Nevertheless, differences in achievement gains which occur during the summer remain significant.

In addition, summer would appear to be crucial to closing the gap because there are few educational activities competing for students' time.

However, the research does not support the effectiveness of traditional summer school programs in closing the gap. Why? While many potential reasons come to mind, several appear to be more plausible than others.

1. The course of instruction is too short--three to six weeks.

2. The amount of instruction per day is too short--two to four hours.

3. Given the short duration, teachers do not have sufficient time to know the students.

4. The discontinuity between the regular school year and summer school in school rules, procedures, and the content of instruction is too great.

These possible reasons suggest inadequate planning and/or inadequate resources. Without good planning and sufficient resources, we cannot know the extent to which summer instruction can help close the achievement gap.
An alternative would be to provide year-round instruction with one- or two-week vacations scattered throughout the year. Intersession periods could be used to provide additional instruction. Perhaps the breakup of the concentrated 12-week summer period into multiple short vacations would assist learning. However, we do not have any information on the effectiveness of such an approach.

REFERENCES:


Hoepfner, Ralph. *How important is summer school?* Educational Leadership, 1980, 38, 80-82.
IMPACT ON STUDENTS

DROP OUT PREVENTION: A NEED FOR COMPENSATORY EDUCATION PROGRAMS

ORE Pub. No. 82.44

MAJOR FINDINGS:

- The best predictor of whether students drop out of AISD schools is their level of academic success in junior high school.
- Ten percent of dropouts interviewed reported leaving school because of economic need.

BACKGROUND:

One source of information describing the need for compensatory education programs is a study of dropouts recently completed by ORE. The single best predictor of whether students would become dropouts during high school was their degree of academic success through the junior high grades. AISD loses about 20-24% of its fourteen-year-olds before they graduate. Effective compensatory programs that boost students' academic success should tend to reduce the dropout rate. In fact, a longitudinal study of one early childhood program's impact has shown that participation in the program lowered the dropout rate from 55% to 35% (Pifer, 1982).

In a related finding, interviews with dropouts showed that 10% were forced to leave school because they had to work or to care for someone else. This suggests that compensatory programs cannot ignore the economic needs of older students.

REFERENCES:


IMPACT ON STUDENTS
HIGH SCHOOL MIGRANT PROGRAM

MAJOR FINDINGS:

- There has been little or no achievement advantage found for migrant students who were served by a Migrant Program teacher when compared to students not served. This has been true for the last several years.

- Implementing an effective program at this level is beset with difficulties.

- Various pilot projects have been tried and are being tried to reach the high school migrant students.

BACKGROUND:

For the last several years there has been generally unimpressive achievement progress made by the high school migrant students served by Migrant Program teachers. As reported by the staff there have been and continue to be difficulties in implementing the program -- no course credit for special migrant classes, difficulties in scheduling, student reluctance to take the migrant class, etc. The achievement results have not shown pullout or special classes to be more or less effective than team teaching efforts.

As a result of these findings, the staff has tried some pilot projects. In 1981-82 a special math tutorial program was tried but was unsuccessful since students did not go. In 1982-83 two dropout prevention programs were tried -- one at each of two high schools. No data are yet available on the success/failure of these efforts. In 1983-84 a new special program is being planned to begin the second semester at one high school. This effort focuses on using computer-assisted instruction and learning-to-learn strategies. Unlike the previous pilot projects which were conducted in schools where a Migrant Program was also serving the students, this new effort will be the only Migrant Program instruction received by the students and they will receive AISD credit for participating.

REFERENCES:


IMPACT ON STUDENTS

MIGRANT CLOTHING PURCHASES

ORE Pub. No. 80.40
79.09

MAJOR FINDINGS:

- There were no data to show clothing purchases increased student attendance.
- Staff members identified more problems with the program than benefits.

BACKGROUND:

The AISD Migrant Program provided clothing to "needy" migrant students for several years, ending after 1980-81. The purpose of clothing purchases was to supply clothing for students who might otherwise not attend school because they did not have appropriate/nice enough clothes.

In 1980-81 ORE interviewed staff members about the clothing program. Problems with clothing purchases were identified including:

- Lack of clear procedures,
- Expense,
- Excessive time consumption, and
- Uncertainty that the most needy got the clothing.

