ABSTRACT
        The material contained in this publication abstracts
the major reports prepared by the Department of Research and
Evaluation during the 1972-73 school year. The major purposes of the
Research and Evaluation Department of the Dallas Independent School
District are to provide useful information to decision-makers and to
serve as an accountability agent. The process requires cooperative
action by decision-makers (i.e., curriculum developers, teachers, and
administrators) and evaluators. The evaluator has four broad
obligations in the evaluation process: to focus on evaluative
information to be provided; to collect, organize, and analyze this
information; to administer evaluative activities; and to provide
relevant evaluative feedback to decision-makers at all levels. To
provide these evaluation processes, the District's Department of
Research and Evaluation is organized into three branches. The first,
System-Wide Testing, is responsible for the design and implementation
of the District's system-wide norm-referenced and
criterion-referenced testing programs. The second, System-Wide
Evaluation, performs the longitudinal and cross-sectional research
and evaluation necessary to supply major District decision-makers
with information about the overall functioning of the District's
programs. The third, Developmental Project Evaluation, evaluates
specific developmental projects to ascertain the effectsof those
projects on developing specific student abilities in areas that
generally need additional mediation to that which is provided by the
District's general academic program. (Author/JM)

DALLAS INDEPENDENT SCHOOL DISTRICT
DR. NOLAN ESTES, GENERAL SUPERINTENDENT

DEVELOPMENT DIVISION
MR. ROGERS L. BARTON
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DEPARTMENT OF RESEARCH AND
EVALUATION
DR. WILLIAM J. WEBSTER
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ABSTRACTS OF RESEARCH AND
EVALUATION REPORTS, 1972-73

All reports abstracted in this document were
completed by the District's Research and
Evaluation Department during the 1972-73
school year and were presented through the
Evaluation Committee to the Board of
Education.

Approved report of the Department of Research
and Evaluation.

William J. Webster

William J. Webster
Deputy Assistant Superintendent
Research and Evaluation

August, 1973
Dallas, Texas

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OVERVIEW OF THE DEPARTMENT OF
RESEARCH AND EVALUATION

The major purposes of the Research and Evaluation Department
of the Dallas Independent School District are to provide useful
information to decision-makers and to serve as an accountability
agent. The process requires cooperative action by decision-makers
(i.e., curriculum developers, teachers, and administrators) and
evaluators. The decision-maker's role is to weigh the evidence
provided him by the evaluator and render judgment about what course
of action to take in the situation confronting him. Because the
decision-maker generally does not have the time or technical skill
necessary to gather and analyze the objective data necessary to
make informed decisions, the evaluator provides him with the infor-
mation concerning the reason action must be taken and alternative
strategies that are open. Thus, it is essential that the evaluator
know enough about the decision-making process and the information
used by the educator in reaching a given decision to identify the
scientifically sound and useful information needed to reach an ob-
jective decision. Through the aforementioned process, the educator
becomes accountable for his decisions.

In implementing data collection and analysis activities, the
evaluator shares an obligation with the educator; he must provide
information which is valid and objective. Objectivity requires that
the evaluator must be free to identify and investigate the view-
points of a given decision-maker's clients, constituents, and other
interested parties. The evaluator has four broad obligations in the
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The material contained in this publication abstracts the major
reports prepared by the Department of Research and Evaluation during

the 1972-73 school year. All of the listed reports have been studied and responded to by the Evaluation Committee of the Board of Education. If the reader is interested in obtaining a particular report in its entirety, he should refer to page 5 of this book for information concerning ordering of reports.

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> Technical Editor
> Department of Research and Evaluation
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William T. Denton, Ph.D.
Director -
Developmental Project Evaluation

TITLE I TARGETED ACHIEVEMENT
IN READING PROGRAM

Objectives of the Program: The primary objective of the Targeted
Achievement in Reading Program is to aid educationally disadvantaged
students to achieve at least one month's growth in reading for one
month of instruction, using one of four reading systems.   The four
reading systems are: Hoffman Information System Reading Program
(Hoffman), Behavioral Research Laboratories/Sullivan Reading Program
(BRL/Sullivan), Southwest Regional Laboratory Reading Program (SWRL),
and Listen, Look, and Learn Reading Program (LLL).

Purpose of the Evaluation: The evaluation of the Targeted Achieve-
ment in Reading Program was designed to determine which program or
combination of programs best aids the educationally disadvantaged
student to achieve at least one month's growth in reading for one
month of instruction.

Sample: Thirty-eight Title I elementary schools were included in the
study.   The Listen, Look, Learn Reading Program was taught in the
following five schools: Navarro, Carver, Tyler, Earhart, and Washington.
The Hoffman Information System Reading Program was taught in the follow-
ing seventeen schools: Austin, Harris, Colonial, Ray, Harllee, City
Park, Frazier, Hassell, Thompson, Carr, Roberts, Brown, Rice, Lisbon,
Wheatley, Lanier, and Pease.   The Southwest Regional Laboratory Reading
Program was taught, in the first two grades, in the following six
schools: Dunbar, Allen, Bushman, Johnston, Crockett, and Kleberg.
The Behavioral Research Laboratories/Sullivan Reading Program was
taught in the following ten schools: Travis, Douglass, Rhoads, Darrell,
Bryan, Bowie, Young, Fannin, Jackson, and Arlington Park.   Students
from Budd and Arcadia Park were selected to be in the comparison group.

Evaluation Design:

Stratification → Assignment (Schools) OX_1O
                                            OX_2O
                                            OX_3O
                                            OX_4O
                                            OCO

The four TARP reading systems were assigned to schools in accordance
with Title I guidelines. X_1 represents the Hoffman reading program,
X_2 represents the BRL reading program, X_3 represents the SWRL reading
program, X_4 represents the LLL reading program, and C represents the
comparison group.   Variables observed at each point of observation (O)
were the pretest and posttest standardized reading achievement tests.

The major evaluation questions of interest were:

1. Which of the four reading systems shows the largest gain in reading achievement for first-grade students; for second-grade students; for third-grade students; and for fourth-grade students?

2. Do students in the TARP Reading Program show gains in reading achievement comparable to those of the comparison group?

3. Has the TARP project been successful in meeting its objective of one month's growth in reading for one month of instruction?

Evaluation Results:

1. The achievement results for the first grade show that students in the BRL reading program scored higher on the reading and language totals of the CAT than students in the other three reading programs. Slight differences were found between Hoffman, SWRL, and LLL students in the first grade. At the second-grade level, the results of the standardized achievement tests show SWRL students made the largest achievement gains. The next-largest gains were made by BRL students, then Hoffman students, then LLL students. At the third-grade level, BRL students again showed slightly higher scores on both the reading and language totals. Hoffman students showed the next-largest gains. At the fourth-grade level, there appears to be little difference between the three reading programs on reading total; however, on the language total, BRL students performed at a higher level than students in the other programs.

2. In general, TARP students showed grade-equivalent gains for grades two, three, and four comparable to those of the non-Title I comparison schools on both the reading and language totals of standardized achievement tests. Due to the nature of the tests given in the first grade, it was not possible to calculate grade-equivalent gains.

3. The average gain made by students in the TARP reading programs at the second-grade level was a full year's growth in reading achievement. The average grade-equivalent gain for third-grade students on the reading total of the CTBS was approximately .9. The average grade-equivalent gain for students in the fourth-grade was approximately .8 for the reading total and approximately .9 for the language total.

Recommendations of the Evaluator:

1. The successful results of the TARP project clearly point out the need for continuation of at least three of the four reading programs. The programs that this evaluation strongly recommends being continued are: the Hoffman Information Systems Reading Program, Behavioral Research Laboratories/Sullivan Reading Program, and Southwest Regional Laboratory Reading Program.

2. The effect of continuation of only three of the four reading programs would necessitate implementation of at least one of these reading programs in five TARP schools where LLL is currently being taught. It is suggested that SWRL/BRL be implemented in three of these schools and that BRL be implemented in two of these schools. It is strongly recommended that these programs be randomly assigned to these five elementary schools.

3. Due to the consistently successful nature of the SWRL reading program, in grades one and two, it is recommended that the SWRL reading program be extended to the third grade in the six TARP schools in which SWRL is currently taught.

4. The results of two years of evaluation of the TARP project show that it has helped in aiding students to make substantial gains in reading achievement. Therefore, it is recommended that the Program be expanded to other elementary schools where students exhibit reading deficiencies.

5. During the 1973-74 school year, the TARP project should be expanded to include fifth-grade students in all the elementary schools in which TARP is currently being implemented.

6. In an effort to ensure continued student success in reading, it is recommended that students remain in the TARP project until they meet the criteria of reading at or above grade level for two consecutive years. Currently, students are ineligible for additional reading instruction once they have shown that they are reading at grade level. This decision is currently made on the basis of only one test score. Students in the TARP project exhibit reading difficulties which will bear directly on their future learning styles. It is therefore imperative that we as educators be as certain as possible that the student does not require further supplemental reading instruction before declaring him/her ineligible for TARP instruction.

Additional recommendations for the TARP project are included in the Educational Testing Service Auditor's Report.

Additional Information:

72-114   Evaluation Design for the Targeted Achievement in Reading
          Program, 1972-73, Robert J. Costello, 79 pp.

73-185   Evaluation of the Targeted Achievement in Reading Program:
          1972-73, Robert J. Costello, 56 pp.

TITLE I TARGETED ACHIEVEMENT IN READING PROGRAM:
CRITERION-REFERENCED ANALYSIS

Objectives of the Program: The Dallas Independent School District's
(DISD) criterion-referenced reading tests were administered to a sample
of students in the Targeted Achievement in Reading Program (TARP).
These tests were designed to measure the extent to which students could
perform tasks related to reading objectives specific to each grade
level. The objectives from which these tests were designed were
cooperatively developed by the Department of Research and Evaluation
and District reading consultants and teachers.

The rationale for such testing was to provide information about how well
a sample of students in each of the four reading programs had mastered
the appropriate grade-level objectives.

Purpose of the Evaluation: The use of the DISD criterion-referenced
tests was to provide additional indices of the relative success of the
four reading programs which are included in the TARP program.

Sample: Two classrooms from a stratified random sample of schools were
selected for testing. The schools were stratified to include at least
one school for each of the four reading programs included in the TARP
program. For a complete listing of the sample, refer to the following
table.

School	Classes	Index of Deprivation	Reading Program
Earhart	4	81.01	LLL
Roberts	4	67.84	Hoffman
Pease	4	38.04	Hoffman
Johnston	8	42.02	SWRL/BRL
Fannin	4	42.53	BRL

Evaluation Design:

First Grade

$$X_1 0$$
$$X_2 0$$
$$X_3 0$$
$$X_4 0$$

Second Grade   Same as First

Third Grade $X_1 0$
$X_2 0$
$X_3 0$

Fourth Grade   Same as Third

X_1 represents students in the Hoffman reading program, X_2 represents students in the BRL/Sullivan reading program, X_3 represents students in the Listen, Look, Learn (LLL) reading program, and X_4 represents students in the Southwest Regional Laboratory (SWRL) reading program. The variable defining the observation point (0) is the posttest criterion-referenced test.

1. Do certain TARP reading programs show higher levels of performance than other TARP reading programs on criterion-referenced test measures?

Evaluation Resul.s: The four reading programs were not randomly assigned to schools according to degree of deprivation. The reader should interpret these results after reading the text.

1. At grade one, on a total of 20 objectives, at least 50% of the students tested answered at least 75% of the questions correctly on six objectives for the Hoffman program, ten objectives for BRL, nine objectives for SWRL, and seven objectives for LLL.

2. At grade two, on a total of 18 objectives, at least 50% of the students tested answered at least 75% of the questions correctly on eight objectives for Hoffman, 14 objectives for BRL, nine objectives for SWRL, and five objectives for LLL.

3. At grade three, on a total of 16 objectives, at least 50% of the students tested answered at least 75% of the questions correctly on two objectives for Hoffman, six objectives for BRL, and four objectives for LLL.

4. At grade four, very few students mastered grade-four objectives.

Recommendations of Evaluator: This report was not designed to include a comprehensive evaluation of the TARP project (see Research Report No. 73-185) and, as such, no recommendations about particular reading programs will be included. However, it is appropriate to include a recommendation about the future use of criterion-referenced test data in the TARP project.

1. Criterion-referenced tests should be administered both as a pretest and posttest of a 10% sample oف the TARP population for evaluation purposes during the 1973-74 school year.

Additional Information:

71-27   Evaluation Design for Targeted Achievement in Reading Program, 1971, Robert J. Costello, 61 pp.

72-68   Evaluation of the Targeted Achievement in Reading Program, 1972, Robert J. Costello, 115 pp.

72-114   Evaluation Design for Targeted Achievement in Reading Program: 1972-73, Robert J. Costello, 76 pp.

73-185   Evaluation of the Targeted Achievement in Reading Program: 1972-73, Robert J. Costello, 56 pp.

73-186   Targeted Achievement in Reading Program: Criterion-Referenced Tests, 1972-73, Robert J. Costello, 36 pp.

TITLE I READING CLINICS

Objectives of the Program: The purpose of the Reading Clinics Program
(RCP) was to offer clincial reading services for diagnosing and teaching
Title I children with reading disabilities and to foster a more positive
attitude within the children toward the reading process.

Purpose of the Evaluation: The evaluation of the Reading Clinics Program
was designed to determine if the Program was successful in producing
reading gains not only within the Program, itself, but relative to an
appropriate control group, and to determine the effectiveness of concomi-
tant variables as predictors of pupil achievement for use as diagnostic
and prescriptive purposes.

Sample: Two hundred and sixteen pupils, on which total data were
available, from C. F. Carr, G. W. Carver, S. Lanier, J. Madison, and
B. T. Washington Reading Clinics were used in the analyses. There were
150 RCP fifth-grade, 15 fifth-grade waiting-list, and 59 RCP sixth-
grade and seventh-grade pupils.

Evaluation Design: The design used for the evaluation of the RCP
consisted of a pretest-posttest design, schematically represented as:

$$0_1 \ 0_2 \ X_1 \ 0_3 \ 0_4$$
$$0_1 \ 0_2 \ \ \ \ 0_3 \ 0_3$$

where the variables at each point of observation (0) consisted of the
Gates-MacGinitie Reading Test (GMRT) and Comprehensive Tests of Basic
Skills (CTBS) pretest (0_1, 0_2) and posttest (0_3, 0_4) subtests; X_1
represents the RCP treatment. The vocabulary and comprehension subtests
of the GMRT and the vocabulary and language subtests of the CTBS served
as the criterion variables in a regression analysis (linear) where the
variables of pretest, age, sex, IQ, pupil ethnicity, teacher ethnicity,
number-of-sessions-attended, A-Trait measure, and a deprivation index
for the school attended served as independent predictor variables. The
major evaluation questions of interest were:

1. Were there achievement gains within the grade levels
    served by the RCP on objective tests such as the GMRT
    and CTBS; were there achievement gains relative to an
    appropriate control?

2. Were the concomitant variables significant predictors
    in pupil achievement, accounting for variances useful
    for diagnostic and prescriptive purposes?

Evaluation Results: The results were discussed by test.

1. The analysis of the GMRT data for 1972-73 indicated general
    ineffectiveness of the RCP when longitudinal performance
    considerations of the GMRT data from 1969-1973 were viewed.
    The 1972-73 evaluation indicated that, although significant
    gains were made within the fifth, sixth, and seventh
    grades, the magnitude of the gains was not larger than would
    have been expected without treatment. Moreover, when
    achievement was considered relative to an appropriate
    control, there was no difference on either the vocabulary
    or comprehension subtests. This finding occurred when
    the fifth-grade RCP pupils were compared to pupils who
    remained on the fifth-grade RCP waiting list. Project
    administrative error permitted pupils on the RCP waiting
    list for sixth and seventh grades to be admitted to the
    RCP. Consequently, appropriate control groups were not
    available for comparison. However, a longitudinal con-
    sideration of data (1969-72) indicated that, across
    grades four, five, and six and across both the vocabulary
    and comprehension subtests of the GMRT, there was a
    decrease in grade-equivalent gain from year to year.

2. The analysis of the CTBS data indicated consistent
    ineffectiveness of the RCP for the 1972-73 data as well
    as the longitudinal (1971-72) data. Specifically, the
    results indicated that there were no significant gains on
    any subtests within any of the grade levels. However,
    there was a significant achievement decline for the
    vocabulary subtest within fifth grade. Moreover, for the
    fifth grade, there was no significant difference between
    RCP participants and children on the RCP fifth-grade
    waiting list, indicating a failure of the RCP Program.
    The longitudinal data (1971-72) also indicated that there
    previously were no achievement gains on the CTBS for RCP
    participants.

3. The 1971-72 evaluation indicated that the concomitant
    variables of sex, ethnicity, IQ, and self-image were
    significant predictors of pupil achievement. The current
    evaluation demonstrated that student ethnicity, teacher
    ethnicity, IQ, number-of-sessions attended, pretest,
    deprivation index, and basic vocabulary index were
    significant predictors.

Recommendations of Evaluator:

1. Based upon longitudinal (1971-72) and current data
    (1972-73), it is recommended that the Title I Reading
    Clinics Program, in its current form, be discontinued.

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2. An alternative to discontinuance of the Title I RCP would
    be to orient the Program directly toward the needs of the
    disadvantaged reader with individually designed treatments.
    A possible scheme for this approach would consist of in-
    puts from a team of DISD professionals. The team would
    consist of the reading specialist, a clinical psychologist,
    and an educational psychologist evaluator. The function of
    the clinical psychologist would be diagnostic and treatment
    prescription; the function of the educational psychologist
    (evaluator) would be treatment prescription and evaluation;
    the function of the reading specialist would be reading
    diagnosis and treatment administration.

3. The basic vocabulary index concomitant variable demonstrated
    diagnostic capability. In addition, since it accounted for
    a large part of the variance for pupil comprehension, in-
    creasing the pupils' vocabulary may be a good starting place
    in treatment.

Additional Information:

72-107   Evaluation Design for the Title I Reading Clinics, 1972-73,
         James P. Papay, 22 pp.

73-147   Evaluation Report: Title I Reading Clinics, 1972-73, James
         P. Papay, 64 pp.

ESEA TITLE I MULTIAGE PROGRAM

Objectives of the Program: The Multiage Classes Program (MAP) had as
its primary goal the education of five-, six-, and seven-year-old children
(kindergarten through two) through a philosophy of nongraded, Multiage classes
and an individualized, custom-tailored curriculum based upon performance
objectives, self-pacing, and work-agreement schedules.

The global goals of the MAP included the desire to: (a) help the child
develop a more positive self-concept by offering educational experiences
to him within a framework of success; (b) help each child develop the
skill of making choices which will, in turn, lead him to accept responsi-
bility for his own learning; (c) subject the child to less academic
learning experiences; (d) help each child develop pride in the successful
completion of his learning tasks; (e) help the child move naturally from
the concrete to the abstract task through a designed curriculum; (f)
demonstrate that the success of the Program resides with the teacher.

Purpose of the Evaluation: The evaluation of the MAP was designed to
determine the effectiveness of the MAP with a Title I population compared
to a traditional program that included the Targeted Achievement in
Reading Program (TARP); to determine the effectiveness of selected MAP
curriculum; to determine the effects of anxiety on pupil achievement; and
to scrutinize the effects of teacher parameters, such as ethnicity,
experience, and certification, on pupil performance. It should be remem-
bered that the control groups received TARP reading instruction and tra-
ditional instruction in other academic areas.

Sample: The criterion-referenced component of the 1972-73 evaluation
employed 557 pupils, on which complete data were available, from four
schools selected from intervals along the full spectrum of deprivation
indices for Title I schools. The schools used in the analyses consisted
of G. W. Carver, P. Tyler, J. Rhoads, and J. Bryan. All testing for the
criterion-referenced evaluation was performed independently of Research
and Evaluation (except for supervision) by ten substitute teachers trained
specifically for the task by Research and Evaluation personnel. The teachers
were selected from the approved DISD substitute teachers' list, generally
on the basis of previous testing experience, early childhood experience,
or clinic-type experience.

For the evaluation of the objective data using the Boehm Test of Basic
Concepts (BTBC), the California Achievement Tests (CAT), and the Metro-
politan Readiness Tests (MRT), approximately a 34% random sample of MAP
pupils was used for analyses purposes. The only stipulations placed on
the random sample was that pupils had to have complete data and not have
also participated in the Bilingual-Multicultural Education Program (BMEP).
Two hundred and six TARP program pupils were drawn from among the follow-
ing schools: G. W. Carver, P. Tyler, N. W. Harllee, C. F. Carr, O. M.
Roberts, C. Rice, J. Rhoads, J. H. Brown, J. N. Bryan, and E. M. Pease.
Consequently, the MAP and TARP program children had similar deprivation

indices. It should be noted that the TARP program consisted of various reading programs.

Evaluation Design: The evaluation design used for the criterion-referenced evaluation consisted of the following counterbalanced paradigm:

$$O_1 \ O_2 \ T_1 \ T_2 \ T_3 \ O_3 \ T_4 \ T_5 \ T_6 \ O_4$$

$$O_1 \ O_2 \ T_4 \ T_5 \ T_6 \ O_3 \ T_1 \ T_2 \ T_3 \ O_4$$

The observations (O_1, O_2) consisted of the pretask A-Trait and A-State (anxiety) measure; the tests (T_1, T_2, T_3) consisted of the concrete, semi-concrete, and abstract subtests for the communications module; O_3 consisted of the Task 1 A-State measure; tests (T_4, T_5, T_6) consisted of the concrete, semi-concrete, and abstract subtests from the mathematics module; and O_4 consisted of the Task 2 A-State measure. Counterbalancing the order for tests was undertaken to eliminate any practice effects across modules.

Various repeated measures analysis of variance designs were used to assess the effects of anxiety on pupil achievement. These designs were configured dependent upon the particular hypotheses tested.

The design used for the evaluation of the objective data consisted of a pretest-posttest design which may be schematically represented as:

$$O_1 \ X_1 \ O_2$$

$$O_1 \ X_2 \ O_2$$

The observations (O_1, O_2) consisted of the pretest and posttest data, respectively; X_1 consisted of the MAP treatment, and X_2 consisted of the TARP program treatment.

The regression analysis approach was employed for the BTBC component of this analysis. Within the regression analysis framework, the posttest BTBC served as the criterion variable, and, in order to reduce error variance, age and the pretest BTBC served as covariates. Predictor variables such as program type, pupil ethnicity, teacher ethnicity, teacher experience, teacher certification, and attendance were used to categorize the data to test hypotheses on their effectiveness in accounting for pupil achievement. The major evaluation questions of interest were:

1. Were the sampled curriculum modules from the MAP curriculum effective, and were MAP children superior to TARP program children on these materials as expected?

2. Were low A-Trait and A-State pupils able to demonstrate greater performance than high A-Trait and A-State pupils on the criterion-referenced materials as predicted by State-Trait Anxiety theory?

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3. Were there achievement diffe·ences between MAP and TARP children on the objective BTBC?

4. Were teacher variables such as ethnicity, experience, and certification important factors for pupil achievement within MAP?

5. Were there differences between children taught by the MAP and TARP programs on the MRT and CRT objective tests?

6. Was attendance a significant factor in pupil achievement?

7. Were kindergarten through one Multiage classes equivalent to single-age-grade kindergarten and one classes for learning, and were there sex differences within these classifications?

8. Was the Program implemented as specified?

Evaluation Results:

1. The criterion-referenced evaluation indicated that TARP program children performed higher than MAP children on four of the six subtests on MAP curriculum; the difference was significant only for the abstract concepts' subtest of the communications module. Children in the TARP program were not previously exposed to the criterion-referenced materials while MAP children saw the materials in their classrooms as part of the MAP activities, were tested with the materials, brought to criterion, and retested. Typically, the use of criterion-referenced materials has been shown to reduce pupil variance. The current evaluation found that TARP children obtained lower test variances than MAP children using the criterion-referenced, multiage curriculum.

2. The results of the analysis of the standardized tests, Metropolitan Readiness Tests (MRT), and the California Achievement Tests (CAT) data indicated either higher scores for TARP pupils or findings of no difference when the MAP was compared with the TARP program.

3. The results indicated that the TARP kindergarten program children scored higher than the Multiage kindergarten children on the MRT although the Multiage kindergarten children showed initially superior pretest MRT scores (TARP kindergarten children were those in a traditional kindergarten who would probably enter a TARP class in the first grade).

4. When student ethnicity and teacher ethnicity were considered across programs, the standardized test data from the BTBC indicated that the TARP program children outperformed MAP children on the following classifications:

1) Anglo students taught by Anglo teachers,
2) Negro students taught by Anglo teachers,
3) Mexican-American students taught by Anglo teachers, and
4) Mexican-American taught by Negro teachers.

5. Student achievement was not necessarily facilitated by matching the student's ethnicity to the teacher. For Anglo and Mexican-American students, teacher ethnicity had no significant difference.

6. Teacher certification was demonstrated not to be a significant factor for pupil achievement.

7. Teacher experience within MAP (no years vs. one + years) was shown to affect pupil achievement significantly.

8. Useable data were available only on two categories of aides and class sizes: one aide for class size less than or equal to 30; or, one aide for class size less than or equal to 60 but greater than 30. Both these classification categories of aides and class sizes resulted in significant pupil achievement.

9. Evaluation of adjunct data from the Bilingual Multicultural Education Program (BMEP) by Murray (see Report No. 73-142) indicated that there were no differences on criterion-referenced BMEP posttest data for Bilingual program children compared with children from the Multiage BMEP classes. However, Murray indicated that, although the MAP children started out on the pretest with superior scores, the superior advantage vanished over the year when compared with self-contained Bilingual program. This result corroborated a previously reported similar finding which was observed when the MAP kindergarten children were compared with the TARP kindergarten children on the MRT standardized test.

10. Murray (1973) also reported no sex differences for his data when comparing single-age and Multiage classes.

11. Process evaluation data indicated that the MAP was rated as individualized by the teachers. The MAP appeared to be implemented along the guidelines specified.

12. The evaluation demonstrated that low A-Trait and low A-State (anxiety) children consistently out-performed the high A-State and A-Trait children. The educational implications of this finding revolved around (1) grouping strategies of Multiage children for optimal educational effect, (2) allocation of resource strategies (e.g., teacher aides), (3) selection of individual learning strategies, and (4) curriculum development strategies.