Because cuts in funding for 1981-82 were expected, the staff interviews and lack of data showing increased attendance were considered, and the program was deleted.

REFERENCES:


EARLY CHILDHOOD EDUCATION

MAJOR FINDINGS:

- An effective prekindergarten program can lead to a 50% reduction in later special education placement, as well as some reduction in grade retention.

- There is evidence that prekindergarten can lead to a substantial reduction in dropout rate.

- Preschool can affect achievement test scores and attitudes toward school.

- A cost-benefit analysis of a Michigan program showed that because of reduced special education costs and participants' greater expected lifetime earnings, prekindergarten more than paid for itself.

BACKGROUND:

After early optimism, compensatory early childhood education programs fell into disfavor in the early 1970's after initial evaluations seemed to show that their educational benefits wore off after a couple of years.

In recent years, however, the Consortium for Longitudinal Studies has coordinated efforts to assess the long-term effects of programs conducted in the 1960's; they have done a "meta-analysis" of eleven independently conducted projects of high quality, using a variety of outcome measures. Their reports as well as results reported by the Perry Preschool Project in Ypsilanti, Michigan and other locally conducted studies, indicate long-term benefits for the participants and for society.

REFERENCES:


EARLY CHILDHOOD EDUCATION

CHANGES IN EARLY CHILDHOOD PROGRAMS THAT WERE RELATED TO EVALUATION FINDINGS

MAJOR FINDINGS:

- After extensive observations and comparison of test results, which indicated Title I students got more instructional time and made greater achievement gains than did migrant students, the decision was made to implement the Title I curriculum in migrant classes and provide more and more coordinated instructional supervision to migrant teachers.

- Aides were eliminated when funding cuts were inevitable. Previous research had indicated aides were not of instructional benefit.

BACKGROUND:

Extensive observations indicated that there were differences between the Title I and Migrant Early Childhood classes - most importantly - there was more instructional time in Title I classes and Title I teachers were more often responsible for instruction that were migrant teachers (they shared responsibility more with their aides). Also the Title I students made greater gains on the Tests of Basic Experiences (TOBE) than did the Migrant students. These findings influenced the decision to change the curriculum used in the Migrant Program to that used in the Title I classes. It was also decided that the Migrant classes needed more instructional supervision, so one person became the Early Childhood Coordinator for both Migrant and Title I.

Since both programs faced funding cuts for the 1981-82 school year, and priority was on keeping teachers, aides and student helpers were cut. The rationale for this came, to a large degree, from previous ORE research (as well as other national research) that indicated aides did not increase instructional time nor achievement. The class size was decreased to 16 students. Although not directly comparable, the achievement results from 1980-81 and 1981-82 indicate that students did not suffer an achievement "setback" without aides. Teachers did however not like the aides being removed.

REFERENCES:


CURRICULUM/TECHNIQUES

CURRICULUM DEVELOPMENT

ORE Pub. No. 78.50

MAJOR FINDINGS:

- The experience gained from three externally funded projects with curriculum development components points to there being at least seven critical factors for successful curriculum development. These factors emphasize the need for and the benefits to be derived from clearly specifying the guidelines for new curriculum, monitoring the writing, pilot testing the product, and providing training for teachers in its use.

BACKGROUND:

The most successful locally developed curricula have been...

1. Based on clearly defined specifications of
   - content
   - skills
   - instructional level
   - target population
   - lesson format.

2. Written by consultants or staff in consultation with teachers - all of whom have much experience in the area of focus and with the target population.

3. Monitored during the writing by staff to ensure that the specifications are being followed.

4. Pilot tested and critiqued by a limited number of teachers, assessed by a criterion-referenced test for success in teaching targeted content/skills, and assessed by an achievement test for broader learning effects.

5. Revised or rewritten after the pilot testing.

6. Accompanied by training for the teachers in understanding, using, and following up on the activities.

7. Disseminated to teachers with a timeline for use and supervision of the implementation of the activities.

REFERENCES:

CURRICULUM TECHNIQUES

COOPERATIVE LEARNING

MAJOR FINDINGS:

Slavin (1980), in summarizing 28 studies of Cooperative Learning indicates that research justifies the following conclusions:

1. For academic achievement, cooperative learning techniques are no worse than traditional techniques, and in most cases they are significantly better.

2. For low-level learning outcomes, such as knowledge, calculation, and application of principles, cooperative learning techniques appear to be more effective than traditional techniques to the degree that they use:
   a) A structured, focused schedule of instruction;
   b) Individual accountability for performance among team members;
   c) A well-defined group reward system including rewards or recognition for successful groups.

3. For high-level cognitive learning outcomes, such as identifying concepts, analysis of problems, judgment, and evaluation, less structured cooperative techniques that involve high student autonomy and participation in decision-making may be more effective than traditional individualistic techniques.

4. Cooperative learning techniques have strong and consistently positive effects on relationships between Black, White, and Mexican American students.

5. There is some indication that cooperative learning techniques can improve students' self-esteem.

6. Students in classes using cooperative learning generally report greater liking of school than do traditionally taught students.

There is already enough evidence from field research to support the use of cooperative learning techniques in schools, particularly desegregated schools. Many of the techniques are not difficult to learn—forexample, teacher training for the STAD studies has taken no more than three hours, and often less. All of the techniques can be used by individual teachers in traditionally structured classes without outside help, additional expense, or radical changes in schedules or other external features of school organization.

BACKGROUND:

Cooperative learning refers to classroom techniques in which students work on learning activities in small groups and receive rewards and recognition based on their group’s performance. Research has focused on four major models of cooperative learning: Teams-Games-Tournament (TGT), Student Teams-Achievement Divisions (STAD), Jigsaw, and Small-Group Teaching (SGT). The most successful and most extensively studied is the TGT model which is described below.
TGT is built around two major components: 4- to 5-member student teams and instructional tournaments. Students are assigned to teams according to a procedure that maximizes heterogeneity of ability levels, sex, and race. The primary function of the team is to prepare its members to do well in the tournament. Teammates study together and quiz each other to be sure that all team members are prepared.

After the team practice session, team members must demonstrate their learning in the tournament, which is usually held once each week. For the tournament, students are assigned to three person "tournament tables." The assignment is done so that competition at each table will be fair—the highest three students in past performance are assigned to Table 1, the next three to Table 2, and so on. At the tables, the students compete at simple academic games covering content that has been presented in class by the teacher and on the worksheets. Students at the tournament tables are competing as representatives of their teams, and the score each student earns at his or her tournament table is added into an overall team score. Because students are assigned to ability-homogeneous tournament tables, each student has an equal chance of contributing a maximum score to his or her team, as the first place scorer at every table brings the same number of points to his or her team. Following the tournament, the teacher prepares a newsletter which recognizes successful teams and first place scorers. While team assignments always remain the same, tournament table assignments are changed for every tournament according to a system that maintains equality of past performance at each table. For a complete description of Teams-Games-Tournament, see Slavin (1978).

REFERENCES:


MAJOR FINDINGS:

- In an extensive review, Hyman and Cohen (1975) concluded that learning for mastery is consistently more effective than traditional curricula, and may also tend to counter the effects of teachers' low expectations for children in compensatory programs.

- The Chicago Mastery Learning reading program, used in AISD summer school, has received mixed reviews.

BACKGROUND:

Mastery learning refers to an instructional model involving formal specification of a set of objectives, frequent diagnostic and formative evaluation, corrective instruction, and criterion-referenced summative evaluation.

Hyman and Cohen (1975) reviewed 15 years of research on mastery learning involving some 3,000 schools and concluded that the mastery learning model was more effective than traditional curricula.

In the late 1970's the Chicago Public Schools began using a locally developed program, Chicago Mastery Learning Reading. Early pilot results were promising, but the Chicago program has been attacked by critics who claim that although students are learning to pass criterion-referenced tests and to recognize words, they are not learning to read and understand well.

AISD's results with CMLR have been inconclusive. CMLR was used in 1982 and 1983 summer schools for retainees. Although the students mastered the material at a high level, summer school lasted only five weeks, and no long-term effects were apparent for the 1982 group on the 1983 ITBS.

REFERENCES:


PARENT INVOLVEMENT

MAJOR FINDINGS:

There are four ways a parent can be involved in educational programs.