Recommendations of Evaluator: Before considering recommendations, it was also important to consider the overall results from the 1971-72

evaluation. The objective data from the Metropolitan Readiness Tests, the California Achievement Tests, the Boehm Test of Basic Concepts, and a Self-Image Test all indicated, overall, either smaller gains when the MAP was compared with a TARP program or no differences. Recommendations were made from these data not to extend the Program until curriculum revision was undertaken on a systematic basis. The results of the current evaluation suggested that systematic revision, and especially the assessment of the entry levels of the MAP materials,did not produce the intended effects. In a program such as MAP, which relies so heavily upon curriculum, the potential merit of an individualized, self-paced, multiage-grouping philosophy had to be evaluated largely in terms of curriculum effectiveness, especially in terms of producing transferable skills and knowledges. The implications of this situation were that a curriculum was evaluated, not a process, since the curriculum and the process could not be separated.

The following recommendations were made toward improvement of the MAP:

1. The Multiage curriculum strongly appears to be in need of systematic revision.

2. Given the DISD desire for extending the Multiage classes concept, it is suggested that a variety of curriculum treatments be employed within the Multiage classes framework. Such curricula might include expanded use of the Houghton-Mifflin or Economy Basal Reading Series, successful TARP curricula, or other available systems focusing not only on reading but on other academic areas.

3. Since teacher variables such as teacher certification, ethnicity, and experience had little programmatic impact on pupil achievement, added emphasis again was suggested toward multiage grouping and individualized instruction should be implemented.

4. Within the context of multiage grouping, perhaps grouping by ability and/or on anxiety level in addition to age would have meaningful implications and should, perhaps, be tried out in selected classrooms.

5. Additional aides would be useful, especially in teaching classrooms with predominantly high-anxious children, as suggested by the results. Moreover, other possibilities such as a more structured learning environment, provision of memory support materials, more feedback, and more individual attention may be warranted for instruction of high-anxious children.

6. Since the comparison schools consisted of TARP schools, this report provides additional support for the effectiveness of the TARP reading progrsms. In a Title I setting, the Hoffman Information Systems Reading Program, Behavioral Research Laboratories/Sullivan Reading Program, and the Southwest Regional Laboratory Reading Program should be tried in a multiage environment.

7. Since this evaluation attempted to measure the MAP and
    TARP curricula only with economically and educationally
    deprived pupils, it is recommended that the 1973-74
    evaluation determine the effects of MAP, TARP, and other
    appropriate curriculum materials with populations other
    than the economically and educationally deprived.

Additional Information:

73-158   Multiage Classes Program, 1973, James P. Papay, 68 pp.

72-98   Evaluation Design for the Multiage Classes Program:
            1972-73, James P. Papay, 24 pp.

Objectives of the Program: The Bilingual-Multicultural Education
Program (BMEP) consists of four components: Instructional, Materials
Acquisition, Staff Development, and Community Participation.

The major objectives of the Instructional component are to allow the
children to acquire basic concepts in the language they understand best,
to instill in the children a sense of personal pride and integrity with
respect to their cultural heritage, and to provide all children in the
Program with an opportunity to become bilingual. The major function of
the Materials Acquisition component is to support other components by
procuring, adapting, and developing materials for the Bilingual class-
room. The objective of the Staff Development component is to develop a
cadre of highly trained personnel in Bilingual Education. The objectives
of the Community Participation component are to enhance parental
participation in Program development, teaching and learning, and Program
monitoring. The Community Participation component also strives to in-
crease community understanding of the goals and accomplishments of the
Program.

Purpose of the Evaluation: The evaluation of the Bilingual-Multi-
cultural Education Program was designed to determine the extent to which
the Program objectives were met and to provide Program administrators
with information which could be used for the improvement of the
effectiveness of the Program.

Sample: Thirteen elementary schools and one high school were included
in the study. The Bilingual-Multicultural Education Program was imple-
mented at Allen, Douglass, Houston, Juarez, Lanier, Maple Lawn, Milam,
Travis, St. Anne, St. Mary of Carmel, and Holy Trinity Elementary Schools
and at North Dallas High School. Allen, Bonham, and Knight Elementary
Schools served as comparison schools for the evaluation. Throughout the
year, data were collected from BMEP children, parents, and teachers.

Evaluation Design: The figures below schematically represented the
evaluation designs used in the BMEP. Randomization of students or teachers
to the BMEP was not used. Teachers were selected by language ability
and/or a strong commitment to the philosophy of bilingual education. In
general, all students attending a school selected for bilingual education
were included in the Program. In four of the eight public BMEP elementary
schools, several classrooms were not included in the Program to
accommodate children whose parents did not desire this type of education
for their child or for children transferring from nonbilingual schools.

1. 0_1 X 0_2
    0_1 0_2

This design was used in the evaluation of the Instruction-al and Staff Development component. X represented the implementation of the BMEP while O_1 and O_2 represented, respectively, pretest and posttest observations on both cognitive and affective instruments for both students and teachers.

2. X O

This design was used in the evaluation of the Materials Acquisition component. O represented the teachers' responses to evaluative questions concerning the BMEP-produced curriculum after implementing the curriculum (X) in the classroom.

3. O_1 X O_2

This design was used in the evaluation of the Community Participation component. O_1 and O_2 represented, respectively, observations on the Parental Involvement Questionnaire before and after the implementation of the BMEP (X).

The major evaluation questions of interest:

1. Were the standardized test performances of BMEP and comparison-group-children from different ethnic and language groups equivalent?

2. Were the Curriculum-Referenced Test (CRT) performances of BMEP and comparison-group children of different ethnic groups equivalent?

3. What were the second-language achievement gains of BMEP students?

4. What were the BMEP teachers' self-reported usage rates and quality ratings of the BMEP-produced curriculum materials?

5. To what extent were BMEP teachers successful in completing the requirements of the Master of Liberal Arts program in Bilingual Education at Southern Methodist University?

6. What was the extent of success of the BMEP with respect to educating parents about the Program schools and community?

Evaluation Results:

1. Anglo children in the comparison schools scored higher on the standardized tests than children in the BMEP. This difference was attributed to the higher socio-economic level of the comparison-group children and not to a weakness in the BMEP.

2. When administered the standardized tests of basic concepts in English, the Spanish-dominant Mexican-American BMEP first- and second-grade children tended to score lower than English-dominant BMEP and comparison-group children. However, the lack of differences between Spanish-dominant BMEP children and other BMEP and comparison-group children at the third-grade level (where Spanish-dominant BMEP children were becoming bilingual) suggested that the deficiencies observed in the first two grades were best attributed to language problems rather than to an inadequate development of basic concept skills. This contention was supported by data from the Curriculum-Referenced Test which showed that, when tested in their dominant language, BMEP children performed at least as well as children in the comparison schools.

3. No differences on the posttest CRT scores were observed for BMEP children of differenct ethnic groups in grades of kindergarten, one, and two. However, grade-three Mexican-American BMEP children outperformed Negro BMEP children on this measure. This result was not surprising, considering that the BMEP teachers felt that the curriculum was more appropriate for the Mexican-American child than it was for the Negro child.

4. Large and statistically significant pretest-to-posttest gains were made on the English-as-a-Second-Language (ESL) Test by Spanish-dominant Mexican-American students. The gains made on the Spanish-as-a-Second Language (SSL) Test by English-dominant children were also significant but were considerably smaller than the ESL gains. Consistent with the results from the 1971-72 evaluation, it is apparent that Spanish-dominant Mexican-American children are becoming bilingual much faster than English-dominant Anglo and Negro students.

5. Anonymous responses from teachers showed that the BMEP teachers did not exclusively use the BMEP-produced curriculum materials and that there were large differences in curriculum usage between subject areas. On a three-point scale, the majority of teachers rated the quality of all curriculum areas as "average". Also, a positive relationship was found to exist between the teachers' reported usage and quality ratings of the curriculum.

6. During the school year, most BMEP teachers, curriculum
    writers, and supervisors enrolled in four courses in
    the Master of Liberal Arts (MLA) in the Bilingual Edu-
    cation program, which resulted in BMEP personnel
    enrolling for 957 hours of course work. Only
    5% of their course work was not completed by June,
    1973. This was a considerably lower incompletion rate
    than is usually found in graduate school. In addition
    to the high course-completion rate, substantial pretest-
    to-posttest gains were observed for all MLA courses.

7. Similar to the results found in the 1971-72 evaluation,
    the 1972-73 evaluation showed that the BMEP was
    successful in educating the parents about the Bilingual
    Program. The success was attributed to the Merienda
    meetings, teacher-parent communications, principal-
    parent communications, and the visiting teachers'
    activities. The BMEP publication "¿Que Tal?" was
    also found to be a useful information-dissemination
    tool.

Recommendations of Evaluator:

1. It is recommended that Spanish-dominant Mexican-American
    children be tested only in Spanish. It is further
    recommended that, where Spanish tests are not available,
    the Spanish-dominant children should not be tested. It
    is felt that the possible psychological damage to the
    child caused by attempting to respond to the test items
    in an unfamiliar language outweighs the value of the
    resulting (and probably invalid) data.

2. More information concerning Negro history and culture
    should be included in the curriculum. This could be
    facilitated by either hiring additional Negro curriculum
    writers or by hiring individuals who are interested in
    researching and writing in the area of Negro history and
    culture.

3. Project administrators should reevaluate the goal of
    bilingualism for all BMEP students. Perhaps a more
    realistic goal would be bilingualism for 1) all Spanish-
    dominant Mexican-American BMEP students and 2) those
    English-dominant BMEP students who demonstrate superior
    language skills. More time could then be spent perfecting
    the English language skills of English-dominant BMEP
    children who have shown difficulty with acquiring English
    language skills.

4. The teachers' quality ratings of the BMEP-produced
    curriculum should be used by project administrators in
    the allocation of curriculum-writing talent. While no
    causal relationship was established between teachers'
    usage rates and quality ratings, there was sufficient

evidence to hypothesize that a curriculum which was uniform
with respect to quality across subject areas would lead to
uniform implementation across subject areas. It is also
recommended that the teachers' implementation of the
curriculum be more closely monitored by the resource teachers.
The resource teachers should be required to submit
curriculum implementation reports for each teacher to Program
administrators and evaluators.

5. The Master of Arts (MLA) in Bilingual Education program
    at Southern Methodist University should be continued.
    During the 1973-74 school year, teachers new to the BMEP
    will take one MLA course per semester. Teachers in the
    second year of the MLA program will take two courses per
    semester. It is recommended that one of the courses for the
    second-year MLA students be taken on Saturday morning.
    This will decrease the very heavy workload experienced by
    these teachers when both courses were offered on weekday
    afternoons.

6. Because of the vertical expansion within the BMEP from
    grades of kindergarten through three to grades of kinder-
    garten through four, it is recommended that an additional
    visiting teacher be added to the BMEP staff. Also, a
    second "El Quiosco" (the media production and social
    services referral center) should be established at Gabe
    P. Allen Elementary School so that BMEP parents in West
    Dallas can more easily participate in, and be served by,
    this component of the BMEP.

Additional Information:

73-142 Evaluation Report for the Bilingual-Multicultural Education
        Program, 1972-73, Wayne R. Murray, 97 pp.

72-82   Bilingual-Multicultural Education Program Evaluation Report,
        1971-72, Daniel J. Macy and Wayne Murray, 75 pp.

A COMPARATIVE ANALYSIS OF TITLE I
READING PROGRAMS

Objectives of the Program: The six Title I programs that are examined
in this study are:. 1) Hoffman Information System Reading Program
(Hoffman), 2) Behavioral Research Laboratories/Sullivan Reading Program
(BRL/Sullivan), 3) Southwest Regional Laboratory Reading Program (SWRL),
4) Listen, Look, and Learn Reading Program (LLL), 5) Bilingual-Multicul-
tural Education Program (Bilingual), and 6) the Multiage Classes Program
(Multiage). These six Title I programs have a variety of program objec-
tives relating to specific parts of the various curriculum. However, each
program does have a reading component and a specific objective, that in
different ways attempts to raise the reading levels of the students enroll-
ed in the six Title I programs.

Purpose of the Evaluation: The evaluation of the six Title I programs was
designed to determine and compare the effect of each program on the reading
and language achievement of the students enrolled.

Sample: A 15% sample was drawn from the population of students enrolled
in each of the six programs under investigation. The only restrictions placed
on the data being that students included in the sample must have both pretest
and posttest achievement scores.

Evaluation Design: The figures below schematically represent the evaluation
design used in this study.

$$1\text{st Grade} \quad OX_1O$$
$$OX_2O$$
$$OX_3O$$
$$OX_4O$$
$$OX_5O$$
$$OX_6O$$

$$2\text{nd Grade} \quad \text{Same as on 1st Grade}$$

$$3\text{rd Grade} \quad OX_1O$$
$$OX_2O$$
$$OX_3O$$
$$OX_4O$$
$$OX_5O$$

$$4\text{th Grade} \quad OX_1O$$

$$OX_2O$$
$$OX_4O$$

where X_1 represents students in the Hoffman reading program, X_2 represents students in the BRL/Sullivan reading program, X_3 represents students in the SWRL reading program, X_4 represents students in the LLL reading program, X_5 represents students in the Bilingual program, and X_6 represents students in the Multiage program. Variables defining the observation points (0) are the pretest and posttest standardized achievement tests. The major evaluation question of interest was: What are the effects of the six Title I programs on student reading and language achievement?

Evaluation Results: In general, students in the Hoffman, BRL/Sullivan and SWRL programs showed higher adjusted mean scores, for both reading and language totals, on a standardized achievement test than students in the other programs. At grade-level one, students in the BRL/Sullivan program showed the highest level of performance on both the language and reading totals. At grade-level two, students in the SWRL program showed the highest level on reading while students in the Bilingual 2 program showed the highest levels on language. At grade-level three, students in the BRL/Sullivan program showed the highest level on both reading and language total. At grade four, no difference was found for students on reading total, however, BRL/Sullivan students showed the highest level of performance on language totals. In addition, the Hoffman program appears to show consistently good results for all four grade levels investigated.

Recommendations of Evaluator: No recommendations specific to this report will be made, since this report is simply a comparison of Title I programs. Specific recommendations within each program have been made and can be found in the following Research Reports of the Department of Research and Evaluation, for Hoffman, BRL/Sullivan, SWRL, and LLL, see Research Report No. 73-185; for Bilingual-Multicultural Education, see Research Report No. 73-158; and for Multiage Classes see Research Report No. 73-142.

Additional Information:
    73-201   Comparative Analysis of Title I Reading
                    Programs, 1973, Robert J. Costello
                    and James P. Papay, 26 pp.

TITLE I MULTICULTURAL SOCIAL SCIENCE PROJECT

Objectives of the Program: The 1972-73 Multicultural Social Science Project (MSSP) consisted of two related classes of objectives. The first was to field-test both the Multicultural Social Studies curriculum materials developed by the Southwest Educational Development Laboratory (SEDL) in grades one, two, and three, and those written by DISD MSSP curriculum writers in grades kindergarten, four, five, and six. The realization of this first objective included the actual writing of the curriculum materials and corresponding criterion-referenced tests by DISD MSSP curriculum personnel in accordance with a model SEDL format. The second class of objectives dealt with the validation of the MSSP curriculum through the assessment of the classroom performance of participating children assigned the Multicultural curriculum in grades kindergarten through six with respect to 1) curriculum mastery, 2) general social studies knowledge, 3) self-concept, and 4) school attitude.

Purpose of the Evaluation: The evaluation was conducted to determine the extent to which the 1972-73 MSSP was able to realize its stated objectives and to provide information potentially useful to MSSP supervisory personnel and curriculum writers in their planning of the 1973-74 MSSP.

Sample: Children attending the following five elementary schools were assigned the Multicultural curriculum during the 1972-73 school year in the grades indicated: Paul L. Dunbar and O. M. Roberts (kindergarten through six); N. W. Harllee and James Fannin (one through three); and David Crockett (one through two). In addition, children in grades kindergarten through six attending Stephen F. Austin and B. T. Washington Elementary Schools served as controls.

Evaluation Design: The two basic designs incorporated into the evaluation were as follows:

a) O_1, O_2 ..., O_n, where each O_i represents an observation on a selected variable during the 1972-73 school year, and

b) O_1 X O_2

O_1 O_2, where O_2 represents a student performance measure functioning as a dependent variable, X represents the assignment of either the SEDL or DISD Multicultural curriculum within a given grade level, O_1 represents children's characteristics or pretest performance measures used as statistical controls, and the dashed line (-----) represents the fact that the experimental treatment effect (X) was not assigned randomly over all schools. The specific evaluation questions investigated were as follows:

1. Did the children in each grade learn the MSSP curriculum material?

2. What characteristics of children were related to success in learning the MSSP material in each grade?

3. Could the children's learning of the MSSP curriculum content in each grade be attributed to the MSSP instructional materials?

4. Were the MSSP curriculum materials in each grade properly implemented?

5. Was the general social studies knowledge of children assigned the MSSP curriculum in each grade greater than that of comparable children receiving traditional instruction?

6. Did the children assigned the MSSP curriculum in each grade hold a more positive opinion of their own school learning skills compared to similar children receiving traditional instruction?

7. Did the children assigned the MSSP curriculum in each grade display a more positive attitude toward classroom learning and school than similar children receiving traditional instruction?

8. What were the opinions of participating classroom teachers regarding selected aspects of the MSSP curriculum in each grade?

Evaluation Results:

1. Children's mean percentage of questions correct over all criterion-referenced unit mastery tests for the SEDL curriculum in grades one, two, and three were 86.0, 83.4, and 78.1, respectively. Children assigned the DISD Multicultural materials in grades kindergarten, four, five, and six obtained a mean percentage of 79.6, 81.3, 78.2, and 68.2, respectively, over all unit tests attempted. However, although the kindergarten unit tests were criterion-referenced, the demands of writing the curriculum units in grades four, five, and six allowed sufficient time only for the preparation of informal unit tests over selected curriculum topics. The obtained unit test performance in grades four, five, and six, therefore, should be considered as indicators of learning rather than of curriculum mastery.

2. Children's characteristics found significantly related to mean unit-test performance in each grade of the SEDL curriculum were initial SEDL curriculum knowledge, as measured by a criterion-referenced pre-test, and school attendance. The analysis of the unit performance data in grades one, two, and three also found that white, black, and chicano children realized similar high degrees of success on the SEDL curriculum. For the DISD curriculum materials, only initial general social studies knowledge in grades five and six was found related to performance on the unit tests over all grades. Because

the enrollment of both schools in which the DISD curriculum was field-tested was predominantly black, the effect of ethnicity upon performance of the Multicultural materials could not be investigated.

3. Significant differences between the scores of SEDL and control children on criterion-referenced posttests indicated that both the grade-one and the grade-three curriculum produced children's learning. The lack of a significant difference between SEDL and control children on a similar test in grade two, however, suggested the possibility that the mastery of these children might have resulted from other sources of learning. Significant differences obtained between the performance of Multicultural and control children in grades kindergarten, four, five, and six also served to indicate that the curriculum in each of these grades produced children's learning.

4. Teacher responses to a questionnaire based upon the results of classroom process evaluation by Title I Evaluation personnel indicated that the implementation of the SEDL and DISD curriculum components was generally satisfactory. However, teachers also indicated that they were not able to obtain all of the help they desired from MSSP staff and that they often did not receive all of the materials required each day to teach the curriculum. This latter defect was most prominent in grades four and five, and especially in grade six, in which the curriculum materials were all being written during the school year. Although more curriculum units were written in grades kindergarten, four, five and six over the school year, due to a late start, only three of 11 planned units were field-tested in kindergarten, three of five in grade four, three of seven in grade five, and one of seven in grade six.

5. Significantly greater social studies achievement in favor of the Multicultural children as measured by standardized tests was found only for the SEDL material in grade three and for the DISD material in grade four. In the remaining grades, Multicultural and control children displayed the same degree of general social studies knowledge at the end of the school year.

6. Children assigned the DISD Multicultural curriculum in grade four were found to hold more positive academic self-concepts as assessed by a verbal scale developed by Instructional Objectives Exchange. No other significant differences were found in children's self-concepts over grades kindergarten through six.

7. Children assigned the DISD Multicultural curriculum in grade four also were found to have a more positive attitude toward school as measured by a verbal scale developed by Instructional Objectives Exchange. However, the control children in grade six displayed a significantly more positive attitude toward school than the Multicultural children. No other significant differences were found between experimental and control children in grades kindergarten through six.

8. Teachers in grades kindergarten through five generally indicated that the difficulty level of the material was appropriate for from 60—70% of participating children, with teachers in grades one and two tending to indicate the material was somewhat easy, and teachers in grades three, four, and five indicating the material was too difficult for approximately 25% of children in each grade. Kindergarten teachers felt the material was appropriate for virtually all children in their classes. In this context, teachers recommended that 5.0, 17.3, 22.9, 25.4, 36.6, and 38.0% of the curriculum be revised in grades kindergarten through five, respectively. In grade six, teachers reported that the material was too difficult for 82.5% of their children and that they were forced to make classroom changes for over 82.5 and 67.5% of the material to insure children's interest and learning, respectively, during field-testing. Accordingly, grade-six teachers recommended that 87.5% of the grade-six curriculum be revised. With the exception of those in grade six, the large majority of teachers evidenced a positive attitude toward the Multicultural curriculum by indicating that they would like to teach in the program during the coming school year.

Recommendations of Evaluator: Based upon the results of the 1972-73 MSSP evaluation, the following recommendations are offered:

1. MSSP personnel should complete whatever revision is required for the SEDL curriculum in grades one and three so that it can become available for implementation. For the grade-two SEDL curriculum, MSSP personnel should determine whether children are, in fact, learning from the curriculum materials or whether the curriculum is attempting to teach children that which they already know. This question can be answered by administering, on an experimental basis, the criterion-referenced unit mastery tests to experimental and control children as both a pretest and a posttest. Any further decision regarding implementation of the grade-two materials should await this or equivalent performance data.

2. MSSP personnel should complete writing, revising, and field-testing all of the units planned in grades kindergarten, four, five, and six, perhaps placing greatest priority upon the grade-four and kindergarten materials that both show the greatest promise and provide direct upward and downward extensions of the SEDL curriculum in grades one through three. It is essential that an integral part of this activity include that curriculum writers follow the model SEDL lesson format. In addition, MSSP supervisory personnel should direct curriculum writers to plan and construct technically adequate criterion-referenced unit tests that can function to assess curriculum mastery by participating children. This latter step is crucial since curriculum effectiveness cannot be considered validated without the demonstration of learning mastery by participating children. In general, given the stated objectives of the MSSP, the writing, the field-testing, the necessary revision, and the eventual validation through student

mastery of all units within a grade level should properly pre-
cede any implementation of the DISD Multicultural material.
Finally, if it is the purpose of the MSSP to validate the
curriculum materials being developed in grades kindergarten,
four, five, and six for a population of white, black, and chicano
children, then these curricula should at some point be tested
in other than predominantly black schools.

Additional Information:

72-98   Evaluation Design for the Multicultural Social Science
             Project, 1972-73, Michael R. Vitale, 32 pp.

73-141   Evaluation Report: Multicultural Social Science
             Project , 1972-73, Michael R. Vitale, 81 pp.

TITLE I CHILD DEVELOPMENT
SPECIALIST PROJECT

Objectives of the Program: The Child Development Specialist Project (CDSP) consisted of the assignment of a certified elementary school counselor to each of the 20 DISD elementary schools having the largest proportion of economically disadvantaged chil...en. The CDSP was funded through the Elementary and Secondary Education Act Title I program at a cost of $214,000. The CDSP objectives were to identify and help eliminate the school problems evidenced by disadvantaged children that ordinarily reduce their success in school achievement, to assist with the implementation of the DISD group-testing program and provide training workshops designed to help teachers properly utilize the standardized test results, and to complete a number of "mini-experiments" that would demonstrate clearly the effectiveness of selected change-techniques in eliminating selected categories of children's problems. The activities of specialists (e.g., counselors) most relevant to these objectives included individual and group counseling with children and consultation with teachers, other school personnel, and parents.

Purpose of the Evaluation: The CDSP evaluation was designed to assess the general pattern of specialist activities during the school year, to determine whether the CDSP objectives were realized, and to provide recommendations that would increase the future effectiveness of the Project.

Sample: Three distinct samples supplied the information used in completing the evaluation. The first consisted of the specialists themselves who summarized both their own activity patterns as well as specific aspects of children's long-term counseling problems. The second consisted of principals and a random sample of teachers within each grade-level obtained from the CDSP and from 18 equivalent control schools who provided information relating to the nature and seriousness of children's classroom problems and to specialist effectiveness in helping teachers use DISD standardized test results. The third consisted of all children in grades one, two, three, and four CDSP and four equivalent control schools who provided information regarding DISD standardized test achievement.

Evaluation Design: The components of the evaluation design corresponding to the comparisons planned within the different samples are presented schematically below:

a) $0_1 \ 0_2 \ \ldots \ 0_n$ where each 0 represents an observation by a specialist during the school year.

b) $R\ O_1\ X\ O_2$
    $\overline{}$

$R\ O_1\quad O_2$ where R represents the random selection of teachers within each grade level in CDSP and control schools, X represents the presence of a specialist in the CDSP schools, O_2 represents the responses of teachers at the end of the school year, the dashed line (----) represents the nonrandom assignment of the CDSP treatment among the schools, and O_1 represents observations on concomitant variables available at the beginning of the school year that functioned as statistical controls. The design components used with the samples of principals and children were equivalent to that shown above in b) except for the deletion of the R's to indicate that all principals and all children in grades one through four were included from their respective schools. The major evaluation questions investigated were the following:

1. How much time did specialists devote to different kinds of activities in their schools, and what kinds of children's problems did they face?

2. How successful were specialists in eliminating children's problems and what specialist activities contributed most to that success?

3. Did children in CDSP schools evidence fewer classroom problems and greater school achievement than those attending comparable control schools?

4. Did specialists help prepare teachers to interpret DISD standardized test results?

5. What were the opinions of principals and teachers regarding selected aspects of the CDSP?

6. Were specialists able to describe and validate as effective specific change-techniques applicable to specific children's problems?

Evaluation Results:

1. Specialists as a group spent over 50% of their overall activity counseling students and consulting with teachers about children's problems. Specialists also reported that approximately 50% of the children with whom they worked on a continuing basis evidenced classroom discipline and/or social problems. Problems categories specialists faced less frequently included motivation, learning remediation, and family.

2. Specialists averaged a 63% degree of success in the elimination
   of children's long-term problems over grades K through six, with
   specialists being slightly less successful with children in grades
   two, three, and four. The results also showed that parental contact
   was associated with increased counseling success. However, length
   of the counseling episode, number of counseling contacts, and
   hours of teacher contact all were discovered to be related in-
   versely to counseling success. This latter finding was inter-
   preted to reflect the fact that more serious problems require
   more counseling activity while offering less opportunity for
   success.