- As a tutor: helping his/her child with specific skills at home
- As a paraprofessional: working as an aide, either as a volunteer or as paid staff
- As an active member of the parent advisory council or parent-teacher organization: in an advisory capacity
- As a learner: attending workshops and training sessions offered by the program

It is relatively easy to measure the degree of parent involvement in any of the four capacities, but it is very difficult to measure the impact of parent involvement alone on student gains for the following reasons:

- Parent involvement changes in a program often occurs at the same time that other changes are implemented, and it is difficult to separate their effects
- Although it is clear that children whose parents are involved perform higher, it has not been empirically proven that increasing parent involvement as a learner, paraprofessional, or advisor increases children's achievement gains
- Reaching parents at home seems to be more effective than expecting them to come to school
- Alternative methods of reaching parents are needed: notes to parents do not always reach them or are not always read or understood

BACKGROUND:

There are many theoretical papers that advocate parent involvement. Empirical data on the effect of parent involvement on achievement, however, are not only scarce, but inconclusive. (Stanford Research Institute, 1973 and Crosset et al., 1972) Studies measuring more general outcomes agree that attitudes and morale of program staff, parents, and students are higher when parent involvement is higher (Brophy, et al., 1975).

McKinney (1975) reports that parents tutoring their children at home produce higher scores in reading and math and a "much more positive attitude" towards school. He also points out that parent involvement in a tutoring capacity is more likely to occur using school representatives visiting the homes, as opposed to expecting parents to come to the school.
Although it is often said there is a lack of interest on the part of the parents, other reasons could be the cause of low achievement. (Shadick, 1970)

REFERENCES:


PARENTAL INVOLVEMENT

HAPPY TALK

MAJOR FINDINGS:

- Happy Talk produced achievement gains with minimal instructional activities.

BACKGROUND:

One program that was successful in improving achievement was the Happy Talk early childhood program. In this program paraprofessionals visited the homes of four-year-olds to model an educational activity with the child for the child's mother. The activity used a toy or book as a prop. The parent was to repeat the activity with the child during the week. The next week another activity was modeled.

In the final year of the program, students were randomly assigned to participate or to be control students. The Peabody Picture Vocabulary Test was given to the students before and after the instruction. The results showed that participants made greater gains than control students.

This program provided minimal instructional activities, yet it produced a significant achievement gain. The results support the notion that gains or benefits are readily obtainable from compensatory programs when they provide educational opportunities where few exist rather than attempt to significantly improve existing experiences.

REFERENCES:

Doss, D., Final technical report: ESEA Title I regular program 1979-80. Austin, Texas: Office of Research and Evaluation (Publica-
MAJOR FINDINGS:

- Chapter 1 and Migrant parents report their top priorities to be working with their children at home in reading and in math.

- No discernible achievement advantage has been found for Kit participants when compared with a similar group of nonparticipants.

- Although no achievement advantage has yet been found, parents have been highly positive about receiving the Kits.

BACKGROUND:

Both the Math and Reading Rainbow Kits were developed in response to surveys of Chapter 1 and Migrant parents indicating their top priorities were working with their children at home in reading and in math. There is a math and reading Rainbow Kit for each grade level (K-6) focusing on the essential competencies.

Analyses done (by grade level) on the math/reading scores of students who received the Kits compared to similar students who did not receive the Kits revealed no greater achievement gains for the students receiving the Kits.

Although there have yet to be measurable achievement advantages for Rainbow Kit participants, parents have been highly positive about receiving the Kits. Also parents' expressed priorities are still to be helped in working with their children on reading and math at home, and these Kits are directed at these needs. Therefore the Kits may be an effective parental involvement tool even if, thus far, no discernible achievement increases have been measured.

REFERENCES:


STAFF CONSIDERATIONS

ADEQUATE ADMINISTRATIVE SUPPORT

MAJOR FINDINGS:

- Unless a concerted effort is made to integrate the program into the district's administrative structure, the program will tend to drift off course or fail to be fully implemented.