3. Children in CDSP schools generally were found to display about
   the same degree of classroom problems as comparable children in
   control schools, according to principal and teacher estimates.
   The one exception showed that the control children evidenced
   fewer learning problems. On DISD standardized tests, second-
   grade CDSP children performing significantly better than controls.
   However, no difference in standardized test achievement was
   found between CDSP and control schools in grades one, three, and
   four.

4. Teachers in CDSP schools indicated that they obtained satis-
   factory help from specialists in the use and interpretation
   of DISD test results when such assistance was required. However,
   approximately 50% of all teachers obtained at least part of such
   help from specialists informally rather than in formal teacher
   workshops. About 33% of all CDSP teachers surveyed required
   no help from specialists in using DISD test results.

5. Both teachers and principals in CDSP schools indicated that
   specialists seemed effective in reducing classroom problems
   and that specialists made a small, but significant, contribution
   to children's classroom learning. However, many teachers and
   principals (although not a majority) felt that specialists
   should devote a greater amount of time to helping solve class-
   room problems.

6. The CDSP objective calling for specialists to identify and validate
   specific change-techniques was not implemented during the school
   year. One possible reason suggested for this outcome was that
   the CDSP represented only a small part of the Project director's
   overall responsibility within the DISD.

Recommendations of Evaluator: Based upon the conclusions drawn from the
1972-73 CDSP evaluation, the following recommendations are offered:

1. The 1973-74 CDSP should focus upon the elimination of the specific
   classroom problems evidenced by Title I children in the areas of
   discipline, social adjustment, and motivation for learning. This

certainly seems to be an important need within Title I schools that most specialists should be well able to satisfy on a continuing basis.

2. The 1973-74 CDSP should identify and validate specific change-techniques that are effective in eliminating children's problems in each of the three areas listed above. If such specific techniques can be identified and disseminated, then the impact of the CDSP can be multiplied throughout the DISD.

3. The 1973-74 CDSP should determine the most effective role for specialists in providing the assistance teachers require in interpreting and using DISD standardized test results. If, as the present evaluation showed, 33% of teachers require no help in using DISD test results, and at least 50% of teachers who need help obtain much of that assistance through informal specialist contact, then there seems little justification for the CDSP objectives to emphasize formal teacher workshops.

4. The 1973-74 CDSP should have a full-time director who works closely with and coordinates the activity of specialists in realizing the objectives of the Project as a whole. Under the present administrative system, the CDSP consists of little more than elementary counselors working relatively independently within their own school, united by a common funding source. Although the present specialists do seem to perform an important service within their schools, such individual efforts do not necessarily imply that any goals of the CDSP as a whole will be realized.

Additional Information:

73-146   Evaluation of the Child Development Specialist Project, Michael R. Vitale, 1973, 52 pp.

72-115   Evaluation Design for Child Development Specialist Project, 1972-73, Michael R. Vitale, 77 pp.

PAUL L. DUNBAR READING PROGRAM: 1972-73

The evaluation of the Dunbar Reading Program for 1972-73 considered the educational outcomes of three primary reading programs which were implemented at the Paul L. Dunbar Community Learning Center. These programs included: (1) the Communication Skills Program, (2) the BRL/Sullivan Program, and (3) the Chandler Reading Program.

Objectives of the Program: The objectives for each of these programs were basically similar. Each of these programs emphasized development of reading vocabulary with particular attention toward word-attack skills, phonics, and the ability to sound out new words of different construction. Each program had its own unique curriculum. However, each program also had the same goals, which were oriented toward the enhancement of the student's learning capabilities through specialized instruction.

Purpose of the Evaluation: The main purpose of the evaluation was to determine the differences, if any, between the students in the Dunbar Reading Program and students in comparison groups (different reading programs) by examining the standardized test results. Within each grade level, means, standard deviations, and gain-score comparisons were used to determine program differences. However, without the availability of appropriate controls uncontaminated by other programs within the Dunbar Learning Center, it was impossible to evaluate the complete effectiveness of each reading component.

Sample and Design: The sample for the evaluation came from each of six grades at Paul L. Dunbar Community Learning Center and the equivalent two classes from each of the four control schools: C. F. Carr, H. S. Thompson, B. T. Washington, and O. M. Roberts. The design used for the analysis of the Dunbar Reading Program can be construed as a pretest - posttest design, schematically represented as

$$O_1 \ O_2 \ O_3 \ X_1 \ O_4 \ O_5$$
$$O_1 \ O_2 \ O_3 \ X_2 \ O_4 \ O_5$$

where the observations ($O_1 \ O_2 \ O_3$) consisted of pretests on the Metropolitan Readiness Tests (MRT), California Achievement Tests, (CAT) and the Comprehensive Tests of Basic Skills (CTBS); X_1 was the Dunbar Reading Treatment, X_2 was the control Targeted Achievement in Reading Program (TARP) subcomponent reading treatment; and the observations (O_4, O_5) were the posttest performance scores on the CAT and CTBS.

The regression approach was used for the analysis. Within the regression analysis framework, the posttest CAT and CTBS tests served as the

criterion variables, the factor of participation was the predictor
variable, and the pretest MRT, CAT, and CTBS tests served as covariates.
Particular hypotheses were tested by generating a restricted model
and testing the R^2 from the restricted model against the R^2 from the
full model. The resulting F-test enabled the determination of whether
or not the observed event (treatment) was different from chance occur-
rence.

Evaluation Results: The results or the evaluation were not, overall,
consistent. The lack of controlled assignment of pupils to treatments,
pupils receiving additional treatment, and, at times, different entry
levels precluded precise interpretation. However, the following general
trends were observed:

1. Within grades one through four, the Dunbar programs produced
   higher exit level performances than the corresponding compar-
   ison groups. However, in grades two and three, the comparison
   groups evidenced lower entering performances than pupils in
   the experimental Dunbar Program.

2. Within grades five and six, where the entry levels were simi-
   lar, the Dunbar Chandler Reading Program did not produce any
   higher exit-level performances. However, the Chandler Reading
   Program was not uniformly implemented.

3. There was not a clearly consistent trend within either the
   Dunbar or comparison programs favoring performance on either
   the Reading or Language tests of the CTBS.

Recommendation of the Evaluator: The lack of appropriate control
students in grades one through four strongly suggests that the follow-
ing recommendations be made: 1) that no evaluation of the Dunbar
Reading Program be implemented next year without the selection of
appropriate control students within Dunbar; 2) that the control stu-
dents be randomly selected from the Dunbar population and not given
any of the additional instruction received by the experimental students.

An ancillary recommendation regarding specific program implementation
is that the second-grade Transition program be continued next year with
the consideration of extending the concepts to other grade-levels for
smoother transfer from one program to another.

Additional Information:

72-116   Evaluation Design for Paul L. Dunbar Reading Program: 1972-73,
          James P. Papay, 18 pp.

73-148   Evaluation Report for Paul L. Dunbar Reading Program: 1972-73,
          James P. Papay, 24 pp.

PAUL L. DUNBAR MATHEMATICS PROGRAMS

Objectives of the Program: The Mathematics Program at Paul L. Dunbar Elementary School for 1972-73 consisted of two different curricula for the primary and intermediate levels: (1) Developing Mathematical Processes (DMP), used in kindergarten and grades one and two, and (2) Quality Education Development (QED), used in grades three, four, five, and six. The objective of both the DMP and QED components of the Dunbar Mathematics Program was to insure that children achieved learning mastery of the curriculum content assigned them during the school year.

Purpose of the Evaluation: The evaluation was conducted to determine the extent to which children mastered the DMP and QED curriculum objectives and whether DMP and QED increased children's general mathematics knowledge more than traditional instruction.

Sample: Two kindergarten, four first-grade, and three second-grade classes at Dunbar were assigned DMP, while five third-grade, four fourth-grade, six fifth-grade, and five sixth-grade classes at Dunbar were assigned QED. Kindergarten through sixth-grade children attending Booker T. Washington Elementary School served as controls.

Evaluation Design: The two basic evaluation designs used are presented schematically below:

(a) O_1, O_2,..., O_n, where each O_i represents an observation
    of a student during the school year and

(b) O_1 X O_2
    -------, where O_2 represents children's performance on
    O_1 O_2

    DISD standardized mathematics tests administered at the end
    of the school year, X represents the DMP or QED
    curriculum treatment, O_1 represents a measure of children's
    initial mathematics knowledge, and the dashed line (-------)
    represents the fact that the DMP and QED treatments were
    not assigned randomly to classrooms in Dunbar and Washington.

The specific evaluation questions investigated were as follows:

1. What was the level,and rate of mastery,of DMP and QED
   curriculum objectives?

2. What student characteristics were related to level and
   rate of curriculum mastery within DMP and QED?

3. Was the general mathematics knowledge of children
   assigned DMP and QED greater than that of comparable

control children after statistically equating all of
the children on prior mathematics knowledge?

Evaluation Results:

1. DMP criterion-referenced test results indicated that
    the average performance of children was at the satis-
    factory progress level or above for 100% of the tests
    in levels one (kindergarten) and two (grade one) and
    for 73.3% of the tests in level three (grade two).
    In addition, DMP test results showed that the children
    mastered a mean of 88.2% of objectives attempted in
    level two, 63.5% of the objectives in level one, and
    47.5% of the objectives in level three. For QED, teacher
    records indicated that the average child completed
    and mastered 1.2 levels (of the total of six) of the
    QED material in grades four, five, and six. However,
    in grade three, in which the full QED program was not
    implemented, children completed only an estimated
    0.2 curriculum levels.

2. In both DMP and QED, only children's prior knowledge
    of the curriculum content was consistently related
    positively to rate and mastery of the curriculum mate-
    rials in kindergarten through grade six.

3. DISD standardized test results revealed no significant
    difference between the general mathematics knowledge of
    children assigned either DMP or QED in grades one,
    three, four, five, and six compared to that of controls.
    However, the controls in grade two were found to have
    significantly greater mathematics knowledge than the
    second-grade children assigned the DMP level-three
    curriculum.

Recommendations of Evaluator: Based upon the results of the 1972-73
evaluation, the following recommendations are suggested:

1. DMP curriculum personnel should monitor closely the
    performance of second-grade children on the level-three
    curriculum materials during the coming 1973-74 school
    year in order to determine their appropriateness for
    Title I children.

2. QED curriculum personnel should take necessary steps to
    insure that the curriculum is implemented properly in
    grade three as it was in grades four, five, and six, so
    that its effectiveness can be assessed. In addition,
    possible techniques to motivate children to work more
    rapidly through the QED objectives should be investi-
    gated.

3. Both DMP and QED curriculum personnel should formally identify the components assessed by DISD standardized mathematics tests that do and do not correspond to their curriculum objectives. The results of these curriculum analyses would allow for a more satisfactory interpretation of DMP and QED children's performance on the DISD standardized tests.

Additional Information:

72-117   Design for Paul L. Dunbar Mathematics Programs, 1972-73, Michael R. Vitale, 13 pp.

73-159   Evaluation of the Paul L. Dunbar Mathematics Programs, 1972-73, Michael R. Vitale, 29 pp.

PAUL L. DUNBAR SCIENCE PROGRAMS

Objectives of the Programs: During the 1972–73 school year, two science
programs were pilot-tested in the first grade at the Paul L. Dunbar
Learning Center. One of these programs, Science: A Process Approach –
Level A, was developed by the American Association for the Advancement
of Science (AAAS). The second, the Conceptual Approach to Teaching
Science (CATS) was developed by the Paul L. Dunbar curriculum develop-
ment staff. In addition to the first-grade class, the CATS program was
pilot-tested in one Minimum Foundation Kindergarten class.

The AAAS program was designed to teach the scientific processes of
observing, space-time relations, classifying, using numbers, measuring,
inferring, and communicating. The concept base was built around common
knowledge content such as color, size, quantity, shape, etc. The
program does not include the more traditional science content. The
CATS program, in comparison, is designed to teach these same processes
but through a more expanded, traditional science content approach.

Purpose of the Evaluation: The evaluation of the Dunbar Science pro-
grams was designed to determine the relative effectiveness of the two
programs in teaching scientific processes and concepts. In addition,
the effectiveness of the CATS program in meeting its own stated objec-
tives was examined. This information could be useful in making dissem-
ination or discontinuation decisions.

Sample: Three first-grade classes, one Minimum Foundation Kinder-
garten class and the Kindergarten-age children in three multiage classes
were included in the study. One first-grade class and Minimum Founda-
tion Kindergarten class received the CATS program. One first-grade
class received the AAAS program, Science: A Process Approach. One
first-grade class and the kindergarten-age children in the three multi-
age classes served as controls receiving only the regular elementary
science program.

Evaluation Design: Essentially two designs were used in this study,
the first for kindergarten-age children and the second for first-grade
children.

K	Class	Assignment	$O\ X_1\ O$
			$O\ X_2\ O$
1st	R(Subjects)	R(Classes)	$O\ X_1\ O$
			$O\ X_2\ O$
			$O\ X_3\ O$

In the kindergarten study, children were assigned to the Minimum Foundation Kindergarten Class and Multiage classes in accordance with District policy. In the first-grade study, students were randomly assigned to classes. One class each was randomly assigned to each of the three treatments. X_1 is CATS; X_2, the elementary science program; and X_3, the AAAS program. Variables observed at each observation point are the CATS program Pre/Post Test and Science Test of the Test of Basic Experience. In addition, the CATS participants received interim assessment on CATS objectives. The major evaluation questions of interest were:

1. What is the level of performance on CATS objectives of participants in that program?

2. What is the level of performance on CATS objectives of children not participating in that program?

3. What is the relative level of performance of participants in the three programs on the TOBE Science Test?

Evaluation Results:

1. First-grade CATS participants met the 80 - 80 criterion (80% of the children mastering 80% of the objectives) on the Posttest and on all but two of the unit tests. In addition, 80% of the students in AAAS and the control group answered no more than 47% of the items correctly on the Posttest.

2. Kindergarten CATS participants met the 80 - 80 criterion on only one unit.

3. No significant difference was observed among the two kindergarten programs on the TOBE Science Test. In addition, no significant differences were found between the three science programs at the first-grade level on the TOBE Science Test.

Recommendations of Evaluator:

1. The effects of the CATS program in a multiage situation should be examined.

2. The CATS program should not be implemented in a straight kindergarten situation.

3. The three first-grade classes should remain intact for a follow-up study on the second level of both CATS and Science: A Process Approach.

4. Level I of the CATS program, with minor revisions, appears to be ready for dissemination to other Title I first-grade classes.

Additional Information:

72-104   Evaluation Design for the Paul L. Dunbar Science Programs, 1972-73, Allen W. Scott, 24 pp.

73-139   Evaluation Report: Paul L. Dunbar Science Programs 1972-73, Allen W. Scott, 28 pp.

DUNBAR EARLY CHILDHOOD EDUCATION

Objectives of the Program: During the 1972-73 school year, two classes
of four-year-old children were taught at Paul L. Dunbar. One of these
classes received the Cognitive Program for Early Childhood, a Program
developed by the Dunbar Development Staff, based on the works of David
Weikart of Ypsilanti, Michigan. The second class received a combination
of the Direct Instructional System Teaching and Remediation (DISTAR)
and the Early Childhood Education Learning System developed by the
Southwest Educational Development Laboratory (SEDL).

The Cognitive Program focuses its attention on the cognitive or intel-
lectual growth of the child. The Program is directed toward teaching
the processes that children use to learn relationships between things
which are in their environment. This is accomplished through the use
of abstract symbols representing the environment. The Program is
derived from the ideas of Piaget, but other theories are also considered.

The Early Childhood Education Learning System, developed by SEDL,
emphasizes oral language development, concept formation, visual train-
ing, auditory training, motor training, and development of problem-
solving skills. Activities for each training area are sequenced and
presented in accordance with the child's level of development. Each
activity is written with a behavioral objective that relates to a
higher-order skill.

The DISTAR program was developed by Science Research Associates (SRA)
from the Bereiter-Engelmann program of the University of Illinois. The
DISTAR language program is designed to teach basic language concepts,
focusing upon the language of instruction. The activities of the pro-
gram are sequenced, first teaching the use of complete statements in
identifying objects, and then teaching a variety of concepts, such as
color, shape, relative size, and class name, that reside in familiar
objects.

Purpose of the Evaluation: This evaluation was designed to provide
information about the relative effectiveness of the two programs being
examined. In addition, general information which could lead to Pro-
gram revision was sought.

Sample: Thirty-two Title I-eligible four-year-old children were
recruited from the Dunbar community. These children were randomly
assigned to the two programs being examined.

Evaluation Design:

R (Subjects)   O X_1 O
                      O X_2 O

Thirty-two four-year-old children were randomly assigned to two classes
(sixteen each). One class received the Cognitive Program (X_1), and the
other class received a combination of SEDL and DISTAR (X_2). At each
observation point (O), the Boehm Test of Basic Concepts and the Engle-
man Basic Concept Inventory were administered. In addition, criterion-
referenced instruments were administered throughout the year.

As an added dimension of the study, the current level of achievement
of past participants in the three programs was examined in relationship
to classmates who did not have the benefit of an early childhood
education program. The major evaluation questions of interest were:

1. Is there any difference in concept development between
    participants in the two programs?

2. What is the level of objective mastery of participants
    in the two programs?

3. What is the current level of achievement of partici-
    pants in SEDL, ⱯISTAR, and the Cognitive Program in
    relation to their age-mates?

Evaluation Results:

1. No significant difference was observed between participants
    in the Cognitive and SEDL/DISTAR programs on Boehm Test of
    Basic Concepts performance. The SEDL/DISTAR participants
    scored significantly higher than the Cognitive participants
    on the Engleman Basic Concept Inventory, but since this test
    was developed as a criterion instrument for DISTAR, the
    importance of this outcome was reduced.

2. Participants in both programs experienced little difficulty
    in mastering the majority of the objectives of the program
    in which they were participating.

3. In attempting to examine the current level of achievement
    of past participants in the three ECE programs, it was
    discovered that valid data on less than one-sixth of the
    students were available in the Institutional Research Data
    Base. With this very small and possibly biased sample, no
    valid comparisons could be made among the programs.

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Recommendations of the Evaluator:

1. It is recommended that pilot-testing of both programs be continued.

2. Efforts should be made to improve the Cognitive Program.

3. Efforts to locate past participants in the Early Childhood programs should be continued so that more meaningful follow-up information can be provided.

Additional Information:

72-102   Evaluation Design for Dunbar Early Childhood Education, 1972, Allen W. Scott, 23 pp.

73-150   Evaluation Report: Dunbar Early Childhood Education, 1973, Allen W. Scott, 25 pp.

SPECIAL SWRL PROJECT

Objectives of the Program: The Southwest Regional Laboratory (SWRL)
First-Year Communication Skills Program (FYCSP) was designed for use
by kindergarten children. The Second-Year Communication Skills Program
(SYCSP) was designed for use by first-grade children. In the past, the
FYCSP has been implemented in Dallas in first-grade classes with the
SYCSP to follow as FYCSP is completed. However, the SYCSP has a Trans-
ition Supplement that was designed for first-grade children who did not
have sufficient mastery of FYCSP objectives to enable them to partici-
pate successfully in SYCSP. The objectives of FYCSP and the SYCSP
Transition Supplement are essentially the same. The decision was made
to implement the SYCSP in two classes at Dunbar without FYCSP. In its
place, the SYCSP Transition Supplement was implemented. It was hoped
that, in this way, the entire SYCSP could be completed in the first
grade.

Purpose of the Evaluation: The purpose of this special project study
was to determine if the SYCSP could be successfully implemented without
prior implementation of FYCSP. A second purpose was to determine if
exclusion of FYCSP and the subsequent acceleration would affect achieve-
ment test scores in reading and language arts.

Sample: Four self-contained first-grade classes and the first-grade-
aged children in four multiage classes were included in the study.

Evaluation Design:

	First Grade (R(Subjects))	O_1 X_1 O_2
Assignment		O_1 X_2 O_2
	Multiage	O_1 X_2 O_2
		O_1 X_3 O_2

First-grade-aged children at Paul L. Dunbar were assigned to either
multiage or first-grade classes in accordance with the guidelines set
forth for the multiage program. The children assigned to first-grade
classes were then randomly assigned to four classes. Two of these
classes received the FYCSP followed by the SYCSP (X_1). The other two
classes received SYCSP with the Transition Supplement (X_2). The first-
grade-aged children assigned to multiage classes served as controls
(X_3). The first observation (O_1) was the Metropolitan Readiness Tests.
The second observation (O_2) was the California Achievement Tests. In
addition, Unit Criterion Assessment data were collected on the children
in the SWRL Programs. The major evaluation questions of interest were:

1. What is the level of unit criterion performance of first-
    grade children participating in SYCSP without prior partici-
    pation in FYCSP?

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2. Is there any difference in standardized test performance among first-grade FYCSP participants, first-grade SYCSP participants, and first-grade-aged multiage-class children who did not participate in a SWRL Program?

Evaluation Results:

1. First-grade children receiving SYCSP without prior participation in FYCSP met and surpassed criterion on every outcome of both the Transition Supplement and SYCSP. Further, with the exception of six children, all children in these classes completed SYCSP, while the classes that began with FYCSP were only able to complete half of the Second-Year Program.

2. No difference was found among FYCSP participants, SYCSP participants, and the controls that could not be attributed to entry characteristics.

Recommendations of Evaluator:

1. The SYCSP with the Transition Supplement appears to be the most appropriate Program for most first-grade children.

2. Efforts to individualize instruction with SWRL Programs should be continued.

3. The overall success of SWRL, not only at Dunbar, but throughout TARP, would appear to justify a close examination of the new kindergarten through three SWRL Communications System.

4. A careful study should be made to determine if the SWRL System can be successfully and economically implemented in a multiage setting.

Additional Information:

72-120   Evaluation Design for the Special SWRL Study, 1972-73, Allen W. Scott, 9 pp.

73-162   Evaluation Report: Special SWRL Project, 1973, Allen W. Scott, 12 pp.

PAUL L. DUNBAR COMPREHENSIVE MUSIC PROGRAM

Objectives of the Program: If the purpose of education is to free man to realize his full potential as an individual and as a member of society, then education must provide the mental, physical, and spiritual discipline necessary for man's development. In keeping with this purpose, the Comprehensive Music Program (CMP) was developed and has as its major objectives: 1) to provide activities at which one can succeed, 2) to create an atomophere in which one perceives one's individual worth, 3) to promote self-understanding, 4) to improve self-concept, and 5) to provide a background of experience which will continue to enrich the life of each individual.

The curriculum developed for the Comprehensive Music Program is based on the knowledge that the musical experience is an individual experience. It is a means to self-understanding and self-expression.

It is believed that music education should be aesthetic education. Basic to the child's understanding of the art of music is aural discrimination. Through exploration and success-oriented experiences, the child develops sensitivity to the expressive possibilities of duration, pitch, timbre, dynamics, form, and texture. He perceives and reacts to the fusion of these elements through composition, improvisation, movement, singing, playing, and listening. The total Program is one of comprehensive musicianship.

The background experience provided by the music education Program will continue to enhance other areas of learning and to enrich the life of the individual whether one is a composer, performer, listener, or a combination of these three.

Purpose of the Evaluation: The evaluation of the CMP is intended to serve two functions; first, it was designed to assist Program developers in making any necessary revision decision, and secondly, to inform upper-level decision-makers of the progress being made in the development of the music Program.

Sample: The design test sample included the children and teacher in one kindergarten class.

Evaluation Design: Volunteer (Teacher) $\quad O_{11} \; X_1 \; O_{12} \; O_{21} \; X_2 \; O_{22} \; O_{31} \; X_3 \; O_{32}$

The volunteer teacher taught the three units (X_1, X_2, and X_3) to her class. Before teaching each unit, she administered a unit preassessment (O_{11}, O_{21}, and O_{31}). At the completion of each unit, she administered a unit postassessment (O_{12}, O_{22}, and O_{32}). In addition, lesson assessment data were collected at the completion of each lesson. A unit is composed of several lessons. The teacher also filled out a Teacher Checklist at the completion of each lesson. The following evaluation questions were

investigated:

1. What is the level of performance on the lesson objectives of the Program?

2. What is the level of performance on the unit objectives of the Program?

3. What is the reaction of the teacher to the Program?

Evaluation Results:

1. Unit test performance was found to be lower than desired for units one and three. Much of the difficulty could be attributed to the overly complex assessment methods.

2. Lesson assessment results were acceptable for units two and three. The same technical difficulties observed on the Unit Posttest for Unit I were revealed for lesson assessments in that unit.

3. The reaction of the teacher to the Program was generally favorable. She was, however, critical of the evaluation procedures in Unit I.

Recommendations of Evaluator:

1. The Program should be pilot-tested in not more than four Kindergarten and grade-one multiage classes at Paul L. Dunbar during the 1973-74 school year.

2. The first unit, along with the evaluation procedures, should be extensively revised.

3. Units IV-VII should be design-tested prior to being implemented as part of the pilot test.

4. The Hawiian Music program should be implemented simultaneously with CMP to determine which is more effective.

5. Staff development and Program implementation should be initiated early enough in the school year to assure completion of both programs.

Additional Information:

72-103   Evaluation Design for the Comprehensive Music Program: Design Test 1972-73, Allen W. Scott, 8 pp.

73-151   Evaluation Report: Comprehensive Music Program, 1972-73, Allen W. Scott, 11 pp.

TALENT EDUCATION PROGRAM

Objectives of the Program: The Talent Education Program is an adaptation
of the techniques and philosophy of Shinchi Suzuki. These techniques
have been incorporated in a strings Program which was designed to meet
the needs of children and their parents in the Dallas Independent School
District. A major tenet of this philosophy contends that children, even
very young children, can learn best from their parents. As a result,
parent participation is a major part of the Program. The music learning
system is designed to promote self-understanding, to improve self-concept,
and to provide a background of experiences which will continue to enrich
the life of each individual. The experiences are success-oriented and
develop musical skills and concepts in such a way that they encourage
reinvolvement in other areas of learning. Students in the Program will
be expected 1) to demonstrate musical performance skills commensurate
with individual potentiality; 2) to improve auditory discrimination
through prescribed listening-response activities; 3) to demonstrate an
increased understanding of the elements of music and their interrelation-
ship; 4) to demonstrate an effective working relationship with the
participating parent; and 5) to demonstrate improved self-concept after
successful experiences in the music Program.

Purpose of the Evaluation: The evaluation of the Talent Education
Program was designed to serve three purposes. First, the evaluation was
designed to provide information for upper-level decision-makers which
could lead to decisions regarding dissemination, continued extended pilot-
testing, or redirection of efforts. A second purpose was to provide
information for the development staff which could lead to needed Program
revisions. The third purpose was to identify valuable resource persons
for future staff development.

Sample: A stratified random sample of the pupils of nineteen Dallas
elementary string teachers was included in the investigation. Stratifi-
cation was based on the proportion of the children taught by the teacher
placed in each category (level).

Evaluation Design:

Program Identification → Stratification → R (subjects) $X_1 0$

$$X_2 0$$
$$X_3 0$$
$$X_4 0$$

The program of each of the nineteen teachers was classified as Talent Education with parent participation (X_1), Talent Education without parent participation (X_2), Dallas String Program (X_3), or Paul Rolland (X_4). Five pupils were selected from each teacher's enrollment in one school by stratified random sampling. Stratification was based on the proportion of pupils in each category or level. Observation (O) consisted of video-taping the performance of each child individually without accompaniment. A panel of three judges then rated the performance of each child on the auditory variables of Tone Quality, Intonation, Phrasing, Articulation, Pulsation, and Overall Performance, without seeing the children or knowing which program or teacher they represented. The following evaluation questions of major interest were investigated:

1. Is there any difference in string performance ratings among the four programs evaluated?

2. Is there any difference in string performance ratings between pupils in Title I schools and that of pupils in non-Title I schools?

3. What is the relationship between the length of time a pupil receives string instruction and the category in which he is placed for each of the four programs?

4. Is there any difference in the standardized achievement test performance of children in Title I schools who participate in TEP and that of children in Title I schools who do not participate in TEP?

Evaluation Results:

1. Students in Talent Education Program, with parent participation, received higher ratings, on all the variables considered, than students in the other three music programs. However, students in the Talent Education Program, without parent participation, received the lowest ratings.

2. Children from Title I schools (all of whom were TEP participants with parent participation) received significantly higher ratings on all string performance variables than participants in all programs in non-Title I schools.

3. TEP participants with parental involvement progressed at a significantly faster rate than participants in all other programs. TEP participants without parental involvement progressed at a significantly faster rate than participants in either the Paul Rolland or the Dallas String programs.

4. TEP participants in Title I schools scored higher on standarized achievement tests than non-participants in the same schools. In general, differences at Dunbar were highly significant. Participants, on the average, were a full year ahead of non-participants in grade equivalency.

Recommendations of Evaluator:

1. The Talent Education Program should be given serious consideration for dissemination to any school with an existing string program if, and only if, parent participation can be reasonably assured.

2. The Talent Education Program should be disseminated to other Title I schools on a tuition-free basis with a parental participation requirement.

3. The Program should be expanded in the current Title I schools as much as possible.

4. Efforts to refine the string performance evaluation procedures should be continued.

5. Refinement and extension of TEP should continue at the Paul L. Dunbar Learning Center.

6. A carefully designed longitudinal study should be conducted in the Title I expansion schools to determine whether TEP participation has a causative relationship with academic achievement gains or merely a concomitant relationship.

Additional Information:

72-101   Evaluation Design for Talent Education, 1972-73, Allen W. Scott, 16 pp.

73-149   Evaluation Report: Talent Education Program, 1972-73, Allen W. Scott, 61 pp.

FUNDAMENTAL LEVELS IN PHYSICAL SKILLS

<u>Objectives of the Program</u>: Test results and observation indicate
that children first entering school are lacking basic concepts of
movement as well as movement skills. The Fundamental Levels in
Physical Skills (FLIPS) program compensates for these apparent de-
ficiencies by presenting basic skill development activities that
serve as a foundation for all physical development. The emphasis
of the program is on individual development, thus there is an
absence of team-oriented activities in the first level of the pro-
gram. Children participating in the program should be able to
demonstrate fundamental movements basic to all physical activities,
a knowledge of body parts and their movements, a knowledge of direc-
tional concepts, skills in rhythmic activities, and abilities in all
major areas of physical development: balance, agility, strength, en-
durance, and flexibility.

<u>Purpose of the Evaluation</u>: The evaluation of Level I of the FLIPS
program was designed to provide information to both program developers
and District decision-makers. The information provided program devel-
opers was designed to lead to further program refinement. The infor-
mation provided decision-makers was designed to facilitate decisions
regarding dissemination, extended pilot-testing, continued pilot-
testing at Dunbar, or, in the event the program shows little promise,
redirection or discontinuation of efforts.

<u>Sample</u>: Two self-contained first-grade classes and one kindergarten
class were included in the study. The children in the two first-grade
classes were randomly assigned to classes. All three classes partic-
ipated in the FLIPS program, but one of the first-grade classes was
taught by a physical education specialist, while the other first-grade
class and the kindergarten class were taught by their homeroom teachers.

<u>Evaluation Design</u>:

$$
\begin{array}{lll}
\text{K} & \text{Assignment} & 0 \ X_{11} \ 0 \\
 & & 0 \ X_{12} \ 0 \\
 & & 0 \ X_{13} \ 0 \\
 & & 0 \ X_{14} \ 0 \\
 & & 0 \ X_{15} \ 0 \\
 & & 0 \ X_{16} \ 0
\end{array}
$$

1st R(Subjects) R(Classes)

$$0 \ X_{11} \ 0$$
$$0 \ X_{12} \ 0$$
$$0 \ X_{13} \ 0$$
$$0 \ X_{14} \ 0$$
$$0 \ X_{15} \ 0$$
$$0 \ X_{16} \ 0$$
$$0 \ X_{21} \ 0$$
$$0 \ X_{22} \ 0$$
$$0 \ X_{23} \ 0$$
$$0 \ X_{24} \ 0$$
$$0 \ X_{25} \ 0$$
$$0 \ X_{26} \ 0$$

X_{11}, X_{12} --- X_{16} represent the six units of the program taught by a teacher without a physical education specialization. X_{21}, X_{22}, X_{23} --- X_{26} represent the six units of the program taught by a physical education specialist. The variable examined at each observation point, 0, is the performance of the participants on the unit objectives. The major evaluation questions of interest were:

1. What is the level of unit posttest performance of program participants?

2. What is the gain from pretest to posttest on unit objectives for program participants?

3. What is the difference in pupil performance between children taught the program by a physical education specialist and that of children taught the program by nonspecialists?

Evaluation Results: The program was not implemented until January due to the multiplicity of programs being implemented by the program teachers. Conflicts in scheduling of released time for these teachers prevented implementation of the formal staff development that accompanies the program. In spite of these limitations, the following results were observed:

1. At least 80% of the children mastered at least 80% of the objectives for every unit taught.

2. Since many of the objectives of the first level of the program were considered essential to future cognitive, as well as psychomotor, development, no arbitrary increase criterion was established. Marked increases were observed on every unit of the program for all three classes.

3. The unit pretests pointed out pupil deficiencies among first-grade children in areas that a first-grade child would be assumed to have prior mastery. These deficiencies were generally eliminated by the program.

4. Although the children taught by the physical education specialist tended to have a slightly higher level of performance on the unit posttests, the children taught by the nonspecialists had no difficulty meeting the 80 - 80 criterion (80% of the objectives being mastered by 80% of the participants).

Recommendations of Evaluator:

1. Level I of the FLIPS program is recommended for extended pilot-testing during the 1973-74 school year.

2. Level I of the program should be tested in first-grade, kindergarten, and kindergarten and first-grade classes.

3. Alternative activities for children demonstrating mastery of objectives on the pretest should be given consideration.

4. Preservice staff development and program implementation should be initiated early enough to facilitate completion of the program by the end of the school year.

5. A program pre-posttest based on the objectives of Level I of FLIPS should be developed to assess overall gain.

Additional Information:

72-108   Evaluation Design for Dunbar Physical Skills Program, 1972-73, Allen W. Scott, 25 pp.

73-138   Evaluation Report: Fundamental Levels in Physical Skills, 1973,
         Allen W. Scott, 24 pp.

LEARNING THROUGH PIANO: DALLAS PLAN

Objectives of the Program: The Learning Through Piano curriculum is a criterion-referenced, individually prescribed program of group piano instruction. The curriculum package is divided into four levels of instruction to be used with grades two through six in the elementary school. Included in each level is the teacher handbook, including lessons and tests, student materials, compositions written to supplement specific objectives, teacher resources, transparencies, and record forms.

The curriculum is designed to allow each child repeated opportunities of success and is flexible enough in use of materials to give each child musical experiences relating to his own culture and cultures of others. Emphasis is placed on developing musical concepts and skills in such a way that other areas of learning are enhanced. The program is designed to: develop the concepts necessary to play the piano musically and with understanding, develop attitudes and values that will allow each child to make an intelligent decision about the place music will have in his life, build musical concepts and skills in such a way that will allow success and reinvolvement in other areas of learning, and provide the framework from which the student can organize music as a discipline.

Purpose of the Evaluation: The evaluation of Learning Through Piano – Dallas Plan was designed to serve two purposes. First, it was designed to aid upper-level decision-makers in making decisions regarding dissemination, continued pilot-testing, or the redirection or discontinuation of efforts. The secondary purpose was to provide the development staff with information that would lead to program revision decisions.

Sample: Eight elementary schools were included in the study. The four experimental schools were Bayles, Sudie Williams, Nathan Adams, and Paul L. Dunbar, while Everette L. DeGolyer, Stevens Park, Dan D. Rogers, and Ascher Silberstein made up the control schools. In addition, sixth-grade students at Paul L. Dunbar who were not LTP-DP participants served as controls for sixth-grade students in that school who were participants in the program.

Evaluation Design:

Participation	Selection	$X_1 \ O_1$
		$X_2 \ O_1$
Volunteers	Participation	$X_1 \ O_2$

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The four participating schools were matched as nearly as possible with the four control schools. The fact that all eight schools had to be selected from the elementary schools offering class piano restricted the choice. The four experimental schools implemented LTP-DP, designated by X_1. The four control schools implemented the regular Dallas class piano program, designated by X_2. The observations, designated O_1, consisted of judges' ratings on piano performance and a written test over music knowledge and listening skills.

The second part of the study compared sixth-grade children at Paul L. Dunbar who participated in the program (X_1) with other sixth-grade children in the same school who did not participate in the program on (O_2) reading achievement, language achievement, and arithmetic achievement. The major evaluation questions of interest were:

1. What is the comparison between LTP:DP participants and other DISD piano students on piano performance after two years of instruction?

2. What is the comparison between LTP:DP participants and other DISD piano students on listening skills and cognitive awareness of the elements of music after two years of instruction?

3. What is the effect of two years of participation in LTP:DP on standardized achievement test performance in a Title I school?

Evaluation Results:

1. LTP:DP participants received significantly higher ratings than the control subjects on eleven of the thirteen performance categories. No significant difference was observed on the other two categories.

2. LTP:DP participants scored significantly higher than the control subjects on six of the eight subtests of the written test over listening skills and cognitive awareness of the elements of music. No significant differences were observed on the other two subtests.

3. Sixth-grade LTP:DP participants at Paul L. Dunbar scored significantly higher than non-participating sixth-graders in the same school on the Reading Total, Language Total, and Arithmetic Total subtests of the Comprehensive Tests of Basic Skills.

Recommendations of Evaluator:

1. Learning Through Piano: Dallas Plan, Level II, should be given serious consideration for District-wide dissemination.

2. A study of the effect of varying types and intensities of staff development should be conducted during the 1973-74 school year.

3. Dissemination of the program on a tuition-free basis to other Title I schools should be given serious consideration.

4. A carefully designed longitudinal study of the effects of LTP:DP participation on standardized achievement test performance should be conducted in the next Title I school(s) to which the program is disseminated.

Additional Information:

72-100   Evaluation Design for Learning Through Piano: Dallas Plan, 1972, Allen W. Scott, 23 pp.

73-137   Evaluation Report: Learning Through Piano: Dallas Plan, 1973, Allen W. Scott, 28 pp.

PAUL L. DUNBAR
VISUAL ARTS PROGRAM PILOT TEST

<u>Objectives of the Program</u>:   The Dunbar Visual Arts Program is a compre-
hensive, sequential Program based on the observed needs of Dallas inner-
city children.   The Program had undergone extensive design-testing prior
to the 1972-73 pilot test.   Some of tne major goals of the Program are
to enable children to develop knowledge of the concepts, principles, and
elements of art; develop skills with tools and media; develop an aware-
ness of beauty, its sources and potential in their environment; create
original art products; and achieve success in art which is enjoyable to
them.

<u>Purpose of the Evaluation</u>'   The evaluation of the Dunbar Visual Arts
Program was designed to determine whether the Program was appropriate
for a self-contained kindergarten class, a self-contained first-grade
class and a kindergarten-through-one multiage class.   In addition, the
effectiveness of each component of the Program was examined.   The
purpose of this examination was to aid in decision-making regarding
future dissemination, extended pilot-testing, continued pilot-testing
at Dunbar, or, in the event the Program shows little promise, re-
direction or discontinuation of efforts.

<u>Sample</u>:   One kindergarten class, one kindergarten-through-one multiage
class, and one first-grade class participated in the Program.   The
children in the first-grade class had been randomly assigned to this
class.   The other two classes were intact with no random assignment.

<u>Evaluation Design</u>:   First-grade   R(Subjec.s)   assignment $0 \ X_1 \ 0$
                                                                              $0 \ X_2^1 \ 0$
                                                                              $0 \ X_3^2 \ 0$
                                                                              $0 \ X_4^3 \ 0$

                       Kindergarten   assignment $0 \ X_1 \ 0$
                                                                              $0 \ X_2^1 \ 0$
                                                                              $0 \ X_3^2 \ 0$
                                                                              $0 \ X_4^3 \ 0$

                       Multiage   assignment $0 \ X_1 \ 0$
                                                                              $0 \ X_2^1 \ 0$
                                                                              $0 \ X_3^2 \ 0$
                                                                              $0 \ X_4^3 \ 0$

One self-contained first-grade class, one self-contained kindergarten
class, and one team-taught multiage class received the Dunbar Visual Arts

Program. Only the first-grade class was formed by random assignment. X_1 X_2, X_3, and X_4 represent the four units of the Program that were implemented. A unit pretest and posttest were administered before and after each unit, respectively. These tests were designed as inferential measures of the unit with which they were associated. More direct objective measurements were made at the end of each lesson. The major evaluation questions of interest were:

1. What is the level of performance on unit tests of kindergarten participants, of first-grade participants, and of kindergarten-through-one multiage participants by age group?

2. What is the level of pupil growth from unit pretest to posttest of kindergarten participants, first-grade participants, and kindergarten-through-one multiage participants by age group?

3. What is the level of performance on lesson assessments of kindergarten participants, first-grade participants, and kindergarten-through-one multiage participants?

Evaluation Results:

1. The 80-80 criterion (80% of the children correctly answering 80% of the items) on the unit tests was met by the first-grade and mulitage classes on 75% of the units. The kindergarten class, on the other hand, failed to meet criterion on any of the units.

2. The validity of the unit tests as measures of the Program objectives was seriously questioned when they were found to yield markedly different results from those obtained by the more direct lesson assessments. This discrepancy has led to the extensive revision of the unit tests as well as the unit structure for the 1973-74 school year.

3. The lesson assessments revealed that the Program was quite effective in meeting its own objectives. These results were consistent for kindergarten, first grade, and kindergarten-through-one multiage classes.

Recommendations of Evaluator:

1. The Program appears to be ready for extended pilot-testing in a limited number of schools (no more than two or three schools).

2. Additional efforts should be exerted in the development and validation of unit tests.

3. Kindergarten-through-multiage classes and self-contained first-grade classes should be given first priority over self-contained kindergarten classes as extended pilot-test sites.

4. Staff development and program implementation should be initiated early enough to facilitate completion of the Program during the school year.

5. The participants in Level I of the Program should be kept together for pilot-testing of Level II during the 1973-74 school year.

Additional Information:

72-99   Evaluation Design for Paul L. Dunbar Visual Arts Program, 1972, Allen W. Scott, 14 pp.

73-136   Evaluation Report: Paul L. Dunbar Visual Arts Program Pilot Test, 1972-73, Allen W. Scott. 27 pp.

CAREER DEVELOPMENT CENTER
SKYLINE - CONTEXT EVALUATION

Objectives of the Program: The Skyline Career Development Center provides
extensive preparation in a specific area of opportunity without sacrificing
college entrance requirements. Any high school student in the Dallas
Independent School District who meets certain minimal requirements can
enroll in any of a variety of programs. Thereby the Career Development
Center becomes an extension of all District high schools that offers
participants the opportunity to obtain knowledge and experience in tech-
niques of an infinite variety in selected advanced study and career areas
heretofore unavailable. The Center's innovative approach demands the best
teaching staff that can be provided. This means not only exceptional
academic and technical knowledge and the ability to impart it but also personal
involvement above and beyond the ordinary.

Purpose of the Evaluation: The context evaluation at the Career Develop-
ment Center was to continue the data base established during the 1971-72
school year. This data base allowed for comparative studies during the
school year, as well as longitudinal research. The student and instructor
data bases were also needed to inform administrative decision-makers of
the composition of the student body and instructional staff at the Career
Development Center. Finally, all other areas of evaluation at the Career
Development Center required an accurate accounting as to the student and
instructor population on a day-to-day basis.

Sample: All students who were accepted into the Career Development Center
were involved in the data collection for context evaluation. This included
returning students as well as new students. Also included were all
instructional staff members during the 1972-73 school year.

Evaluation Design: The context evaluation at the Career Development
Center involved the development and maintenance of an in-depth file on
each student and instructor at the Career Development Center. Major stu-
dent variables included were name and identification numbers, ethnicity,
parental data, enrollment information, and various achievement and
aptitude test scores. Instructor variables dealt with previous experience,
non-teaching experience, and educational background. The design also
involved continuous updating with reports presented in November,1972,
January, 1973; and February, 1973. The major evaluation questions of
interest were:

1. What, if any, changes occurred in the student body and
    instructional staff between the 1971-72 and 1972-73 school
    years at the Career Development Center?

2. What, if any, changes took place during the school year
    at the Career Development Center?

3. What was the extent of withdrawal, and what reasons were
    given for withdrawing, from the Career Development Center?

Evaluation Results:

1. The final CDC enrollment at the completion of the 1972-73
    school year was 2,201 students; this represented an
    increase of 27.3% over the 1,729 students enrolled in CDC
    at the end of the 1971-72 school year.

2. The ethnic makeup of the Career Development Center was
    relatively unchanged except for an increase of 3% for
    Negroes and a decrease of 4% for Mexican-Americans. The
    final ethnic composition was 71% Anglo, 22% Negro, and
    7% Mexican-American.

3. Thirteen clusters remained predominantly (over 90%) one
    sex in makeup. They were: Child Care, Cosmetology,
    Aeronautics, Architectural Drafting, Business, Construc-
    tion, Electronics, Fashion, Interior Design, Television
    Arts, Transportation Services, Environmental Control,
    and World of Manufacturing.

4. Twelve clusters remained predominantly (over 80%) Anglo
    in ethnic makeup. They were: Aeronautics, Aesthetics,
    Architectural Drafting, Drama, English, Horticulture,
    Mathematics, Music, Photography, Science, Television Arts,
    and Transportation Services.

5. Approximately 77% of the instructors at the Career
    Development Center have college degrees. The average
    instructor at the Career Development Center has nine
    years' work experience in a field related to his
    teaching assignment. Those individuals having no college
    degree average 17.3 years of work experience in their
    teaching field. All teaching staff are certified in
    accordance with State regulations governing teachers in
    their respective fields.

6. Approximately 67% of the student body at the Career
    Development Center were full-time Skyline High School
    students. This reflects no change from the 1971-72
    school year.

7. Enrollment by cluster ranged from a low of 13 in
    Mathematics to a high of 166 in Business. Generally, the
    clusters with the larger enrollments consisted of
    several sub-components.

8. Generally, the academic clusters drew students with
    strong academic backgrounds.

9. The withdrawal rate at the Career Development Center
    during the 1972-73 school year was 11.9%. This compares
    favorably to the approximately 22% withdrawal rate
    during the 1971-72 school year. Approximately 50% of the
    withdrawals took place during the first two weeks of

school or at the semester break. The two major reasons
for withdrawal were desiring to return to home school
full-time and leaving the District.

Recommendations of Evaluator:

1. Context evaluation should be continued to provide
    necessary inputs for administrative personnel, as well
    as data for other evaluation efforts.

2. Given the extent of predominantly Anglo or unisex
    clusters, additional steps should be taken to encourage
    minority students or students of the opposite sex to
    enroll in those clusters.

3. Considering the limited representation of minority
    groups on the instructional staff at the Career Develop-
    ment Center, efforts should be redoubled to hire
    qualified minority instructors.

Additional Information:

S72-73 - 8   Preliminary Student Context Data Report, 1973, Walter H. Hardi,
              66 pp.

S72-73 - 9   Preliminary Instructor Context Data Report, 1973, Walter
              J. Hardi, 8 pp.

S72-73 - 13   Initial Student Context Data Report, 1973, Walter J. Hardi,
              71 pp.

S72-73 - 19   First-Semester Student Withdrawal Report at the Skyline
              Career Development Center, 1973, Walter J. Hardi, 8 pp.

S72-73 - 22   First-Semester Context Data, 1973, Walter J. Hardi, 66 pp.

S72-73 - 29   Preliminary Graduate Student Report, 1973, Walter J. Hardi,
              14 pp.

SKYLINE CAREER DEVELOPMENT CENTER - PROCESS EVALUATION

Objectives of the Program: The Skyline Career Development Center is
the product of the Dallas Independent School District's commitment to
career education. The facilities and equipment are modern and repre-
sentative of that found in various careers for which the students are
receiving training. (There are twenty-eight clusters representing
many different career areas.)

Curriculum continues to be developed for the Center which may have
impact throughout the District. The curriculum is to be unique to
the District. It is also meant to be flexible, enabling students to
perform at varying levels and terminate at different points in any of
the offerings.

Instructors were also encouraged to explore new relationships, try
new ideas, and investigate innovative teaching strategies. This
stemmed from the concept of the Career Development Center as a cat-
alyst for positive change.

Purpose of the Evaluation: Process evaluation (derived from the CIPP
model) was designed to detect or predict, during implementation stages,
defects in the procedural design (including setting) or its implementa-
tion. This provided needed periodic feedback to the project manager
and other decision-makers, who had the responsibility for continuous
control and refinement of plans and procedures.

Sample: All twenty-eight clusters at the Career Development Center
were evaluated during the 1972-73 school year.

Evaluation Design: The overall strategy was to identify and continually
monitor the potential sources of failure in the project. Personal
interviews and observations combined with survey questionnaires pro-
vided the information for this part of the evaluation. Observation
and interview efforts were spread over two complete rounds from
September, 1972, to April, 1973. The six major evaluation questions
under process evaluation were:

1. Were the facilities and equipment adequate for the intended
    activities; if not, what changes were recommended?

2. To what extent was the program, as designed, being implemented?

3. To what extent were the facilities and equipment being util-
    ized?

4. To what degree was the curriculum, as implemented, customized to the needs of the individual student?

5. Were instructors aware of the appropriate sources of assistance concerning any problems or questions they might have?

6. How much time was spent by instructors on administrative work and was it worthwhile?

Evaluation Results:

1. There existed, and, in some cases, still exists, a need for additional materials and equipment in a few clusters.

2. Instructors universally held the opinion that practically all curriculum would need some form of revision.

3. There was a general satisfaction on the part of everyone over the operation during the 1972-73 school year as compared to the 1971-72 school year.

4. Most clusters were found to be individualizing the implementation of the curriculum as written, and students seemed most enthusiastic to learn.

5. Most instructors were aware of the appropriate channels for obtaining information or assistance at the Center.

6. Of all administrative forms required of personnel at the Career Development Center, only two were not considered by instructors to be worth the time required to fill them out. They were the Curriculum Revision Form and a TEA Course Data Form.

Recommendations of the Evaluator:

1. Further efforts should be made by the Research and Evaluation staff to provide observational data concerning curriculum implementation.

2. Due to the sensitivity of the information obtained, care must be taken in the handling, dissemination, and reaction of interim reports.

3. While developmental projects lend themselves to constant change, additional attempts should be made to test existing curriculum before allowing changes to take place.

4. Given the amount of time required and the suggestions made by instructors, assistance in completion and/or alteration of administrative forms should take place over the summer of 1973.

5. Because of the nature of the information collected, it is suggested that considerations enumerated within the text of this report, under Conclusions, be examined before reacting to the above findings and recommendations.

Additional Information:

72-105   Plan for the Evaluation of the Skyline Career Development Center 1972-73, Thomas G. Krueck, 21 pp.

S72-73-11   Final Process Evaluation Report for Round 1, 1973, Janice Lave, Bob Clements, Dan Peterson and Thomas Krueck, 29 pp.

S72-73-15   Instructors' Opinions toward Administrative Forms Used at Skyline Career Development Center, 1973, Janice Lave, 17 pp.

S72-73-30   Final Process Evaluation Report for Round 2, 1973, Thomas Krueck and Dan Peterson, 17 pp.

Also Interim Process Evaluation Reports:

S72-73-1	S72-73-18
S72-73-2	S72-73-20
S72-73-3	S72-73-24
S72-73-4	S72-73-25
S72-73-5	S72-73-26
S72-73-6	S72-73-28

SKYLINE CAREER DEVELOPMENT CENTER
PRODUCT EVALUATION

Objectives of the Program: The Skyline Career Development Center is the
product of the Dallas Independent School District's commitment to career
education. The facilities and equipment are modern and representative
of that found in the various careers for which the students are receiving
training. (There are 28 clusters representing many different career
areas.)

Curriculum continues to be developed for the Center, which may have impact
throughout the District. The curriculum was to be unique to the District.
It was also meant to be flexible, enabling students to perform at varying
levels and terminate at different points in any of the offerings.

As part of the concept of the Career Development Center as a catalyst
for positive change, extensive efforts were made to provide criterion-
referenced assessment instruments. The instruments were designed to
measure success on the curriculum.

Finally, the program was to foster more favorable attitudes toward school
and encourage students to select and develop career skills.

Purpose of the Evaluation: Product valuation (derived from the CIPP
model) was designed to measure and interpret student attitudes and
performance both at the conclusion of the project's second year of
operation as well as during the school year. Also included in this
portion of the evaluation was the examination of instructor and parent
attitudes. This would allow decision-makers to carry out a change
process with alternative options available depending on the findings
gained through the evaluation.

Sample: All or a portion (depending on the study) of the student body,
parents of the students, and the instructional staff at the Career
Development Center during the 1972-73 school year were included in
product evaluation.