BACKGROUND:

One ingredient of a successful compensatory education program is adequate administrative support. It has been our general experience that new programs supported by external funds are poorly implemented during the first year. Often it is the add-on nature of most of these programs that contributes to the implementation problem. Unless a concerted effort is made to integrate the program into the district's administrative structure, unless there is clearly a person at the helm, the program will tend to drift off course or fail to be fully implemented. Not only can students receive fewer or poorer services than previously anticipated, compliance problems can arise when programs are not run in accordance with the district's application to the funding source.

REFERENCE:

STAFF CONSIDERATIONS

COMPENSATORY TEACHER EVALUATIONS

MAJOR FINDING:

- Concerns about compensatory teachers being seen as less competent than regular teachers were quelled when their teacher evaluation ratings were examined and they compared very favorably with regular teachers' evaluation ratings.

BACKGROUND:

Overall, the personnel ratings received by Title I, Title I Migrant, and State Compensatory Education teachers have been very similar to those received by locally funded personnel. The externally funded personnel are frequently rated higher than locally funded teachers on a probationary contract. In some areas, the externally funded personnel are rated higher than locally funded teachers on a three-year contract. These high ratings may reflect experience (many compensatory teachers have many years of teaching experience) rather than compensatory/regular teacher differences.

REFERENCES:


STAFF CONSIDERATIONS

INSTRUCTIONAL AIDES

ORE Pub. No. 75.47

MAJOR FINDING:

- Instructional aides are negatively related to achievement.

BACKGROUND:

AISD first reported on the conclusion that aides did not lead to improvement in achievement as the result of the evaluation of a pilot program to use instructional aides (Lee, 1976). The pooling of this finding with findings from other studies about the relationship between the number of adults in the classroom in relation to the number of students (where the adults might be volunteers, student teachers, aides, etc.) led to an hypothesis that anything which detracted the focus of the teacher from the student might be detrimental to achievement.

A joint study by the School District of Philadelphia and the Federal Reserve Bank concluded: The fewer aides per week, the better the pupils achieved. (Kean, Summer, Raivetz, and Farber, 1979.)

A study of reading at the secondary level conducted by SRI/Stanford University, a study conducted by the Pennsylvania Department of Education, and a smaller study conducted by the Lansing Public Schools all reported negative achievement results related to aides in the spring of 1979.

REFERENCES:


Compensatory educators have noted, and accurately so, that their programs are held to stricter standards while the regular, foundation program has escaped such close evaluation. Hindsight shows that this was a blessing disguised as a burden. So much of what we now know about effective instruction came from evaluations of and research related to programs for low achievers.

Pull-out programs, service by multiple programs, and turning over instruction to volunteers or paraprofessionals are just three of the common practices of the seventies that have been shown by evaluations to be potentially detrimental to students. More thoughtful evaluations have now begun to recognize that these approaches were unsuccessful because of the processes we used to implement them. They may indeed help if conditions are right.

Pull-out programs may help the very low achiever if there is close coordination between the regular teacher and the resource teacher. Paraprofessionals may contribute to learning if instead of replacing the teacher as the instructor, the aide works to increase the amount of time the teacher directly instructs students. We have managed to pull away from the add-on approach where compensatory education adds people and activities to the regular school day and to move toward programs which are more successful because they:

- provide educational experiences where none or few existed, or
- qualitatively change the process of instruction within the classroom.

Early childhood classes and programs that provide parents lessons to be taught at home are examples of successful programs that provide educational experiences where none or few existed. Schoolwide projects that reduce the pupil/teacher ratio dramatically and eliminate pull-out instruction represent approaches which qualitatively change the process of instruction within the classroom.

Evaluation is education's way of sorting out the programs or components of programs which work for students from those which do not. Then the common factors of the successful programs can suggest ways for us to move with compensatory education.

Can Evaluation Actually Increase Planning and Instructional Time for Teachers, or Is Time Only Drained from These Activities for Record Keeping, Surveys, and Testing?

Evaluation can be a positive factor in enhancing planning and instructional time in several ways. Whether the quantity of planning and instructional time can be increased remains unclear; however, the quality of that time can be influenced by an effective evaluation component.

- Studies of time-use and teacher-management styles have contributed to better planning of the school day and management of instructional
and noninstructional time to maximize academic learning time for students. (Teachers can do what they do more efficiently and more effectively within the school day.)