Evaluation Design: The overall strategy was to obtain attitudinal and
performance data on a wide variety of topics dealing with the Career
Development Center and its operation. Personal interviews, survey
questionnaire, student records, and a testing program provided the
information for this part of the evaluation. Data were collected
throughout the 1972-73 school year as required by each individual study.
The five major evaluation questions under product evaluation
as of July, 1973, were:

1. What were the attitudes of students and parents toward
    the present form used for reporting student progress?

2. What were the attitudes and/or perceptions of students
    toward the bussing to and from the Career Development Center?

3. What was the student performance on the stated objectives for the cluster?

4. What were the students' attitudes toward, and perceptions of, class, career, and the Center itself?

5. How did counselors and students perceive the counseling program?

6. What were the activities of the 1971-72 school-year graduates six months after graduation?

Evaluation. Results:

1. Of the 323 criterion-referenced test items evaluated, 144 were deemed inappropriate for future testing. The major reason for suggesting inappropriateness was incorrect type of item (e.g., paper-pencil type instead of performance).

2. Students in general, and minority students in particular, continued to view the Career Development Center in a most positive light. They voiced greatest approval of the individualized instruction taking place at the Center.

3. The Student Progress Report Form, while favored over conventional reporting, was deemed in need of revision by students and parents in order to make it more communicable.

4. Parents viewed the Career Development Center as being open. They felt it was generally easy for parents to interact with the staff at the Center. Blacks, more than any other ethnic group, expressed this sentiment.

5. Students who relied on bussing for transportation were found to be generally satisfied with the existing bussing system.

6. Almost two-thirds of all CDC students utilized the Counselor's Office, and virtually all of them received the help they were looking for. However, part-time students seldom use the counseling facilities at the Center.

7. Only 3% of the former students were found to be unemployed as of March, 1973. Of those employed, almost one-half were employed in areas related to their work at the Center.

Recommendations of Evaluators:

1. Instruction should continue to be individualized when-
    ever and wherever feasible.

2. Assistance should be given to students in finding a
    job suitable to their training.

3. The individual student-progress reporting concept should
    be continued. However, efforts need to be made to
    assure easier understanding of the forms.

4. Extensive effort should be made to provide an appropriate
    "criterion-referenced" assessment instrument for each
    behavioral objective.

5. Alternative methods still need to be sought in
    communicating with minority parents.

6. Additional studies should be undertaken to examine
    possible retention problems involved in auditing student
    performance on stated objectives.

7. Part-time students should be encouraged to take
    advantage of the counseling assistance available at
    Skyline.

8. Further follow-up should be conducted on the graduates
    of 1971-72.

Additional Information:

72-105   Plan for the Evaluation of the Skyline Career Development
                Center 1972-73, Thomas G. Krueck, 21 pp.

S72-73-7   Assessment of Conditions and Limitations at Skyline CDC
                with reference to Criterion-Referenced Testing as of
                November 1, 1972, Robbie G. Davis, 15 pp.

S72-73-14   Parent Impressions of the Student Progress Reporting Form,
                1973, John Robert Clements, 13 pp.

S72-73-16   Career Development Center Student Opinion Survey, 1973,
                Dan Peterson, 32 pp.

S72-73-21   Testing Results of the Armed Services Aptitude Battery
                Administered at the Skyline CDC, 1973, Robbie G. Davis,
                54 pp.

S72-73-29   Preliminary Graduate Student Report, 1973, Walter J. Hardi, 14 pp.

S72-73-33   Career Development Center Parental Response to "The Parent School Communications Questionnaire," 1973, John R. Clements, Leonard Pruitt, 13 pp.

S72-73-34   Final Report for Criterion-Referenced Testing at the Skyline Career Development Center for the Academic Year of 1972-73, Robbie G. Davis, 42 pp.

S72-73-35   Student Perceptions and Impressions of the Career Development Center, 1973, Dan Peterson, 31 pp.

S72-73-36   A Study of Retention Based Upon Results of Two Test Administrations in Different Clusters at the Skyline CDC, 1973, Robbie G. Davis, 6 pp.

Also interim Criterion-Referenced Testing Reports:

S72-73-10   S72-73-27
S72-73-12   S72-73-31
S72-73-17   S72-73-32
S72-73-23

FINAL AUDIT REPORT ON CURRICULUM DEVELOPMENT
AT THE CAREER DEVELOPMENT CENTER

This report discusses the audit of RCA Edu ition Systems curriculum
by the Skyline-CDC Research and Evaluation unit.

During the 1972-73 school year, the audit was carried out in 13
clusters for which RCA had the responsibility of developing second-
year curriculum. First-year curriculum was audited in two addi-
tional areas.

Until June, 1973, the Research and Evaluation Department also audited
curriculum developed by the DISD Career Development Center Curriculum
Department. Officially, four clusters were involved, but additional
work was done in several other areas as a service function. Audit of
DISD-developed material was discontinued primarily because the "con-
cept approach" to the curriculum development, as utilized by DISD-CDC
curriculum writers, did not lend itself to audit, using the guidelines
developed for auditing the RCA curriculum.

Purpose of the audit function was to ensure measurability of behavioral
objectives and the efficacy of their corresponding criterion-referenced
assessment instruments. Other requirements of concern to Research and
Evaluation included standardization, specificity, realistic time frames,
and appropriate and acceptable methods of measuring or judging task
completion. For a more detailed outline of guidelines utilized by Re-
search and Evaluation, refer to the body of this report.

To date, some 1,055 behavioral objectives and 740 criterion-referenced
assessment instruments have been reviewed. Additional instruments are
still being submitted.

The major results of the audit function appeared to show that RCA was
successfully fulfilling their contractural obligations.

Additional Information:

73-202   Final Audit Report on Curriculum Development at the
          Career Development Center, Thomas Krueck, 10 pp.

BASAL READING PROGRAM:
KEYS TO READING

Objectives of the Program: Keys to Reading is a basal reading Program which emphasizes the development of word-analysis skills through a contextual-phonetic approach. The fundamental objectives of the Program are to develop competence in basic aspects of the reading process, to engage in general learning functions appropriate to reading, and to apply reading skills and understandings. Thus, the overall Program is expected to have a significant impact on the development of both cognitive and affective reading skills.

Purpose of the Evaluation: The evaluation of the Keys to Reading Program was designed to determine how effective the Program was in comparison to the primary DISD basal reading program, Houghton Mifflin. Evaluation results were expected to be used as input to decide if the Keys to Reading Program was sufficiently effective to warrant its continuation or expansion to other schools.

Sample: Four elementary schools, two experimental sites and two comparison sites, were included in the study. Experimental schools were Nancy Moseley and Seagoville, with Richard Lagow and Julius Dorsey as comparison schools. The Keys to Reading Program was implemented in grades one through three at the experimental schools, with comparison schools providing instruction under the Houghton Mifflin reading program.

Evaluation Design: A nonrandomized control-group pretest-posttest de. ign

	Pretest	Treatment	Posttest
Experimental	T_1	X	T_2
Comparison	T_1		T_2

was used in assessing students' cognitive reading skills. Since comparison and experimental student populations were carefully matched according to ethnic composition, socioeconomic level, and past reading achievement, the internal validity of the design was considered satisfactory. In addition, further control of the data was obtained using "blocking" or "leveling" procedures.

A control-group posttest-only design was used to analyze individualization

	Pretest	Treatment	Posttest
Experimental		X	T_2
Comparison			T_2

of instruction and affective reading data. Pretest data were not available due to late implementation of the evaluation design. However, the validity of the design would seem to be adequate due to the careful matching of experimental and comparison student populations.

The major evaluation questions addressed were:

1. What was the organization of the Keys to Reading Program in those schools where it was piloted?

2. Was there greater individuali_tion of instruction under Keys to Reading than with the Houghton Mifflin reading program?

3. Did students in the Keys to Reading Program show a greater level of performance on a standardized measure of reading achievement than students in the Houghton Mifflin reading program?

Evaluation Results:

1. There was the highest degree of implementation of the Keys to Reading Program.

2. In comparison to Houghton Mifflin teachers, Keys to Reading teachers perceived their reading Program as being more effective in developing decoding/word perception skills and study/reference skills.

3. There was no apparent difference in the degree of individualization of instruction between the Keys to Reading and Houghton Mifflin programs.

4. With the exception of "high" ability students at the second-grade level, Keys to Reading students exhibited significantly greater achievement than Houghton Mifflin students. Achievement differences were most striking at the first-grade level, with Keys to Reading students exhibiting an especially large achievement advantage.

5. Affective reading measures were found to be invalid, and consequently no attempt was made to interpret the data.

Recommendations of Evaluator:

1. The Keys to Reading Program should be continued at Nancy Moseley and Seagoville.

2. The evaluation effort should be continued in order to assess long-term effects of the Program.

3. The Program should be extended to other pilot schools having disadvantaged student populations, with careful evaluation of its effectiveness in those settings.

4. If the Program is expanded, careful planning should be undertaken to ensure a Program design which will readily lend itself to evaluation.

5. Instruments to assess students' affective reading skills accurately should be identified or designed.

Additional Information:

72-112   Evaluation Design for Basal Reading Program: Keys to Reading, 1972, C. LaVor Lym, 48 pp.

73-144   Basal Reading Program: Keys to Reading, 1973, C. LaVor Lym, 77 pp.

RIGHT TO READ PROGRAMS

Objectives of the Program: The school-based National Right to Read
Effort (NRRE) was aimed at having selected schools assess the reading
needs of their pupils, critically review their present reading program,
and reorganize their program to fulfill the defined needs. Although
materials and equipment could be obtained with Right to Read (R2R) funds,
the NRRE did not involve the adoption of a "specified" curriculum.
However, implementation of a "diagnostic-prescriptive" approach to
instruction was espoused.

In general, R2R students were expected to show improved performance on
cognitive reading tasks and to demonstrate increased motivation toward
reading or school, R2R teachers were expected to gain proficiency in the
application of diagnostic-prescriptive techniques, and parents of R2R
children were expected to become knowledgeable about the program and
actively participate in program planning and implementation.

Purpose of the Evaluation: Evaluation of the R2R programs within the
DISD was designed to define the environments of the programs, assess the
implementation of the programs, and measure student outcomes in relation
to cognitive and affective reading skills and attitude-toward-school.
Evaluation results were expected to provide program management with
information which could be used to improve the effectiveness of the
programs.

Sample: Seven elementary schools, three R2R sites and four comparison
sites, were involved in the evaluation. R2R schools were David Crockett,
Paul L. Dunbar, and T. D. Marshall, while James Bowie, James W. Fannin,
W. W. Bushman, and Erasmo Seguin were comparison schools. The R2R
program at David Crockett was restricted to grades one through six,
while program implementation was focused on grades four through six at
Paul L. Dunbar. Grades one through three, or the total student popula-
tion, at T. D. Marshall were involved in the program.

Evaluation Design: A nonrandomized control-group pretest-posttest
design

	Pretest	Treatment	Posttest
Experimental	O_1	X	O_2
Comparison	O_1		O_2

was used in assessing students' cognitive reading skills. In the
configuration for this design, X represents the implementation of R2R,
while O_1 and O_2 represent, respectively, pretest and posttest observa-
tions. Since comparison and experimental students were matched

according to ethnic composition, socioeconomic level, and past reading achievement, the internal validity of the design was considered satisfactory. In addition, further control of the data was obtained using "blocking" procedures.

A pretest-posttest design

	Pretest	Treatment	Posttest
Experimental	O_1	X	O_2

was used to examine "within group" changes in achievement by R2R students.

Data related to individualization of instruction, teachers' ratings of their reading programs, attitude-toward-reading, and attitude-toward-school were obtained using a control-group posttest-only design.

	Pretest	Treatment	Posttest
Experimental		X	O_2
Comparison			

The major evaluation questions of interest were:

1. To what extent was the "diagnostic-prescriptive" approach applied by the R2R teachers?

2. What was the extent of parental awareness of the DISD R2R programs?

3. Were R2R classrooms characterized by a higher degree of individualization of instruction than comparison classrooms?

4. Did teachers' ratings of the R2R program differ from comparison teachers' ratings of their reading program on dimensions of

   a. decoding or word-perception skills
   b. study/reference skills?
   c. critical thinking (evaluation)?
   d. comprehension?
   e. reading aesthetics?

5. Did R2R students show a change in performance from pretest to posttest on

   a. a standardized test for reading achievement?
   b. a selected measure of attitude-toward-reading?
   c. a selected measure of attitude-toward-school?

6. Did R2R students perform at a higher level than non-R2R students on

teachers in applying uniform diagnostic techniques and formulating instructional prescriptions. Charts or folders reflecting placement (as based on diagnosis), prescribed instruction, and attainment or mastery of the prescribed work should be maintained for individual students.

2. The evaluation of the R2R programs should be extended, with a greater emphasis on process evaluation, assessment of community involvement, and the examination of affective reading constructs.

3. To improve the quality of reading achievement data, all R2R teachers should be exposed to a special inservice workshop designed to reinforce the knowledge and application of skills in test administration.

4. The application of criterion-referenced tests in assessing the R2R programs should be considered. In many R2R classrooms, curriculum materials are being used for which criterion-referenced tests already exist. For other classrooms, criterion-referenced tests may be adopted or designed.

5. Any new teacher making the transition into one of the R2R programs should receive special assistance and inservice training.

6. Although the data clearly indicate an especially low achievement gain for first-grade students at David Crockett, the source of this finding remains unknown. The uniformly low level of performance demonstrated by Anglo, Negro, and Mexican-American students would suggest either a breakdown in the testing procedure or serious deficiency in the instructional process. A careful investigation should be made to determine that source which actually gave rise to the finding.

7. A basic-concepts test written in Spanish should be used in testing Spanish-dominant Mexican-American students at David Crockett. Testing with this instrument should replace testing with standardized achievement tests.

8. The factors contributing to the extremely low level of performance demonstrated by fifth-grade students at Paul L. Dunbar should be identified and necessary steps taken to remedy the problem.

9. Instruments to assess students' affective reading skills accurately should be identified or designed. Any instrument adopted should exhibit sufficiently high reliability and validity to give confidence in the results obtained from its use.

a. a standardized test for reading achievement?
b. a selected measure of attitude-toward-reading?
c. a selected measure of attitude-toward-school?

Evaluation Results:

1. Although R2R teachers showed extensive implementation of curriculum materials and equipment, there was little implementation of the diagnostic-prescriptive instructional approach.

2. The estimated percentage of parents who were aware of the R2R program at David Crockett and Paul L. Dunbar was approximately 40%. A somewhat higher percentage of parents at T. D. Marshall, 67%, was estimated to be aware of the R2R program at the school.

3. There was no apparent difference in the degree of individualization of instruction between R2R and comparison classrooms.

4. In comparison to non-R2R teachers, R2R teachers viewed their program as being significantly more effective in developing study/reference skills, critical thinking, comprehension, and reading aesthetics. Especially large differences in ratings were noted for reading aesthetics and critical-thinking skills.

5. Achievement gains were generally below the expected level (i.e., a month gain in grade equivalent for each month of instruction) except for second-grade students at David Crockett.

6. In general, Mexican-American students in the R2R program performed at a lower level on the standardized reading tests but made gains comparable to "other" students.

7. As compared to similar students not involved in the program, R2R students, in general, showed no better performance on standardized reading tests and, in some instances, exhibited significantly lower achievement.

8. Assuming validity of school-based attitude measures, no significant difference was noted between R2R and non-R2R students for this criterion.

Recommendations of the Evaluator:

1. A greater implementation of the diagnostic-prescriptive technique within the classroom is recommended. Technical assistance should be offered at the building level to assist

Additional Information:

72-111   Evaluation Design for Right to Read Programs, 1972-73,
          C. LaVor Lym, 54 pp.

73-140   Evaluation Report: Right to Read Programs, 1972-73,
          C. LaVor Lym, 107 pp.

SUPPORTIVE SERVICES
FOR INDIVIDUALIZED INSTRUCTION -
SPECIAL EDUCATION

Objective of the Program: The purpose of Supportive Services is to provide exceptional children with an individualized educational plan which uses one or more instructional arrangements to integrate the exceptional child, whenever feasible, into the regular curriculum. The use of local Admission, Review, and Dismissal (ARD) Committees, composed of local school personnel and itinerant appraisal personnel, to deliver special education services was a radical revision of the traditional special education model. It is hoped that Supportive Services can extend special education services to all eligible students and can contribute to providing these students with a successful school experience.

Purpose of the Evaluation: The evaluation concentrated heavily on process evaluation to determine the success of program implementation, since this was the first year of operation. The evaluation attempted to monitor the implementation process and to provide feedback to program management. Product evaluation considered student improvement in academic achievement and attendance.

Sample: The program was implemented in the Thomas Jefferson High School cluster. The eleven schools included were: T. Jefferson High School, Cary Junior High School, Walker Middle School, Caillet, Foster, Burnet, Field, Longfellow, Walnut Hill, Polk, and Williams Elementary Schools.

Evaluation Design: The evaluation relied on a system analysis approach to monitor program operation and implementation. Operational records from ARD committee meetings provided information for process evaluation. Product evaluation used a pre-post measurement design in which the student's previous performance constituted the control. The major evaluation questions were:

1. What characteristics described the implementation and operation of the ARD Committees?

2. What were the attitudes and opinions expressed by faculty members toward Supportive Services in schools scheduled for 1973-74 implementation?

3. What was the effect of receiving Supportive Services with respect to academic achievement and attendance?

4. What was the reaction of ARD personnel to the Supportive Services program?

5. What were the awareness and reaction of parents whose children received Supportive Services?

Evaluation Results:

1. The program encountered major implementation difficulties.
    The predominant implementation problems were the absence
    of clearly defined operational policies and procedures,
    a tremendous backlog in the development of educational plans,
    and delays in the procurement of instructional materials.
    Management initiated a revised implementation model in
    February, 1973, which greatly improved program implementa-
    tion. There was considerable variation in the success of
    program implementation among schools.

2. Supportive Services served fewer students than expected, and
    there was no conclusive evidence that the student popula-
    tion served was necessarily appropriate as defined by program
    specifications. The typical student in the program was
    Anglo male and had a history of poor academic performance
    and poor attendance. The great majority of students had
    not previously received special education services.

3. Shortcomings in program implementation hampered delivery of
    services to students. Most students received instructional
    assistance in language arts, math, and perceptional skills
    through part-time attendance in a resource room. Counseling
    and home visits were also utilized, but numerous services
    delivered by Supportive Services personnel were not docu-
    mented in the ARD records. The majority of students were
    retained in the program for September, 1973.

4. Educational and psychological testing comprised most of the
    information-collecting activities of ARD committees. There
    was great variability among schools in the student appraisal
    process.

5. The Supportive Services personnel, parents, and regular
    faculty in schools scheduled for new implementation responded
    favorably to the program.

6. Subjective reports from program staff indicated that most stu-
    dents had shown improvement on one or more variables. There
    was objective evidence of important reading gains in one
    elementary school, and there was a trend toward improved
    attendance in a sample of all elementary students.

Recommendation of Evaluator:

1. Develop more specific program objectives.

2. Develop and communicate clearly defined operational policies
    and procedures.

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3. Develop and implement a record-keeping system which will be appropriate for all Supportive Services personnel and which will accurately provide all information needed by management for program operation and accounting.

4. Develop and implement a more precise means of determining student eligibility to ensure that the appropriate population receives Supportive Services.

5. Provide Supportive Services personnel and related personnel (regular classroom teachers) with preparation and orientation to ensure understanding of professional functions and responsibilities.

6. Provide resource teachers with an adequate instructional materials inventory at the beginning of the school year.

7. Ensure that all Supportive Services students receive educational plans which specify instructional objectives, methodology, materials, and means for observing attainment of objectives.

8. Consider differential allocation of resources to meet needs of varying student subpopulations.

Additional Information:

72-113   Evaluation Design for Supportive Services - Special Education, 1973, Daniel J. Macy, 38 pp.

73-135   Evaluation Report for Supportive Services for Individualized Instruction - Special Education, 1972, Daniel J. Macy, 61 pp.

EVALUATION OF DRUG EDUCATION PROGRAM

Objectives of the Program: The major objectives of the Drug Abuse
Education Program (DAEP) were to inform students of the facts about
drugs; to make students aware of the personal, social, and economic
problems leading to the misuse of drugs; to inform students of the
consequences of a drug-centered existence; and to promote character
and moral values which will be ultimate deterrents to drug abuse.

Purpose of the Evaluation: The major purposes of the evaluation of
the DAEP were to assess the instructional impact of the Program, to
provide information concerning the implementation of the Program,
and to examine various pilot projects within the Program.

Sample: Nine elementary schools in Area I (far North Dallas) were
stratified according to socioeconomic level of student populations
and randomly assigned to one of three instructional modes: DAEP,
Instructional Implementation, and Drug Division. Seventh-grade
health-science teachers at these schools implemented the assigned
program.

Evaluation Design: The pretest-posttest design

	Pretest	Treatment	Posttest
DAEP	O_1	X_1	O_2
Instructional Implementation	O_1	X_1	O_2
Comparison	O_1	X_1	O_2

was used to compare the effectiveness of the types of instruction, with
knowledge of drug facts, attitude toward drugs, and sentiment regarding
drug abuse education as the criteria.

The three staff development seminars (cognitive skills, valuing, and
eclectic) for the DAEP were compared, using a pretest-posttest design
similar to the one given above.

Implementation of the DAEP was investigated by making a census of
Instructional Implementation teachers and through a survey of a randomly
selected sample from the population of all Dallas Independent School
District (DISD) teachers. Youth-to-youth, a pilot project implemented
by W. T. White High School students, and the initial phase of the
Valuing program at E. D. Walker were examined by sampling the opinions
and respective student and teacher target groups.

The major questions addressed in the evaluation were:

1. What were the differences in performance among DISD students who received instruction under the DAEP, the Area I Instructional Implementation program, and Drug Decision for the following criteria:

   a. drug knowledge?
   b. attitude toward drugs?
   c. opinions concerning drug abuse education?

2. To what extent was the DAEP implemented District-wide?

3. To what extent was instruction in drug abuse education implemented by designated teachers in the Instructional Implementation program?

4. Were there differences among the three approaches to staff development in relation to acceptance of the philosophy of drug abuse education by participants?

5. Were there differences among the three approaches to staff development in relation to the acquisition of drug facts by participants?

6. Did participants perceive a difference in the effectiveness of the three approaches to staff development?

7. What were teachers' attitudes regarding training for implementing the Valuing program?

8. What were the opinions of the target student group concerning the Youth-to-Youth program?

Evaluation Results:

1. All seventh-grade students who received instruction under the Drug Abuse Education Program (DAEP), the Area I Instructional Implementation program, and Drug Decision showed improved performance from pre- to posttest on a test of drug facts. This improvement, however, was greatest for the Instructional Implementation program, followed by Drug Decision, and then the DAEP.

2. There was no change in performance on a selected measure of attitude toward drugs from pre- to posttest for any of the three instructional modes. Pretest means, which reflected positive attitudes toward drugs prior to instruction, did not differ among the three groups.

3. Drug Decision students viewed drug abuse education as more of a "waste of time" and were less interested in extending their learning about drugs than DAEP or Instructional Implementation students.

4. DAEP and Drug Decision students believed more strongly than Instructional Implementation students that "the most important reason for teaching about drug abuse is to find those students who use drugs."

5. The group of teachers in Area I who were designated to work with the DAEP management in the Instructional Implementation program reported extensive implementation of drug abuse educational activities.

6. In assessing District-wide implementation of the DAEP for 1972-73, an estimated 50% of all elementary teachers did not provide any instruction in drug abuse education. Approximately 20% of those sampled in the system-wide survey reported spending three or more hours of instruction in drug abuse education.

7. Implementation of the DAEP by secondary teachers varied widely according to subject area. Estimated implementation was highest for science teachers, with about 60% of those sampled reporting three or more hours of classroom instruction. Implementation (three or more hours) for social science teachers was 35%, compared to approximately 10% for language and mathematics teachers.

8. The eclectic approach taken in the Area I staff development seminar appeared to be much more effective than the cognitive skills approach in Areas II and IV or the valuing approach in Area III.

9. Although teachers perceived the Valuing program as worthwhile, they expressed negative opinions concerning the organization of the sessions to provide training for implementation of the program.

10. Target students in the Youth-to-Youth program expressed positive opinions regarding the peer influence approach to instruction. They were especially optimistic about the effects of the program in combating drug experimentation.

Recommendations of the Evaluator:

1. Further implementation of the Drug Decision program is recommended since materials for the program are available. However,

to overcome the weaknesses in the program evidenced by teachers and students, it is recommended that: (a) the length of the program be reduced, (b) appropriate substitute films be selected for the "cartoon" films, and (c) the implementation be carefully coordinated to ensure the dispensing of materials to meet the teachers' needs.

2. The Drug Decision program should not be implemented in classrooms where students are known to have limited reading skills.

3. In extending implementation of the DAEP, special emphasis should be focused on teachers in self-contained elementary classrooms. Where there is subject-area specialization (upper elementary and secondary), social science or science teachers should be expected to show major implementation of the program. Therefore, special communication should be made with these teachers regarding program implementation.

4. The eclectic approach, which emphasizes instructional skills, cognitive skills, and valuing, should be applied in any future staff development activities for teachers.

5. The valuing program at E. D. Walker should be carefully reviewed before moving into the Instructional Implementation phase. If necessary, additional staff development sessions should be held or, possibly, alternative sites for implementing the program should be considered.

6. The Youth-to-Youth program should be continued, and, whenever possible, integrated into the teachers' instructional unit on drug abuse.

Additional Information:

72-93   Evaluation Design for the Drug Education Program, 1972-73, C. LaVor Lym, 23 pp.

73-155 Evaluation of Drug Education Program, 1972-73, C. LaVor Lym, 75 pp.

STUDY OF ALTERNATIVE GRADING
AND REPORTING PRACTICES

<u>Objectives of the Program</u>: The Dallas Independent School District has several current efforts to develop new methods of reporting student progress. These efforts include: grades one through three, the Bilingual-Multicultural Education Program and the Early Childhood Education program; grades five through eight, the Continuous Progress system at E. D. Walker; and grades ten through twelve, the Continuous Progress system at Pinkston and the Behavioral Objective system at the Skyline Career Development Center.

<u>Purpose of the Evaluation</u>: This study was designed to ascertain student, teacher, and parent opinions of the various forms being used in the District to report student progress.

<u>Sample</u>: Because of the extensive number of schools involved in some of the innovative programs, a sample of schools was selected on a geographic basis. Within the sample of schools, all teachers were surveyed and a sample of classrooms was selected for student and parent representation.

<u>Evaluation Design</u>: The above sample of students, teachers, and parents was surveyed to determine their opinion on the reporting forms used. Different techniques were used to obtain responses from parents, varying from interviews to having children take questionnaires home. The major evaluation questions of interest were:

1. Does the reporting form convey an accurate description of student progress?

2. Can parents understand the forms?

3. What recommendations would parents make for improving the reporting system?

<u>Evaluation Results</u>:

1. Teachers in most programs do not feel the present reporting form provides an accurate description of how well a child is doing. The notable exceptions are the systems used with the Bilingual-Multicultural Education Program and the Career Development Center.

2. Parents, in all cases, feel the forms do present an accurate description of how well the child is doing.

3. In all innovative systems, teachers say that parents do not understand the reporting form being used.

4. In all systems, parents say the forms are easy to understand.

5. Parents would like to see more teacher comments on the reporting forms and have parent-teacher conferences.

Recommendations of Evaluator:

1. Efforts to develop innovative, individualized student progress reporting forms should be continued.

2. Before individualized student reporting can become more widespread, individualized criterion-referenced curriculum needs to be established.

3. Efforts should be increased to find viable ways to incorporate parent-teacher conferences.

4. Whatever innovative student progress reporting systems are developed, they must not increase the present workload of teachers.

5. Extensive parental involvement needs to be incorporated into future plans to develop student progress reporting systems.

Additional Information:

73-145   Study of Alternative Grading and Reporting Practices, 1973, William T. Denton, 67 pp.

EMERGENCY SCHOOL ASSISTANCE PROGRAM

Objectives of the Program: The Federal Court order of August 9, 1971,
relative to desegregation in the Dallas Independent School District
(DISD), generated new needs which required redirection and expansion
of existing programs and the creation of new programs. To facilitate
this demand, the 1971-72 Emergency School Assistance Program (ESAP)
was funded through the United States Office of Education and consisted
of these seven components: (1) Staff Development, (2) Student Affairs,
(3) Youth Advisors, (4) Multicultural Education, (5) Principal's
Aide, (6) Community Affairs, and (7) Multiethnic Music. Each compon-
ent had specific goals which comprehensively projected the attainment
of a true cultural confluence among school personnel, pupils, parents,
and the community.

Evaluation Design: Considering that the 1971-72 school year was
basically a year of implementation of the ESAP, evaluation was largely
one of process approach. The sample consisted of all persons partici-
pating in the ESAP. Each of the seven components was monitored, and
information was compiled relative to the goal operations and evalua-
tion questions. Survey-type instruments were utilized to solicit
responses from key personnel and targeted students in each component.

Evaluation Results: Results are stated relative to each of the seven
ESAP components.

     Staff Development. The following Dallas Teacher Education
Centers were established and in partial operations as of May, 1972:
H. S. Thompson, Longfellow, Silberstein, Paul L. Dunbar Learning Lab,
Birdie Alexander, and North Dallas. These centers functioned in
training, resource, and cultural capacities. Three groups of class-
room teachers, and one group of supervisory teachers and student
teachers, indicated somewhat favorable responses toward the H. S.
Thompson program. A number of the Thompson participants, however,
related adverse feelings toward the selection process for entry into
the program.

     A Confluence of Cultures staff development program was held in
August, 1971, at Skyline Center and an attitude survey designed by
Research and Evaluation (R & E) was administered at that time. The
survey indicated generally positive feelings toward desegregation
and the District's administrative staff. The survey was not admin-
istered in the spring.

     Student Affairs. The Superintendent's Student Advisory Committee
(SUPER-SAC) met with the General Superintendent approximately once
during every six-to-eight week period of the school year. The

committee was composed of two student representatives from each high school. A questionnaire concerning the effectiveness of SUPER-SAC was administered to 30 student members of the committee on March 16, 1972. Responses toward the committee were generally favorable. There were strong indications that the committee meetings were more beneficial to the committee members, themselves, than to the students that the members represented. A high number of students were undecided about meeting student needs as a result of the committee's exchange of ideas.

In order to facilitate better student-teacher relations through improving teacher self-concept, the ZZOOOMMM Program was implemented in ten schools of the District. Eleven teachers at each school participated in the sessions which began either during December, January, or February of the 1971-72 school year. Evaluation measures were planned at the Program's initiation. These measures consisted of taped interviews, the Jim Scale (attitude measure), and a questionnaire. For the most part, specific information from the measures was held confidential.

Youth Advisors. Thirty-four youth advisors were assigned to 28 secondary schools for the purpose of designing adjustment programs for students. An opinion survey was designed by Research and Evaluation and administered in May, 1972, to a stratified, random sample of students who were expected to be served by youth advisors. Twenty-seven schools administered the opinion surveys and returned 73% of the 2,173 surveys distributed. Students generally indicated that one or more of these services was rendered: (a) private counseling, (b) consulting with parents, (c) adjusting class schedule, (d) counseling concerning relationships with fellow students, and (e) adjusting to riding the bus to school.

Responses were generally favorable toward the youth advisor's services. The student responses, however, did cluster according to school; students at certain schools were distinctly more favorable than students at other schools. There were approximately equal positive and negative reactions to the question of needing the youth advisor next school year. At least two-thirds of the 27 schools had returns in which there were more students reporting some contact with the youth advisor than there were students reporting no such contact. Two youth advisors were reassigned for the 1972-73 school year.

The tutoring program was operational in 23 secondary schools, which included three night schools. Evaluation of the tutoring program was the primary responsibility of the program coordinator, Mr. Jim Daniel. According to Mr. Daniel's evaluation, little objective data was available to support the general concensus that the program was successful. Questionnaires regarding the effectiveness of the program were administered to the students tutored, tutors, and

school administrative personnel. These questionnaires solicited highly favorable responses. Specific data from some schools were compiled. For example, results from Sequoyah Middle School indicated a gain in reading ability by most students where previous records indicated a loss in reading ability. There was some evidence that attendance improved among the tutored Sequoyah students. Information from the program, as a whole, has suggested that student attitudes were improved.

Multicultural Education. Resource materials were recommended and purchased for the six Teacher Education Centers. The materials were mainly a teacher-training resource which included some pupil materials. Three curriculum writers who will develop multicultural social education curriculum are funded under ESAP.

Principal's Aide. Thirty-six teacher aides were assigned to 15 elementary and 13 secondary schools. Evaluation forms concerning the services of the 36 teacher aides were sent to principals of 28 schools on May 28, 1972. Thirty-three of the forms were completed and returned. Most of the forms indicated that teacher aides assisted teachers in individualizing instruction and in rendering other student services. The aides usually began work either in January or February, 1972. Over half of the respondents indicated that the aides exhibited positive attitudes and cooperated well with school personnel. A few forms stated that some assigned aides never arrived to begin work and that others had left the job following only a short period of work.

Community Affairs. The first administration of the public awareness-attitude survey, which deals specifically with desegregation, was made during the latter part of the first semester (1971-72). The District contracted with Louis, Bowles, and Grace, Inc., to do the survey. The second administration of the same survey was conducted during the summer, 1972. A report of the results of the surveys was released by the Board of Education in late fall, 1972.

A community-relations professional, Mr. Robert Watkins, assumed his duties on January 24, 1972. His duties have included the organization and coordination of: (1) after-school recreation programs, (2) student tours, (3) school exchange programs involving parents, (4) booth exhibits in various school communities, and (5) Ethnic Arts Festival.

Two of the proposed non-professional field workers, community liaison persons, were employed part-time on March 15, 1972 (approximate date). These two persons reported to Mr. Watkins and basically served as communicators between the school and the community.

The District's first Ethnic Arts Festival was held on May 18, 1972, at the Dallas Memorial Auditorium. The festival featured 1,500 students of all ages and ethnic groups in a sampling of ethnic

songs, instrumental music, and dances. Outstanding guest performers representing multiethnic backgrounds also were included in the festival. Narrator and producer was Tom Hughes, managing director and producer of the Dallas Summer Musicals. Student art, which was displayed throughout the auditorium, portrayed the theme of the evening. The festival attracted a diverse and capacity audience.

Multiethnic Music. Instruction in Mariachi (Mexican music) was provided for students at North Dallas High School, Spence Junior High School, and Rusk Junior High School. These instructions began February 21, 1972 (approximate date), and served approximately 56 students. Tuition-free classes in Mariachi were piloted in summer, 1972, at the secondary level. There was an insufficient number of students volunteering for Mariachi at Skyline High School, therefore the proposed class was not established.

Instructions in Suzuki Violin were extended from the Paul Dunbar Elementary School to William Travis Elementary School on October 1, 1971. The program was also begun at Edward Titche Elementary School on October 22, 1971. This extension provided instruction for an additional 95 pupils. ESAP funds were used to purchase instruments for the Travis and Titche programs. Five public performances in violin have been reported with student participants from the Suzuki program. These performances were all rated either "good" or "excellent" by community and school music personnel. Students in the Suzuki program also participated in the "massed strings" at the DISD Ethnic Arts Festival on May 18, 1972.

Recommendations of Evaluator: Inconclusive evaluation results of all activities of the various ESAP components revealed a need for the constant monitoring of these activities. This procedure would further identify the planned and the implemented activities relative to accomplishing the proposed goals of each component. This process approach to evaluation would enable Program changes which would ensure more goal-directed activities for terminal examination. End results would facilitate decision-making processes and thus enable administrative personnel better to serve DISD students who were specifically affected by the desegregation order of August, 1971. Because a number of activities included in this evaluation have only been operational for a short period of time, a continual monitoring of ESAP over an extended period of time would also permit more valid and reliable results.

The following ESAP components reflect the indicated recommendations:

1. Staff Development. Since teachers responded adversely toward the means of selection for participation in the Teacher Education Centers, it is recommended that the

present process for selection be examined for revisions.

2. Student Affairs. Although evaluation revealed that there was significant student representation at SUPER-SAC meetings, members did indicate a need to capture input from more students besides themselves. Therefore, it is recommended that efforts be made to include more ideas from students in SUPER-SAC activities.

3. Youth Advisors. The high number of students who did not know about the youth advisor suggests that a definite effort should be made to inform the targeted students of services available to them.

Additional Information:

72-75   1971-72 Emergency School Assistance Program, 1972, Cordelia R. Alexander, 87 pp.

INDIVIDUALLY GUIDED EDUCATION

Objectives of the Program: Individually Guided Education (IGE), developed by the Institute for the Development of Education Activities (/I/D/E/A/), began implementation in Dallas in February, 1973, in seven elementary schools. IGE is an approach to schooling that provides a framework for individualized instruction through a staff development program designed to reorganize and redirect the time, talents, and energies of an entire school. It has as one of its main purposes that of providing teachers with the mechanisms for developing appropriate learning programs for each child.

Purpose of the Evaluation: The evaluation of IGE was designed to determine if its implementation promotes team-teaching and changes the mode of instruction toward the District's priority goal of individualized instruction. In addition, the evaluation design sought information on the suitability of IGE for implementation in other District elementary schools.

Sample: All teachers in the seven schools implementing IGE were included in the data-collection process. These schools were Birdie Alexander, William M. Anderson, F. P. Caillet, T. L. Marsalis, John J. Pershing, Erasmo Seguin, and Ascher Silberstein.

Evaluation Design: A questionnaire related to the evaluation questions was administered to all teachers prior to the beginning of IGE implementation (February, 1973) and at the end of the school year (May, 1973). Comparisons were made between the two administrations. In addition, three schools were in the initial phases in May, 1973, and four schools evidenced higher levels of implementation. These two levels were compared to determine if the degree of implementation affected attainment of project goals. The major evaluation questions were:

1. Does implementing IGE increase the level of team-teaching?

2. Does implementing IGE make more time available for teacher-planning?

3. Does implementing IGE increase the incidence of student assessment by teachers prior to and after instruction?

4. Does implementing IGE change the mode of instruction?

5. Do teachers feel that there exist opportunities for professional growth within the school?

Evaluation Results:

1. The implementation of IGE increased the level of team-teaching even in its initial stages and more so when moderate levels of IGE implementation were achieved.

2. Initially, the time available for teacher-planning decreased but showed a slight gain after the initial phase was completed.

3. There was a slight increase in teacher assessment of students prior to instruction and no change in post-instruction assessment.

4. A slight increase in multiage grouping was reported: there was no change in the use of large-group, small-group, and one-to-one instructional techniques; and a marked increase in the use of independent study as an instructional mode was reported.

5. Teachers felt that there are opportunities for professional growth within the school through formal inservice programs and through involvement in higher levels of professional decision-making.

Recommendations of Evaluator:

1. Continue the implementation of IGE in Dallas.

2. Provide encouragement and support to those schools in the initial implementation phases. Additional teacher-aides would help, if available.

3. Provide specific inservice programs related to alternate modes of instruction.

4. Insure that student independent study is not being used as a means of providing teachers with more planning time during the school day unless it is an effective instructional strategy.

Additional Information:

73-127   Evaluation Design for Individually Guided Education, 1972-73, Gary W. Womble, 10 pp.

73-154   Evaluation Report: Individually Guided Education, 1972-73, Gary W. Womble, 26 pp.

OPEN-AREA SCHOOLS

Objectives of the Program: Open-area schools were introduced in the Dallas
Independent School District (DISD) in an attempt to increase individualized
instruction and meet a growing demand for new facilities. Open-area school
construction was initiated to facilitate new instructional and administrative
philosophies and reduce building costs.

Purpose of Evaluation: The evaluation was designed to determine if open-
area schools affected relevant student variables, i.e., did they help or
deter student progress?

Sample: Approximately 8% of the students in all open-area schools and
matched control schools were sampled. All teachers in open-area schools
and the matched control schools were included in the sample. The control
schools were matched on ethnicity, socioeconomic status, and instructional
program. The open-area schools were Arlington Park, Darrell, Navarro,
Tyler, Young, Jackson, Marshall, Seguin, and Buckner. The control schools
were Carr, Carver, Earhart, Lisbon, Budd, Miller, Thornton, and Blair.

Evaluation Design: The major evaluation questions were intended to provide
data relative to the comparability of the schools used in this evaluation,
teacher characteristics, student achievement and attitudes toward school,
and organizational climate of the schools involved. Appropriate statistical
techniques were used to measure any differences observed.

Evaluation Results:

1. The schools involved in this evaluation were not representative
    of the District as a whole.

2. The characteristics of teachers in open-area schools were
    similar to those of teachers in the matched traditionally-
    constructed schools used in this study.

3. There were no consistent differences in student achievement.

4. There were no consistent differences in student attitudes.

5. Teachers in open-area schools reported a more open
    organizational climate than did teachers in the matched
    traditionally-constructed schools used in this study.

Recommendations of Evaluator:

1. Continue to build open-area schools.

2. Encourage additional research on the effects of open-area schools on student achievement and attitudes.

Additional Information:

72-93   Evaluation Design for Open-Area Schools: 1972-73, Gary W. Womble, 22 pp.

73-134   Evaluation Report: Open-Area Schools, 1973, Gary W. Womble, 43 pp.

Clinton C. Schuhmacher
Director -
System-Wide Evaluation

MEASUREMENT PROFILES

The Dallas Independent School District Measurement Profiles, 1972-73, are a series of six reports that present a comprehensive summary of the results of the District's system-wide standardized group-testing program as well as selected community socioeconomic indicators. They contain summary statistics and norm scores within each grade, sex, and ethnic background that present a quantitative overview of measured achievement, aptitude, and observed socioeconomic status for each school in the District and for the District as a whole. Information contained in the Measurement Profiles includes for each school and geographic attendance area:

1. Median family income and District percentile norm.

2. Median parental educational level and District percentile norm.

3. Average daily attendance, average daily membership, the ratio of attendance to membership, and District percentile norm.

4. Raw score mean, median, and standard deviation, national percentile norm, and District percentile norm for the Metropolitan Readiness Test administered in the fall of grade one.

5. Raw score means, medians, and standard deviations, national grade-equivalent norms and percentile norms, large-city grade-equivalent norms and percentile norms, and District percentile norms on all District achievement tests. These include the California Achievement Test in the second grade, the Comprehensive Tests of Basic Skills in grades three through eight, and the Iowa Tests of Educational Development in grades nine and twelve.

6. Language, Non-Language, and Total deviation aptitude scores as measured by the California Short-Form Test of Mental Maturity, as well as national and District percentile norms.

The information contained in this series of reports should be useful to District decision-makers and the community in a number of ways. First, it demonstrates commitment to the school system's policy of accountability to parents and the public through a systematic reporting of the educational processes and products of the District. Second, it identifies general areas of strength and weakness in the District's educational program, thus enabling decision-makers to plan more adequately for future programs. Finally, it provides a baseline against which to compare the data of past and future years.

Important generalizations that can be made from the 1972-73 <u>Measure-ment Profiles</u> include:

1. The comparison between 1971 and 1972 achievement results is difficult because, due to pronounced population turnover, the two groups of students tested are not fully comparable.

2. When population turnover is taken into consideration, there is no evident trend in District achievement levels. That is, no practically significant overall increase or decrease exists. For instance, in several schools where Anglo turnover is minimal, achievement is up in some cases and relatively constant in others. In schools that have experienced a large loss of Anglo students, the achievement average is lower. Thus, because of the problem of population loss, and the fact that those students measured at a given grade level in 1971 are not the same students measured in 1972, the only true comparison would be to follow individual students from year to year.

3. Student achievement in the District is highly correlated with aptitude, race, parent's income and educational level, and, to a lesser extent, sex. This result is consistent with the results of similar reports from all parts of the nation.

4. The degree of achievement discrepancy on all tests is related to socioeconomic status as indicated by parental educational level and family income. The socioeconomic data were drawn from the 1970 United States census figures.

5. When economically deprived minority children enter the first grade in the District, they are about a standard deviation below the Anglo mean, or in the lower third of the distribution on most subtests of the Metropolitan Readiness Tests. The degree of discrepancy is related to socioeconomic status as indicated by parental educational level and family income.

6. The Anglo versus minority differential in achievement is larger in the upper grades than in the lower grades.

7. Schools in the northwest quadrant of the city scored higher, on the average, than schools in other areas. Schools in the northwest quadrant scored at about the seventieth percentile on local norms, those in the southwest quadrant at about the fiftieth percentile, those in the southeast quadrant at about the sixtieth percentile, and those in the Inner City at about the twenty-fifth percentile. The socioeconomic status of the four areas, as indicated by parental educational level and family income, conforms to

a pattern similar to that observed in achievement scores. This underscores the high relationship between socio-economic status and achievement.

8. Anglo students, on the average, usually scored between the forty-fifth and sixtieth percentiles on large-city norms, Negro students between the fifth and twentieth percentiles, and Mexican American students between the tenth and thirtieth percentiles. Obviously, the results vary from school to school.

9. There is marked variability among individual District schools relative to measured achievement. This variability can generally be tracked along student aptitude, ethnic and socioeconomic differences.

The tests mentioned in this document are tests of generalized achievement. It is difficult, short of teaching the test, to show major practical differences on these tests in one year's time. The tests measure the Dallas Independent School District's general educational goals, but not specific instructional objectives. For example, a specific instructional objective that one might be expected to accomplish in a given period of time would be "given an orally presented word from the Basal Word List, a student will recognize its printed form." Generalized achievement in reading is, however, a more long-range process.

These data may most effectively be used by policy makers in planning and implementing improvements in the Dallas Independent School District's educational program. For example, if measured achievement in Language is low in a given area of the city, District decision-makers can be made aware of the need and plan remediation and special programs in that subject area. They are descriptive data. They cannot be used to explain why a situation exists, only that it does exist. Because they are descriptive data, comparisons between schools should be made with the greatest degree of care. Socioeconomic differences are documented, however, there may be numerous other variables that affect student achievement that are not documented in the Profiles. Even with the aforementioned shortcomings, the Board of Education is to be commended for taking a major step toward joining accountability in education.

Additional Information:

72-88   Design for the 1972-73 Measurement Profiles, Robert L. Mendro, 6 pp.

73-127-1
Through   Dallas Independent School District Measurement Profiles, 1973,
72-127-6   Robert L. Mendro,

         73-127-1   381 pp.
         73-127-2   396 pp.
         73-127-3   390 pp.
         73-127-4   420 pp.
         73-127-5   154 pp.
         73-127-6   76 pp.

DALLAS INDEPENDENT SCHOOL DISTRICT
TEACHER PROFILES

The Dallas Independent School District Teacher Profiles, 1972-73, are a series of three reports that present a summary of selected academic and demographic characteristics of District classroom teachers. They should be studied in conjunction with the Measurement Profiles in order to obtain an accurate picture of the status of education in the Dallas Independent School District (DISD). Information contained in the Teacher Profiles includes for each attendance area:

1. sex of teachers
2. age distribution of teachers
3. marital status of teachers
4. ethnic background of teachers
5. state of birth of teachers
6. teacher educational level
7. teacher experience
8. teacher certification
9. percentage of teachers teaching in major area of academic preparation

Important generalizations that can be made from the 1972-73 Teacher Profiles include:

1. DISD faculty is racially balanced. When considering Anglo and Negro teachers, racial balance is generally maintained within, as well as across, District schools. However, only about 2% of the District's teachers are Mexican-American.

2. There is no systematic bias in teacher assignment relative to academic background, that is, schools are not significantly different in the academic backgrounds of their staffs.

3. The vast majority of DISD teachers attended a Texas college or university. The major suppliers, in order, are North Texas, East Texas, Bishop, Prairie View, and Southern Methodist University.

4. Some District schools tend to have older, more experienced staffs than others.

5. On the average, junior high teachers are the youngest group, elementary teachers, the oldest.

6. In comparison with females, males are:

   a) older
   b) more likely to be married
   c) more likely to hold a Master's degree

7. Teacher scores on the National Teacher Examinations
    were not reported because over 50% of District
    teachers do not have such scores on record.

8. Teachers of all races are equally likely to be
    teaching in their academic area of major preparation.

9. There is an overwhelming preponderance of female
    teachers at the elementary level. Sex of teachers
    is more evenly distributed at the secondary level.

Additional Information:

72-170   Dallas Independent School District Teacher Profiles
          Elementary Schools, 1973, Fredell H. Pollak, 31 pp.

72-171   Dallas Independent School District Teacher Profiles
          Junior High Schools, 1973, Fredell H. Pollak, 14 pp.

72-172   Dallas Independent School District Teacher Profiles
          Senior High Schools, 1973, Fredell H. Pollak, 12 pp.

A PRELIMINARY SURVEY OF THE RELATIONSHIP BETWEEN SOCIOECONOMIC
STATUS AND ACHIEVEMENT FOR DALLAS PUBLIC ELEMENTARY
SCHOOL CHILDREN

This study was designed to investigate the question:

> Within ethnic background, do achievement and
> aptitude scores of Dallas elementary school
> children track according to their socio-
> economic status?

The investigation was severely limited by the fact that socio-
economic data were only available by school community rather than by
individual student. Subjects were all students enrolled in grades
one to six in the Dallas Independent School District during the 1972-73
school year for whom scores were available on at least one of the
District's system-wide aptitude or achievement tests administered during
the fall of that year. The index of socioeconomic status used was
drawn from census figures on median parental income and educational level
for each school community.

The results of the study suggested that:

> Within ethnic background, student aptitude and
> achievement scores were indicative of the
> socioeconomic level of the school community.
> That is, the higher the socioeconomic level,
> the higher the student aptitude and achievement
> scores.

Socioeconomic status was used as a measure of home environment and,
thus, was thought to be indicative of a child's opportunities for intellec-
tual growth in the home. The environmental portion of achievement is
amenable to intervention. The focus of the study was on socioeconomic
status as an indicator of:

1. achievement press

2. language models in the home and peer group

3. academic guidance provided in the home

4. stimulation to explore various aspects of the
    larger environment provided in the home

5. intellectual interests and activities in the
    home and peer group

6. work habits emphasized in the home and in the peer group

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Thus, socioeconomic status is highly related to achievement among Dallas elementary school children. This further suggests that appropriate environmental intervention in the home could provide a pronounced contribution toward reducing the achievement gap and providing quality education for all studnets. In order for valid conclusions to be reached relative to the effects of home intervention on student achievement, an experimental program, involving programmatic intervention in the home environments of poor children, with a valid experimental design, would have to be implemented.

The tentative nature of the results reported in this study cannot be overemphasized. This is an example of ex post facto cross-sectional research. What is important for the reader to understand is that achievement has two basic classes of components: those that the schools can modify and those that they cannot. It is essential that educators and parents alike understand that there is some portion of a student's academic achievement, regardless of his ethnic background, that is amenable to environmental intervention. It is important to realize, however, that only limited types of environmental manipulation are currently open to educators.

Additional Information:

72-86   Socioeconomic Profile of School Communities in the Dallas
             Independent School District, 1972-73, Charles A. Hunter,
             23 pp.

73-181   A Preliminary Survey of the Relationship between Socio-
             economic Status and Achievement for Dallas Public Elementary
             School Children, 1973, William J. Webster and Robert L. Mendro,
             35 pp.

FIVE-YEAR ENROLLMENT TRENDS, 1968-1972

This report examines enrollment data for District schools since 1968. Some attention is devoted also to consideration of suburban enrollment statistics in order to facilitate interpretation of the DISD patterns. Following are the principal observations noted in the text of the report:

1. Anglo enrollment since 1968 showed a slight downward trend which was accelerated markedly following the court decision of 1971.

2. Negro and Mexican-American enrollments have increased at a fairly steady rate since 1968.

3. Within the District, the most rapid population shifts have occurred in Oak Cliff, the slowest in North Dallas. The same patterns of change, however, have been observed in all areas.

4. Most of the Anglo students lost in 1971-72 and 1972-73 apparently either enrolled in private schools or moved out of Dallas county.

Additional Information:

73-192 Five-Year Enrollment Trends, 1973, Clinton C. Schuhmacher, 41 pp.

INCIDENCE OF DROPOUT

This study was undertaken primarily to determine the extent of the drop-
out problem during 1971-72 in the Dallas Independent School District.
Attempts were made to identify reasons for students leaving school
voluntarily before graduation, to identify District dropout character-
istics, and to provide a progress report for the Metropolitan Alterna-
tive School System. In addition, an attempt was made to determine if
the dropout problem was more critical in certain high schools and/or
ethnic classifications.

Major results are as follows:

1. The system-wide dropout rate for the District's high schools
    was reported as 11.28%. Dropouts were defined as those
    students who left school and were unaccounted for during the
    twelve-month period from September, 1971, to August, 1972.

2. This is the first year that the Department of Research and
    Evaluation has undertaken a dropout study. Previous studies
    defined dropout differently. The most recent dropout study
    completed reported a system-wide 1970-71 dropout rate at the
    senior high school level of 5.6%. A comparable definition for
    dropouts would have produced a 1971-72 dropout rate of 5.31%.

3. Dropouts were reported for each District high school for the
    1971-72 school year. Generally, predominantly Negro high
    schools from lower socioeconomic areas reported higher drop-
    out rates, while predominantly Anglo high schools from higher
    socioeconomic areas reported lower dropout rates than other
    District high schools.