- Teachers' concerns and ideas have been identified and acted upon to improve supervision, coordination of programs, staff development, and other areas which contribute to effective time use.

- Objectives which are evaluated serve to focus teachers' efforts and to minimize activities unrelated to a program's goals.

- Clerical tasks can be streamlined and computerized by today's sophisticated evaluations to minimize the writing and coding teachers must do to document their efforts. This encompasses not just record keeping but also student diagnosis and classroom-achievement summaries useful for grouping and targeting instructional needs.

How Much Does Evaluation Cost?

Evaluation occurs even in the absence of a separate evaluation component. Program staff keep records, teachers assess their students, everyone gathers information on how the program is being implemented and how the students are learning, etc. One real advantage of a separate evaluation staff is that the program staff and teachers have more time to do what they are paid primarily to do while a person with training and expertise conducts the evaluation activities.

Thus, evaluation costs either way—indirectly or directly. Our experience with compensatory programs is that separating the costs, and adding more direct resources, has been well worth the investment.

There is a minimum level of funding below which an evaluation component cannot be effective. Small programs being operated as pilots require a high percentage of their budgets for expensive process-evaluation activities. As a general guideline, the table below reflects the minimum levels of evaluation funding for programs of varying sizes.

<table>
<thead>
<tr>
<th>Program Cost</th>
<th>Approximate Evaluation Cost</th>
<th>Approximate Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 20,000</td>
<td>$ 2,000</td>
<td>10%</td>
</tr>
<tr>
<td>$ 50,000</td>
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<td>$ 100,000</td>
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<tr>
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<tr>
<td>$1,000,000</td>
<td>$ 75,000</td>
<td>7.5%</td>
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<td>Over $1,000,000</td>
<td>$ 75,000 min.</td>
<td>4% to 7.5%</td>
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Projects incorporating strong research aspects may require greater funding levels for research activities.
A SUPERINTENDENT'S VIEW: EVALUATION AND COMPENSATORY EDUCATION PROGRAMS

Evaluation has been an important condition in receiving federal funds. Various programs had evaluation requirements whether the local school officials wanted them or not. While the worth of the thousands of evaluations that occurred will probably never be known, the process of requiring evaluations led to a careful consideration of the role and merit of evaluation. In some districts there were no evaluation departments; however, with the advent of federal money, departments were created or expanded. In the 1970s many were almost entirely federally funded, but today this has been substantially reduced. Many departments are continuing under local funding because of the increased interest in evaluation of local programs stimulated initially by federal funds.

REFERENCE

THE COMPENSATORY EDUCATORS' VIEW: EVALUATION
AND COMPENSATORY EDUCATION PROGRAMS

...given the collective experiences of the members of the Association
for Compensatory Educators of Texas (ACET), we recommend that along with
the system for funds delivery we are suggesting, a school district be re-
quired: (1) to periodically evaluate the programs it chooses to imple-
ment, (2) report its findings to the state and, (3) be able to outline
plans to improve in the areas where the programs have not met stated ob-
jectives. The Regional Service Centers could be of great assistance in
evaluative efforts as well as possible means of improvement. This tech-
nical assistance role for the State Education Agency and the ESC's would
be very helpful to most school districts and be in line with the recom-
mendations that Goodlad outlined to you recently.

School districts need fiscal flexibility in order to plan and implement
programs that will meet the needs of the student populations unique to
each campus. At the same time the districts should be held accountable
to the state and the legislature by means of periodic planning, evaluat-
ing and revising.

Without evaluation results -- required in previous years of federally-
funded projects -- it would not have been possible to ascertain the
positive effects of Chapter 1 (Title I) programs over the last several
years. The recent changes at the federal level in the Elementary and
Secondary Education Act have reduced evaluation requirements. It is the
recommendation of A.C.E.T. that school districts in Texas continue to
carefully evaluate their Chapter 1 programs, utilizing one of the stan-
dardized models formerly provided by the Federal government. Without
solid evidence of positive evaluation results, we cannot justify continu-
ing Chapter 1 programs. Moreover, evaluation findings from our programs
provide valuable information needed for refinement and improvement of our
Chapter 1 efforts.

REFERENCE

Lee, Laws. Report to select committee on education. Austin, Texas,
November 30, 1983.
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