4. System-wide Negro and Mexican-American children evidenced
    a higher dropout rate than did Anglo children. The American
    Indian dropout rate was nearly twice that of any other ethnic
    classification. Oriental children evidenced the lowest drop-
    out rate.

5. "Work" and "marriage and/or pregnancy" were the two major
    meaningful school-reported reasons for students dropping out
    of school in 1971-72.

6. There does not appear to be a significant difference between
    the dropout rate for females and the dropout rate for males.

7. The growth of the Metropolitan Alternative School System and
    its relatively low dropout rate are encouraging. Apparently,
    this system is experiencing success helping dropout-prone
    students to attain educational success. Approximately four

out of five dropout-prone students are being retained through
the Metropolitan Alternative School System.

In the text, methodologies are suggested for future dropout studies.
In addition, a list of reasons suggested for use by students withdraw-
ing from school is provided in Appendix C. Further recommendations for
future reports are as follows:

1. Place a major emphasis on predominantly Negro and inner-city
    schools.

2. More time should be devoted to the evaluation of the Metro-
    politan Alternative School System.

3. District decision-makers should consider the adoption of a
    policy regarding the number of days a student may be absent
    before his name is permanently dropped from the school roster
    and/or an effort is made to locate him.

Additional Information:

73-143   Incidence of Dropout During 1971-72, Ronald S. King, 90 pp.

GRADUATE FOLLOW-UP

Description of the Study: In October of 1972, all Dallas high
schools participated in a telephone survey designed to ascertain
the vocational and educational pursuits of their recent graduates.
This study marked the third year of graduate follow-up surveys.

Results: The results of the survey were categorized by sex within
District schools. The following figure best summarizes the data
available.
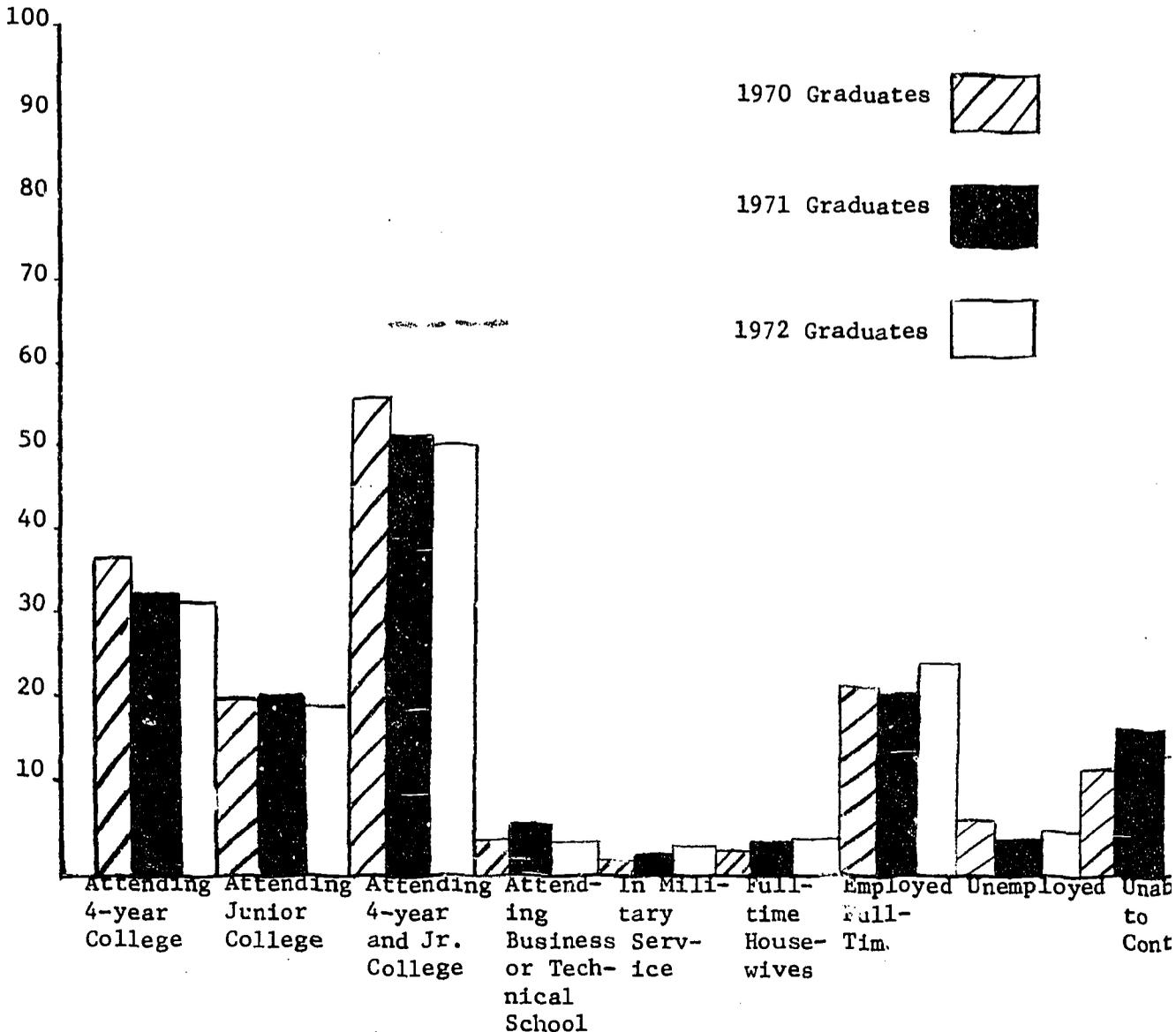
Additional Information:

72-121   Follow-up of 1972 Graduates. Clinton C. Schuhmacher and
          Kay Maxwell, 7 pp.

Description of the Study

The system-wide drug survey reports the results of the fifth large-scale survey of drug usage as reported by Dallas public school children. The results represent the tabulation of a 10% stratified random sample of Dallas public school children. Since data were available from four previous surveys, trends in drug usage were also traced over time. Additionally, the data were tabulated by grade, sex, ethnicity, geographic area, and academic performance. This report provides District decision-makers with information about the extent and concomitants of drug usage among public school children.

Results

1. Reported drug usage increased generally in grades nine through twelve since the 1972 drug survey. Trends were mixed, however, in grade eleven and in the South Dallas-Kleberg-Seagoville area. System-wide trends in reported drug usage are summarized below.

Directions of Changes between
1972 and 1973 Usage Data

Drug	Grades 9-12	Grades 5-8
Alcohol	Stable	Down slightly
Tobacco	Stable	Stable
Marijuana	Up sharply	Up slightly
Hashish	Up slightly	Stable
Inhalants	Stable	Down slightly
Prescription stimulants	Stable	Stable
Prescription sleeping pills	Stable	Down slightly
LSD	Up slightly	Stable
Mescaline and peyote	Up	Stable
Misc. narcotics	Up	Stable
Cocaine	Up	Stable
Prescription tranquilizers	Stable	Stable

2. In grades five through eight, the change, although less pronounced, was generally in the direction of a decrease. Some increases, however, were observed, particularly in North Dallas and Southwest Oak Cliff.

3. Relative to other drugs, the data on marijuana reflect the largest increases.

4. Reported usage in North Dallas and, to a lesser extent, Southwest Oak Cliff was higher than in other areas.

5. There was little evidence of a relationship between reported drug usage and ethnicity, except for the relatively high percentage of Negro respondents classified as users in grades eleven and twelve.

6. Males showed much more inclination to use drugs than did females.

7. The use of drugs is strongly and inversely correlated with academic performance.

Additional Information:

73-132   System-Wide Drug Survey Results, 1973, Clinton C. Schuhmacher, 32 pp.

INDUCED DESEGREGATION: ITS EFFECTS ON
STUDENT ACHIEVEMENT AND
POPULATION RESEGREGATION

Recently, heated debate has erupted in the social science lit-
erature concerning the effects of induced desegregation and its most
visible tool, forced bussing, on student achievement and associated
variables. The proponents of bussing have cited research which they
have claimed has demonstrated positive effects of induced desegrega-
tion and bussing, while bussing's opponents have claimed opposite
results. The situation has understandably caused a great deal of
public and professional confusion about the effects of bussing and
induced desegregation.

The paper had two primary purposes. First, in light of the
confused state of desegregation research, a representative group of
studies on the effects of induced desegregation, including many of
the reports that are featured most prominently in the current debate,
was reviewed in an attempt to explain some of the factors contrib-
uting to the contradictory state of recent desegregation dialogue.
Second, because of rapidly increasing proportions of minority popu-
lation in most major urban areas, the relationship between court-
ordered desegregation and population instability in large school
systems was examined particularly as such instability related to
Anglo enrollment loss. The second phenomenon has been largely ig-
nored in studies examining the effects of induced desegregation.

In order to facilitate the examination of the research, a thor-
ough review of methodological techniques appropriate for examining
the effects of induced desegregation was presented. It included
necessary design prerequisites, statistical analysis techniques,
reporting standards, and minimum requirements and precautions when
recommended design factors cannot be employed. Studies of fifteen
induced desegregation programs were examined using the standards
specified in the methodological review. The analysis clearly dem-
onstrated that, in general, the existing literature suffered from
many faults both in terms of experimental design and in terms of
reporting standards. Particular problems included inadequate de-
scriptions of treatments, subjects, classroom procedures, desegre-
gation procedures, and curriculum implementation; inadequate data
on the comparability of treatment groups; incomplete reporting of
necessary statistical data; and a nearly total lack of process
evaluation.

The examination of the relationship between enrollment patterns
and desegregation orders in large-city school systems clearly demon-
strated a marked correlation between such orders and Anglo enroll-
ment loss. Although correlation does not necessarily imply causation,

the relationship between desegregation orders and abrupt declines in
Anglo enrollment was too conspicuous to be attributed to chance.
T h e relationship was particularly strong at the elementary level.

Thus, two major generalizations emerged from the data analyzed
in t h e paper:

1. Reliable evidence pertaining to the success or failure
    of induced desegregation in general, and bussing in
    particular, in affecting student achievement and asso-
    ciated variables does not exist. The only statement
    that appears warranted by existing data is that the
    achievement of neither majority nor minority students
    seems to be adversely affected by induced desegrega-
    tion. No conclusive evidence concerning possible
    positive effects of induced desegregation on minority
    achievement was presented in the studies reviewed.

2. If the major purpose of desegregating the public
    schools is to promote societal integration, then
    current methods are failing in the large cities.
    The cities and their public school systems are
    being resegregated at an alarming rate.

Before completing t h e Executive Summary, and in light of con-
siderable misinterpretation of an earlier draft version of part of
t h e paper, the authors feel it necessary to discuss three limita-
tions of the paper:

1. It is not a report of original research done by the
    Dallas Department of Research and Evaluation. It is
    a thorough review of studies done elsewhere by re-
    searchers other than Dallas researchers.

2. The paper in no way questions the validity of the
    Supreme Court decision of 1954. The purpose of
    t h e paper was to examine several effects of in-
    duced desegregation as it is currently being
    implemented. The fact that such implementation
    was found to be unsatisfactory in light of the
    evidence on resegregation does not imply that
    desegregation itself is undesirable. Such a
    decision would have to deal first with the ex-
    tent to which moral and ethical issues affect
    the question of desegregation. The data in
    t h e study have absolutely no relevancy to that
    question.

3. The paper is neither pro- nor antibussing. The research on induced desegregation does not deal with bussing alone. If it were possible to draw valid conclusions concerning the adequacy of induced desegregation as an educational treatment, given existing data, such conclusions would be valid only for entire desegregation programs, not bussing alone. Since the paper clearly demonstrates the inappropriateness of drawing these types of conclusions, any pro-bussing or antibussing interpretations of the data in the study must be supported primarily on the emotions and prejudices of the reader.

What the review does suggest is that valid consistent evidence does not exist to support the contention that recent court decisions, as they have been implemented by public schools and their associated communities, have substantially contributed to increasing the quality of education for minority students; and that valid consistent evidence does exist in the case of large cities to support the contention that such decisions and their associated implementation have contributed to rapidly increasing resegregation of the public school population, thus thwarting the goal of meaningful integration.

The data suggest that the time has come to examine current policies and procedures designed to end racial isolation and discrimination. The problem of racial isolation in the cities requires innovative solutions that are not counterproductive. Such solutions might involve expanding the geographic base for desegregation, partial desegregation involving advanced educational technology and/or the maintenance of specific majority-minority ratios, part-time desegregation for certain types of activities involving equal status contact on neutral turf, the construction and use of educational parks, or combinations of the above. The time for trying new, innovative approaches to stimulating societal integration through the public schools is now.

Additional Information:

73-204 Induced Desegregation: Its Effects on Student Achievement and Population Desegregation, 1973, William J. Webster and Robert L. Mendro, 70 pp.

SOCIOECONOMIC PROFILES OF SCHOOL COMMUNITIES IN THE DALLAS INDEPENDENT SCHOOL DISTRICT

Objectives of the Study: The overriding objective of this study was to establish a data base of socioeconomic characteristics of the populations within the boundary of each school community as a frame-of-reference for evaluating achievement, planning and executing programs, and assessing particular behavior of pupils. Such a data base of socioeconomic characteristics will permit administrators and teachers to relate the teaching-learning experience more relevantly to each student and to plan more meaningful social contacts among students and teachers.

Sample: The report utilized the U.S. Census data of social characteristics of the population of Dallas as a source of information.

Evaluation Design: The particular census tracts which fell into each school community were grouped together to form individual units of information, yielding median years of education completed, age of population, level of housing valuation, and median family income. From these data, it was possible to categorize segments of each school population as to dominant sociocultural influences and socioeconomic status.

Evaluation Results: Preliminary results show some consistent patterns of income and educational levels of populations in proximity to one another as well as differential patterns among distant communities. These results show that there are vast differences to be observed between the lowest socioeconomic status level and the highest socioeconomic level in the District. Such information can be useful in designing programs for pupils who represent wide ranges of differences in a single setting.

Additional Information:

72-86   Socioeconomic Profiles of School Communities in the Dallas
         Independent School District, 1972, Charles A. Hunter, 5 pp.

72-92   Socioeconomic Profiles of School Communities in the Dallas
         Independent School District, 1972, Charles A. Hunter, 23 pp.

         Socioeconomic Profiles of School Communities in the Dallas
         Independent School Distict, 1973, Charles A. Hunter

SOCIOECONOMIC PROFILES OF SCHOOL COMMUNITIES
IN THE DALLAS INDEPENDENT SCHOOL DISTRICT
PART II

Objectives of the Study: The Socioeconomic Status Level Study pro-
vides a data base which will permit the development of a community
profile of social and demographic characteristics.   Such data will
be useful in evaluating the educational products of the schools and
serve as a basis for decision-making on the part of administrators.

The Design: This report, the second of two, utilizes U.S. census
data that are gathered in components represented as school communi-
ties.   These school communities are determined by the boundaries of
each elementary school in the District and identified by the name
of that school.   Frequency distributions of the characteristics of
the population in these communities are presented in tabular form.
Variables of family income, occupational distribution, family type,
home ownership status, housing valuation, and school dropouts are
dealt with.   Characteristics of individual school communities are
noted and comparisons made between school communities.

Evaluation Results: The results show a distinct observable differ-
ance between particular communities as to occupational characteristics,
educational range, housing valuation, and to a lesser extent, family
types.   There tended to be little integration of the characteristics
within particular communities.   Where major differences occurred, they
were between communities.   An occupational ranking scale was used to
denote the occupational characteristics of school communities.   Five
general categories have been delineated, including 1) Professional,
2) Managers, 3) Sales and Clerical, 4) Craftsmen, Operatives, and
Transportation workers, and 5) Labor, Service, and Household workers.
For convenience, the scale has been described in three intervals,
namely, upper level (white collar), middle range (generally blue collar),
and lower level (labor and service workers).   Seventy-four of the 128
school communities fall in the lower level of the scale while two fall
in the middle range.   Twenty-nine of the 128 school communities are
occupationally integrated, that is, the types of occupations are gener-
ally distributed throughout the scale.   The study shows a high percent-
age of women in the work force in Dallas, but, at the same time, they are
under-represented in the professional and managerial occupations.   Women
tend to fall more in the lower economic level as there is a high corre-
lation between the communities with higher percentages of female-headed
households and those that fall toward the lower level of the occupational
scale.   The relationship between income and education is not comparable
in predominantly black communities and predominantly white ones, since
a rise in educational level among blacks does not result in similar
rises in income levels as is true of whites.

The study examines the frequency of family types in the District and shows that certain communities have higher percentages of families with female-headed households than is true of most school communities. Those communities with more female-headed households tend to fall in the lower socioeconomic level. Home ownership tends to have a high frequency throughout the DISD. The majority of those communities with low frequency of home ownership are, for the most part, communities around Title I schools.

Recommendations:

1. that each school faculty be requested to acquaint itself with the data presented in the report so that the faculty may create a frame of reference for the pupils of the school, creating a better understanding of the behavior of both pupils and faculty.

2. that each teacher use the profile of his particular school community to evaluate the behavior, performance, and interaction of his/her pupils.

3. that the Socioeconomic Status Level Study become a basic document in the DISD to be used as a reference for all evaluations made of pupil achievement and pupil behavior in the schools.

Additional Information:

72-86   Socioeconomic Profiles of School Communities in the Dallas Independent School District, 1972, Charles A. Hunter, 5 pp.

72-92   Socioeconomic Profiles of School Communities in the Dallas Independent School District, 1972, Charles A. Hunter, 23 pp.

73-196   Socioeconomic Profiles of School Communities in the Dallas Independent School District, 1973, Charles A. Hunter

A SYSTEM-WIDE ASSESSMENT OF INDIVIDUALIZED INSTRUCTION:
VOLUME I - OVERVIEW AND SUMMARY

Description of the Study: Assessment of the extent of individualization was
identified as a priority area for evaluation by both the Elementary and
Secondary Departments of the Dallas Independent School District's Operations
Division; therefore, a major study (involving some 2,100 teachers and 2,500
students) was undertaken in order to provide the desired information. The
full report of that research effort consists of a series of six volumes.
The first volume served primarily as an introduction, outlining procedures
of sampling and instrumentation while presenting results in very general
terms.

Results: At the risk of oversimplification of data subtleties, some of the
major results are sketched below. The reader is strongly urged, however,
to refer to the individual volumes (or at least the summaries), since the
brief list which follows can provide, at best, only a superficial under-
standing.

1. Administratively, the District had moved toward increased
    individualization by attempting to decentralize decision-
    making, by providing numerous alternative programs (e.g.,
    career development programs, developmental programs, etc.),
    and by supporting staff development in areas related to indi-
    vidualization. There were, however, a number of areas in
    which official policy inhibited individualization; among those
    were scheduling, grading practices, and criteria for pro-
    motion and graduation.

2. Teachers generally seemed to have some understanding
    of the concept of individualization and were able to
    identify components specified as important in the
    literature. There was some evidence, however, that
    teachers needed increased training in dealing with
    individual differences among students.

3. Classroom practices were often found to conflict with the
    recommendations of the literature on individualization.
    Particularly was this true in regard to (a) limited use of
    behavioral objectives, (b) failure to provide varying
    sets of objectives, (c) little use of available methods
    and materials, and (d) failure to evaluate students in
    terms of specific, objective criteria.

Recommendations: In terms of standards abstracted from the literature, it
seemed clear that the District was not substantially individualized. Whether
those standards were appropriate, however, was open to question, consider-
ing that the literature tended to be somewhat idealistic and not altogether
consistent. The fact emerged that the District had not specified its own

operational definition of individualization, despite what seemed to be a wide-spread sentiment in favor of the concept. The major recommendation emanating from the study, therefore, was that the District explicitly identify the aspects of individualization which were to be considered desirable and attainable. If components not currently present in the instructional program of DISD were so identified, then a detailed plan of action should be formulated and implemented.

Additional Information:

72-109	Evaluation Design for the System-Wide Assessment of Individualization, 1973, George H. Olson, 85 pp.
73-161-1	A System-Wide Assessment of Individualized Instruction: Volume I - Overview and Summary, 1973, George H. Olson, 35 pp.
73-161-2	A System-Wide Assessment of Individualized Instruction: Volume II - Review of Related Literature, 1973, George H. Olson, 56 pp.
73-161-3	A System-Wide Assessment of Individualized Instruction: Volume III - Administrative Considerations, 1973, George H. Olson, 29 pp.
73-161-4	A System-Wide Assessment of Individualized Instruction: Volume IV - Classroom Practices - Elementary and Secondary, 1973, George H. Olson, 106 pp.
73-161-5	A System-Wide Assessment of Individualized Instruction: Volume V - Teacher Characteristics and Considerations, 1973, George H. Olson, 30 pp.
73-161-6	A System-Wide Assessment of Individualized Instruction: Volume VI - Appendices, 1973, George H. Olson, 66 pp.

A SYSTEM-WIDE ASSESSMENT OF INDIVIDUALIZED INSTRUCTION:
VOLUME II - REVIEW OF RELATED LITERATURE

Description of the Study: One of the major problems encountered at the onset of the survey of individualized instruction in the DISD was the problem of definition. In an attempt to arrive at a definition that would meet the requirements of objective measurement, most of the literature relating to the nature of individualized instruction itself was reviewed. Volume Two represented the results of that review.

Results: The review briefly highlighted the history of individualized instruction from the early colonial days to the mid-1900's. In this development, the modern-day push toward individualization was cast as evolving from a need to create a more responsive educational system. Where earlier forms of education were directed more along the lines of producing efficient education for the masses, new forms of education were seen as being responsive to individual differences among learners.

The attempts to define individualized instruction within the literature were considered next. Articles and books dealing with the goals and specific definitions of individualization were reviewed. It was concluded that individualization was, at best, a highly amorphous concept. The only general definition that could be advanced was that individualized instruction was "the adaptation of the instructional environment to individual differences."

A variety of approaches which had traditionally been employed to adapt instruction to the variability that existed among learners was then reviewed, and many were criticized, for one reason or another, as to meeting the needs of individual learners. Included among these approaches were acceleration and retardation, enrichment and remediation, ability grouping, departmentalization, and the notion of the self-contained classroom. The review was followed by a brief consideration of many of the new formal and informal approaches that had been proposed to more or less "tailor" instruction to individual differences.

Careful review of the literature had failed to provide a working definition of individualized instruction suitable to meet the needs of the DISD survey; therefore, the literature was again reviewed for the purpose of extracting those instructional components which enjoyed wide acceptance among educational authorities as being important to an individualized system. The second was more fruitful in that it yielded a list of instructional components, the existence of which potentially could be determined. These components spanned a range from recommended administrative requirements, to classroom instructional requirements, to required teacher characteristics. These required components of individualization, in turn, served as the variables of analysis in the study of individualization in the DISD.

The major features identified from the literature as characteristic of an individualized system are the following:

Administration

Curriculum Goals
Multipath Curriculum
Alternative Instructional Strategies
Commitment to the Attitude and Philosophy of
  Individualization
Research and Development
Computer Utilization
Decentralized Decision-Making
Ipsative Grading Practices
Flexible Scheduling

Classroom

Operational Objectives
Variability in Choice of Objectives
Variability in Sequence of Objectives
Criterion-Referenced Measurement
Variability in Achievement Criteria
Diagnosis of Entering Ability
Continuous Assessment
Variability of Instructional/Learning Methods
Variability in Rate of Progress
Student/Teacher Consultation and Guidance
Emphasis on Student Decision-Making
Resource Centers
Flexible Grouping Practices
Arrangement and Availability of Educational Resources

Teacher

Sensitivity to Individual Differences
Acceptance of Individual Differences
Utilization of Student Characteristics Data
Guidance and Counseling
Diagnosis and Assessment
Individual, Pupil-Teacher Contact
Role in Decision-Making
Media Utilization

Additional Information:

72-109   Evaluation Design for the System-Wide Assessment of Indi-
vidualization, 1973, George H. Olson, 85 pp. .

73- 161-1 A System-Wide Assessment of Individualized Instruction:
Volume I - Overview and Summary, 1973, George H. Olson,
35 pp.

73-161-2 A System-Wide Assessment of Individualized Instruction:
Volume II - Review of Related Literature, 1973,
George H. Olson, 56 pp.

73-161-3 A System-Wide Assessment of Individualized Instruction:
Volume III - Administrative Considerations, 1973,
George H. Olson, 29 pp.

73-161-4 A System-Wide Assessment of Individualized Instruction:
Volume IV - Classroom Practices - Elementary and Secondary,
1973, George H. Olson, 106 pp.

73-161-5 A System-Wide Assessment of Individualized Instruction:
Volume V - Teacher Characteristics and Considerations,
1973, George H. Olson, 30 pp.

73-161-6 A System-Wide Assessment of Individualized Instruction:
Volume VI - Appendices, 1973, George H. Olson, 66 pp.

A SYSTEM-WIDE ASSESSMENT OF INDIVIDUALIZED INSTRUCTION: VOLUME III - ADMINISTRATIVE CONSIDERATIONS

Description of the Study: Before individualized instruction could be expected to take place on any large-scale, system-wide basis, there were several requirements to be provided which could only be provided by the administration. Many of those requirements were described in the previous volume. (Volume II).

To examine the District's stance in relation to those requirements, newspaper clippings, DISD publications, survey instruments, informal interviews with administrators, and evaluation reports of the Department of Research and Evaluation were utilized. From these sources of information, it was possible to determine, in part, where the District stood in relation to the recommendation of instructional authorities.

Results: Among the general conclusions obtained from the investigation were the following:

1. The District had taken definite steps toward decentralization of educational decision-making. There were, nevertheless, a number of areas in which official policy inhibited individualization; among those were scheduling, criteria for promotion and graduation, and grading practices.

2. The District appeared to emphasize programs of instruction that served the most students effectively. In doing so, the District indirectly supported group-forms of instruction.

3. The District had made attempts to educate at least part of the faculty in methods of individualized instruction.

4. The District had made important contributions in an often-overlooked area of individualization. Through its many alternative educational programs (e.g. career development programs, developmental programs, etc.), the DISD had sought to adapt a significant portion of its instructional offerings to the unique needs of special groups of individuals.

Recommendations: Ultimately, it could not be concluded that the DISD was significantly individualized. Too many constraints on flexibility and adaptation existed. Whether those constraints were necessary for a school system the size of the DISD was not investigated in the study. Nevertheless, before it could be said that DISD was an individualized school system, changes in administrative policy to bring the total realm of educational decision-making closer to the student would have to be made.

A significant requirement, assuming that further individualization was desired, was a formal commitment and plan for individualizing the District's instructional program. In the investigation, no detailed, coordinated plan for achieving that form of instruction could be identified.

Additional Information:

72-109   Evaluation Design for the System-Wide Assessment of Individualization, 1973, George H. Olson, 85 pp.

73-161-1   A System-Wide Assessment of Individualized Instruction: Volume I - Overview and Summary, 1973, George H. Olson, 35 pp.

73-161-2   A System-Wide Assessment of Individualized Instruction: Volume II - Review of Related Literature, 1973, George H. Olson, 56 pp.

73-161-3   A System-Wide Assessment of Individualized Instruction: Volume III - Administrative Considerations, 1973, George H. Olson, 29 pp.

73-161-4   A System-Wide Assessment of Individualized Instruction: Volume IV - Classroom Practices - Elementary and Secondary, 1973, George H. Olson, 106 pp.

73-161-5   A System-Wide Assessment of Individualized Instruction: Volume V - Teacher Characteristics and Considerations, 1973, George H. Olson, 30 pp.

73-161-6   A System-Wide Assessment of Individualized Instruction: Volume VI - Appendices, 1973, George H. Olson, 66 pp.

A SYSTEM-WIDE ASSESSMENT OF INDIVIDUALIZED INSTRUCTION:
VOLUME IV - CLASSROOM PRACTICES -
ELEMENTARY AND SECONDARY

Description of the Study: In Volume Four, a detailed analysis of the
results obtained from the many survey and observation instruments
used in the study was presented.   An item-by-item analysis was under-
taken in order to provide a more in-depth description of the District's
status with respect to individualization in the classroom.   Aspects
of individualized instruction considered were those involving:

1. behavioral objectives,
2. variety and choice of objectives,
3. variability in instructional methods and materials,
4. pacing of instruction,
5. criterion-referenced measures and differential
    achievement levels,
6. subgrouping, and
7. assessment of entering ability.

It should be pointed out that there did not exist an independent
standard against which the District's teachers' responses to these items
could be compared; therefore, item responses had to be interpreted in
an absolute sense.

Results:

1. Although significant proportions of teachers reported
    using behavioral objectives, they did not possess a
    high degree of skill in recognizing the essential com-
    ponents of behavioral objectives.   Objectives were not
    generally given to students, and many students indicated
    that they did not know what the intended outcomes of their
    instruction were.

2. Teachers did not tend to individualize their instruction
    by providing different learners with different sets of
    instructional objectives, although they agreed that the
    procedure was important for individualized instruction.
    Elementary teachers reported being more flexible than
    secondary school teachers.

3. The majority of teachers did not appear to utilize a
    wide variety of instructional materials and methods.
    The evidence indicated that instruction was generally
    group-oriented.   A wide variety of educational resources
    were available to teachers.

4. To a limited degree, teachers allowed students to
    pace themselves through instructional materials.
    However, many teachers indicated that self-pacing
    was allowed only insofar as permitting students to
    proceed at a faster than predetermined rate of pro-
    gress. When queried about the source of decision-
    making with respect to instructional pacing, teachers
    most often identified themselves as this source.

5. Teachers reported that they set differential
    expected achievement levels for different students
    and that they evaluated students in terms of
    individual learner characteristics. However,
    they did not, as a whole, evaluate students in
    terms of specific, objective criteria.

6. The practice of subgrouping was widespread in
    elementary schools and evident in secondary schools
    to a considerably lesser degree. However, the
    patterns of subgrouping were not always particularly
    conducive to individualized instruction.

7. Most teachers apparently believed that the assess-
    ment of entering ability prior to beginning new
    sequences of instruction was an important component
    of individualized instruction. Furthermore, many
    teachers reported that they did, in fact, seek
    information regarding students' earlier performance.

Recommendations: In order to move toward increased individualization, the
District would apparently find it necessary to expand its staff develop-
ment effort, since many teachers appeared to lack skill in the use of
behavioral objectives, criterion-referenced tests, etc. Additionally,
it seemed clear that a commitment would be required of principals and
other supervisory personnel. It was doubtful that the substantial behavioral
modifications required of teachers would likely occur in the absence of
reinforcement from local administration.

The importance to be attached to the above comments was, of course,
dependent upon the level of individualization desired for DISD.

Additional Information:

72-109   Evaluation Design for the System-Wide Assessment of
                Individualization, 1973, George H. Olson, 85 pp.

73-161-1   A System-Wide Assessment of Individualized Instruction:
                Volume I - Overview and Summary, 1973,
                George H. Olson, 35 pp.

73-161-2   A System-Wide Assessment of Individualized Instruction:
                Volume II - Review of Related Literature, 1973,
                George H. Olson, 56 pp.

73-161-3   A System-Wide Assessment of Individualized Instruction:
            Volume III - Administrative Considerations, 1973,
            George H. Olson, 29 pp.

73-161-4   A System-Wide Assessment of Individualized Instruction:
            Volume IV - Classroom Practices - Elementary and Secondary,
            1973, George H. Olson, 106 pp.

73-161-5   A System-Wide Assessment of Individualized Instruction:
            Volume V - Teacher Characteristics and Considerations,
            1973, George H. Olson, 30 pp.

73-161-6   A System-Wide Assessment of Individualized Instruction:
            Volume VI - Appendices, 1973, George H. Olson, 66 pp.

A SYSTEM-WIDE ASSESSMENT OF INDIVIDUALIZED INSTRUCTION:
VOLUME V - TEACHER CHARACTERISTICS AND CONSIDERATIONS

Description of the Study

Volume Five was concerned with the teacher characteristics involved in individualized instruction. The teacher's role in the decision-making process in the classroom was examined in relation to individualzied instruction. Another teacher characteristic discussed as an important aspect of individualization was teacher sensitivity to individual differences. The characteristic was indirectly measured through teachers' predictions of the responses their students would make to an attitude-toward-school questionnaire. In addition, the attitudinal orientation of teachers toward individualization was evaluated.

Results

1. A large amount of student decision-making responsibility was not evident from the responses of teachers and students concerning class practice. However, many teachers in theory seemed to support increased student responsibility.

2. Teachers were able to predict their students' responses only when student variability was low. Therefore, no evidence was provided that teachers recognized individual differences among students. A more accurate measurement of teacher sensitivity would be necessary to obtain more conclusive results.

3. The majority of teachers seemed to hold opinions about education that were similar to those held and espoused by educational authorities. In addition, teachers generally considered those components important to individualized instruction that were cited in the literature as being important. It was evident that teachers were aware of the important components of individualization and were in general agreement with the premises of individualized instruction.

Additional Information:

72-109   Evaluation Design for the System-Wide Assessment of Individualization, 1973, George H. Olson, 85 pp.

73-161-1   A System-Wide Assessment of Individualized Instruction: Volume I - Overview and Summary, 1973, George H. Olson, 35 pp.

73-161-2   A System-Wide Assessment of Individualized Instruction: Volume II - Review of Related Literature, 1973, George H. Olson, 56 pp.

73-161-3 A System-Wide Assessment of Individualized Instruction: Volume III - Administrative Considerations, 1973, George H. Olson, 29 pp.

73-161-4 A System-Wide Assessment of Individualized Instruction Volume IV - Classroom Practices - Elementary and Secondary, 1973, George H. Olson, 106 pp.

73-161-5 A System-Wide Assessment of Individualized Instruction: Volume V - Teacher Characteristics and Considerations, 1973, George H. Olson, 30 pp.

73-161-6 A System-Wide Assessment of Individualized Instruction: Volume VI - Appendices, 1973, George H. Olson, 66 pp.

ELEMENTARY AND SECONDARY
SCHOOL INDICES

Purpose: The purpose of the school index reports is to provide key administrators and District decision-makers with a quantitative index expressing the level of difficulty in administering and leading the educational program of each school in the District. These indices should aid administrators and decision-makers in evaluating each school community in terms of personnel and administrative problems and assist them in devising effective educational programs for each school.

Method: The elementary and secondary indices were derived by standardizing weighting and combining a number of measurable factors for each school which were related to the difficulties encountered in serving as an educational leader for the school. Three distinct sets of elementary indices were generated using the following variables:

X_1 - average daily attendance,

X_2 - average daily membership,

X_3 - mobility ratio,

X_4 - grade-two average California Achievement Tests score,

X_5 - grade-four average Comprehensive Tests of Basic Skills scores

X_6 - median parental income of the school community

The three sets of elementary indices were then constructed by the following weighting formulas after all had been standardized to the same mean and standard deviation:

(Index 1) $y = 4X_1 + 4X_3 - X_4 - X_5$

(Index 2) $y = 5X_2 + 2X_3 - X_4 - X_5 - X_6$

(Index 3) $y = 4X_2 + 4X_3 - X_4 - X_5$

The secondary school indices were computed by combining the following six variables:

X_1 - mean test scores, Iowa Tests of Educational Development in grades nine and twelve and Comprehensive Tests of Basic Skills in grades seven and eight.

X_2 — attendance ratio defined as average daily attendance divided by average daily membership

X_3 — mobility ratio

X_4 — number of students bussed

X_5 — enrollment

X_6 — percent minority, the ratio of the number of students not members of the schools' dominant ethnic group to total enrollment

After standardizing each variable, a composite index was created by the following weighting formula:

$$Y = -X_1 - 2X_2 + 2X_3 + X_4 + 4X_5 + X_6$$

Additional Information:

73-110   Elementary and Secondary School Indices, 1973, Clinton C. Schuhmacher, 18 pp.

Harold W. Lang, Ed.D.
Director -
System-Wide Testing

TECHNICAL CHARACTERISTICS OF STANDARDIZED TESTS
USED IN THE DALLAS INDEPENDENT SCHOOL DISTRICT

Description of the Study: This report presents the results of a major
study of the technical characteristics of some of the tests employed in
the District's System-Wide Testing Program. The source of the test data
used in this study was the 1971-72 item data tapes for the Comprehensive
Tests of Basic Skills (CTBS) and the California Short-Form Test of Mental
Maturity (CTMM). This study examined the degree of reliability of each
test within each grade level and the intercorrelations of test and subtest
scores.

Results:

1. The total scores on both the Comprehensive Tests of
    Basic Skills (CTBS) and the California Short-Form Test
    of Mental Maturity (CTMM) evidenced a high degree of
    reliability within all District sex/ethnic student
    subpopulations at all grade levels.

2. Reliability increased with the age of students.

3. Reliabilities were slightly higher for Anglo students
    than for minority students.

4. The CTBS was more reliable for all sex/ethnic sub-
    populations than was the CTMM.

5. Study Skills was the only subtest of the CTBS that
    evidenced a sufficient lack of reliability so as to
    preclude that subtest's use in instructional planning
    for individual students.

6. Correlations between total scores of the CTBS and
    CTMM were high, ranging from .68 to .87. This suggests
    that the two tests measure essentially the same global
    construct.

Recommendations:

1. It appears that simultaneous administration of the CTBS
    and CTMM is wasteful in terms of information received
    for student time required. Thus, it is recommended that
    the CTMM be eliminated. This recommendation is made
    on the basis of the higher reliability for the CTBS, the
    high correlation between the CTBS and the CTMM, and the
    popular misconception that the CTMM is measuring
    exclusively innate ability.

Additional Information:

73-182   Technical Characteristics of Standardized Tests Used in the
          Dallas Independent School District, 1972-73, George H. Olson,
          40 pp.

73-183   Test Administration Practices in the Dallas Independent School
          District, 1972-73, George H. Olson, 19 pp.

73-184   Test Use and Interpretation in the Dallas Independent School
          District, 1973, George H. Olson, 34 pp.

72-54   Selected Characteristics of Standardized Tests Used in the
          Dallas Independent School District, 1972, George H. Olson, 23 pp.

TEST ADMINISTRATION PRACTICES IN THE DALLAS INDEPENDENT SCHOOL DISTRICT

Description of the Study: For the purpose of evaluating the extent to which administrative practices recommended in the System-Wide Testing Manual (Report No. 72-89) were followed during the fall, 1972, testing program, a questionnaire was sent to a stratified random sample of individuals involved in test administration. In addition to the responses to the aforementioned questionnaire, information of an anecdotal nature collected by the Supervisor of Group Testing and by Educational Testing Service is synthesized and presented. This report provides valuable input to District planners in organizing and implementing the future administration of the system-wide testing program.

Results:

1. Approximately 15% of the survey respondents reported extraneous interferences during the testing sessions. Extraneous interferences reported included such things as fire drills and public address announcements.

2. Approximately 7% of the survey respondents reported that some of their students did not attempt to take all sections of the test.

3. Approximately 5% of the survey respondents reported coaching by the test administrator.

4. Apparently some schools do not have organized procedures for ordering and distributing test materials as evidenced by:

   a. Numerous last-minute requests for materials were submitted, some of which had already been sent.

   b. Students were, in some cases, obliged to record their answers on answer sheets other than the one designed for the test they were taking.

5. School personnel often failed to supply accurate and complete identifying information when returning test booklets to the service center. This often caused delays in test-score turn-around and occasionally resulted in lost scores.

6. The report by Educational Testing Service, which involves only Title I schools, supports points one and two above and, in addition, is critical of the physical arrangements of the testing sites. This is particularly true with respect to the seating of students and the large number of students tested in a

given testing session. The latter observation is validated by the fact that approximately 21% of the survey respondents reported administering standardized tests to large groups of primary students.

Recommendations:

1. Top management support is needed to insure that standardized tests are administered in a professional manner.

2. Systematic auditing of test administration procedures is necessary. This would include the documentation of deviant situations.

3. Expanded printing and dissemination of the System-Wide Testing Manual to every principal, counselor, and building test coordinator is essential.

4. Staff development programs in test administration should be designed and conducted. Given current financial limitations, these programs should be conducted by building test coordinators after having attended an in-depth orientation session presented by the Director of System-Wide Testing and his staff.

Additional Information:

72-54   Selected Characteristics of Standardized Tests Used in the Dallas Independent School District, 1972, George H. Olson, 23 pp.

73-182   Technical Characteristics of Standardized Tests Used in the Dallas Independent School District, 1972-73, George H. Olson, 40 pp.

73-183   Test Administration Practices in the Dallas Independent School District, 1972-73, George H. Olson, 19 pp.

73-184   Test Use and Interpretation in the Dallas Independent School District, 1973, George H. Olson, 34 pp.

TEST USE AND INTERPRETATION
IN THE DALLAS INDEPENDENT
SCHOOL DISTRICT

Description of the Study: An anonymous survey questionnaire and achieve-
ment test were answered by a 5% random sample of teachers and counselors
drawn from all secondary schools and from 20 randomly selected elementary
schools for the following purposes:

1. to assess test users' level of knowledge concerning
    the interpretation of standardized test results

2. to estimate the degree of reliability and validity that
    test users see in test results

3. to determine the extent and purposes for which test
    results are used in the District

4. to determine the extent to which test users feel test
    results are available

5. to determine the extent and nature of modifications that
    users feel should be made in the system-wide standardized
    testing program

    This report provides valuable input to District decision-makers in
planning the future of the District's standardized testing program.

Results:

1. District counselors evidenced a greater degree of under-
    standing of correct use of standardized tests than did
    District teachers. However, neither group performed to
    a standard that would be optimal for adequate test usage.

2. Approximately 55% of the teachers and 75% of the counselors
    sampled felt that individual student scores on standardized
    tests are reliable.

3. Approximately 80% of the teachers and counselors responding
    felt that the District's aptitude tests are valid for help-
    ing to identify underachievers.

4. Approximately 50% of the teachers sampled and 60% of the
    counselors sampled felt that the District's standardized
    tests yield accurate measures of academic achievement and
    ability.

5. Over 70% of the counselors responding reported that they use test results to discuss student progress with parents, to check classroom performance against test performance, to diagnose student learning deficiencies, and to aid students in making career choices.

6. Over 60% of the teachers responding reported that they use the test results to check classroom performance against test performance, to diagnose student learning deficiencies, and to aid in planning individualized courses of study for students.

7. Approximately 10% of the teachers and 1% of counselors responding reported never using the standardized test results. Approximately 50% of teachers and 75% percent of counselors responding reported using standardized test results for all students.

8. The majority of each group of respondents agreed that the cost in instructional time lost for testing was worth the benefit gained from the results of the standardized testing program and that the standardized tests currently administered are appropriate for measuring achievement of the District's educational goals. The most frequent suggestions for improvement were:

   a. revise the testing schedule

   b. develop culturally unbiased tests

   c. improve testing conditions

Recommendations:

1. It is obvious that a staff development program is needed for teachers and counselors in the use and interpretation of standardized test results.

2. Some relief in the testing schedule is needed so that so many tests are not given at one point in time in the school year.

Additional Information:

73-182   Technical Characteristics of Standardized Tests Used in the Dallas Independent School District, 1972-73, George H. Olson, 40 pp.

73-183   Test Administration Practices in the Dallas Independent School
          District, 1972-73, George H. Olson, 19 pp.

73-184   Test Use and Interpretation in the Dallas Independent School
          District, 1973, George H. Olson, 34 pp.

72-54   Selected Characteristics of Standardized Tests Used in the
          Dallas Independent School District, 1972, George H. Olson,
          23 pp.

A PLAN FOR SYSTEM-WIDE TESTING

In order for a System-Wide Testing Program to be maximally effective, it must be continually evaluated and updated. The plan presented in this report is based upon systematic feedback from all persons involved in the Testing Program, a review of the literature relative to current and effective testing practices, the results of a recent study completed by the Department of Research and Evaluation on the technical quality of the Testing Program, and several conferences with members of the Principals' Advisory Committee. In addition, plans for a Criterion-Referenced Testing Program are integrated into the overall testing plan.

Recommendations are as follows:

1. Continue the system-wide administration of the Metropolitan Readiness Tests in the fall of grade one, the California Achievement Tests in the fall of grade two, the Comprehensive Tests of Basic Skills in the fall of grades three through eight, and the Iowa Tests of Educational Development in the fall of grade nine. These tests are of sufficient technical quality and practical utility to warrant their continued administration. Grade equivalents and percentiles will be included on gummed labels.

2. Continue to develop the District's Criterion-Referenced Testing Program. The emphasis for 1973-74 will be secondary reading.

3. Discontinue the system-wide administration of the California Achievement Tests in the spring of the first grade. However, these tests may be administered for special cases and purposes. These tests are administered in the fall of grade two and scoring turnaround for spring testing precludes feedback from reaching the classroom until the fall semester when these tests are again administered to the same students.

4. Instead of administering the Iowa Tests of Educational Development in the fall of the twelfth grade, administer them in the spring. In addition, administer the Iowa Tests of Educational Development in the fall of the tenth and eleventh grades. This should help teachers and counselors in diagnosis as well as enable the District better to evaluate its secondary programs.

5. Instead of administering the California Short-Form Test of Mental Maturity in the fall of grades two, four, six, eight, and nine, administer it in the spring of grades two, four, six, and eight, and where needed for special cases and purposes.

This will provide the necessary data for administrative decision-making without overtesting students at a given point in time. Our reviews of the literature suggest that those four grades are optimal for assessing student growth.

6. Administer criterion-referenced screening tests in the spring to all elementary students in reading (1974) and secondary reading (1975), followed by diagnostic instruments to appropriate students in the fall. This represents the implementation of the District's criterion-referenced testing program.

7. Administer and validate a system-wide attitude-toward-school scale to all students in grades one through twelve in February. Most of the literature suggests that attitudes are a major concomitant of student achievement. This is also a high priority of the Elementary Operations Department.

8. Conduct a comprehensive staff development program in the administration and use of standardized tests for District teachers and administrators. This is particularly a pressing need in Title I schools.

9. Report scores on the four subtests of the California Short-Form Test of Mental Maturity in raw score and local percentiles, in addition to the traditional language, non-language, and total IQ. This should aid teachers in the diagnosis of different student-learning styles.

10. Administer and score Boehm Test of Basic Concepts for kindergarten pupils in Early Childhood Program.

11. Administer and score spring achievement posttests for Title I schools.

Dallas Independent School District

July, 1973

1973-74 Testing Schedule for System-Wide Testing Program

Grade	Month	Test	Testing Time
Kindergarten	September 10-14, 1973	Boehm Test of Basic Concepts (BTBC) Form A, Booklets 1 & 2	40 minutes
1	September 10-14, 1973	Metropolitan Readiness Tests - (MRT), Form A	1 hour
	April 23-May 7, 1974	MRT - Form A, Title I Schools only*	1 hour
	April 23-May 7, 1974	Criterion-Referenced Test-Reading (CRT-R)**	1 hour
	April 23-May 7, 1974	California Achievement Tests - (CAT) - Title I Schools only, Form A, Level 1	1 hour 54 minutes
2	September 17-28, 1973	CAT - Form A, Level 1	1 hour 54 minutes
	April 23-May 7, 1974	California Short-Form Test of Mental Maturity (CTMM), Level 1	41 minutes
	April 23-May 7, 1974	CRT-R	1 hour
	April 23-May 7, 1974	CAT - Title I Schools only, Form A, Level 1	1 hour 54 minutes
3	September 17-28, 1973	Comprehensive Tests of Basic Skills (CTBS), Form Q, Level 1	3 hours 4 minutes
	April 23-May 7, 1974	CTBS - Title I Schools only, Form Q, Level I	3 hours 4 minutes
	April 23-May 7, 1974	CRT-R	1 hour
4	September 17-28, 1973	CTBS - Level Q-2	3 hours

	April 23- May 7, 1974	CRT-R	45 minutes
	April 23- May 7, 1974	CTBS - Title I Schools only, Level Q-2	3 hours 15 minutes
	April 23- May 7, 1974	CTMM - Level 2	43 minutes
5	September 17-28, 1974	CTBS - Level Q-2	3 hours 15 minutes
	April 23- May 7, 1974	CRT-R	45 minutes
	April 23- May 7, 1974	CTBS - Title I Schools only, Level Q-2	3 hours 15 minutes
6	September 17-28, 1973	CTBS - Level Q-2	3 hours 15 minutes
	September 17-28, 1973	CRT-R - Texas Assessment	3 hours 15 minutes
	April 23- May 7, 1974	CRT-R - DISD	45 minutes
	April 23- May 7, 1974	CTBS - Title I Schools only, Level Q-2	3 hours 15 minutes
	April 23- May 7, 1974	CTMM - Level 2H	43 minutes
7	September 17-28, 1973	CTBS - Level Q-3	3 hours 2 minutes
	April 23- May 7, 1974	CTBS - Title I Schools only, Level Q-3	3 hours 2 minutes
8	September 17-28, 1973	CTBS - Level Q-3	3 hours 2 minutes
	April 23- May 7, 1974	CTBS - Title I Schools only, Level Q-3	3 hours 2 minutes
	April 23- May 7, 1974	CTMM - Level 3	43 minutes
9	September 17-28, 1973	Iowa Tests of Educational Development - (ITED), Form X-5	3 hours 15 minutes

	Optional	Occupational Interest Inventory (OII)	30 minutes
10	September 17-28, 1973	ITED - Form X-5	3 hours 15 minutes
11	September 17-28, 1973	ITED - Form X-5	3 hours 15 minutes
	Optional	OII	30 minutes
12	April 23- May 7, 1974	ITED - Form X-5	3 hours 15 minutes

* Tests will be administered in Title I Schools only. All tests not designated to be administered in Title I Schools only will be administered in all schools.

** Diagnostic Criterion-Referenced Tests Reading will be available for grades one through six upon need and request during the entire school year.

*** The same form and level of tests will be administered as pretests and posttests.

Additional Information:

73-177   A Plan for System-Wide Testing, 1972-73, Harold W. Lang, 26 pp.

A GUIDE FOR THE IMPLEMENTATION OF
THE SYSTEM-WIDE TESTING PROGRAM

The bulletins that make up this series include the following instructions for implementing the 1973-74 Basic Comprehensive Group Testing Program:

1. System-Wide Testing Schedule for 1973-74
2. Implementation of Basic Comprehensive Group Testing Plan
3. Instructions for Completion of the Class Information Sheet, kindergarten through three
4. Class Information Sheet to accompany each class section in grades kindergarten through three only
5. Instructions for Completing Student Test Booklets, grades kindergarten through three only
6. Instructions for Coding "Student Number" Field on Answer Sheets, grades four through twelve
7. Instructions for Coding "Special Code" Field on Answer Sheets, grades four through twelve
8. Directions for Marking Group Header Sheet, grades four through twelve only
9. Directions for Completing School Information Sheet, grades four through twelve only
10. Assignment form for Building Test Coordinator
11. Form for listing Additional Group Testing Other than Designated
12. Texas Education Agency (T.E.A.) School Numbers (Same as location code numbers this year.)

Five of these bulletins are being sent to each principal for dissemination among personnel who will be using group tests.

Additional Information:

A Guide for the Implementation of the System-Wide Testing Program, 1973, Harold W. Lang, 23 pp.

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To a considerable extent, the present initiative of the Dallas Independent
School District (DISD) is characterized by the emphasis which it places
upon adapting the educational program to the needs of the individual
child - individualized instruction. Since these needs are governed by the
child's mastery of the educational content to which he has been previously
exposed and taught, it is important to determine these content factors
as accurately as possible.

The Basic Comprehensive Group Testing Program of the DISD includes
instruments which assess school readiness, scholastic aptitude, academic
achievement, and educational development. The student's vocationally
significant interests are appraised by option. These tests are adminis-
tered in a systematic manner in order to provide comparable student scores.

The present Basic Program includes recommendations from the 1970-71
Testing Committee, the Principals' Advisory Committee, the 1973 Research
Report No. 72-119, Selected Characteristics of Standardized Tests Used in
DISD, the Research and Evaluation staff, School District personnel, and
relevant input from a survey of practices of 25 large-city school districts.
Results of this Testing Program are to be viewed as supplementary to
information provided by teacher observation and judgment, school grades,
academic motivation or known industry, and the demonstration of abilities
in areas not normally or successfully measured by standardized tests.

This manual has been prepared to acquaint all school personnel with the
many facets of the System-Wide Testing Program and facilitate its
implementation. In-depth instruction in application of test scores is
provided for instructional and counseling personnel.

I.   Basic Comprehensive Group Testing Program

     A. General Responsibilities from Group Test Administration
     B. Additional Group Testing other than Designated

II. Use of Large-City Norms by the DISD

III. Job Descriptions

     A. Director—System-Wide Testing
     B. Supervisor—Criterion-Referenced Testing
     C. Building Test Coordinator
     D. Program Evaluator—Group Testing, Service Center
     E. Testing Technician—Service Center
     F. Individual Hand-Scorers
     G. Suggestive Hand-Scoring Procedures

IV. Implementation of Basic Comprehensive Group Testing Plan

     A. Requisitioning of Testing Materials

A GENERAL DESCRIPTION OF THE DALLAS INDEPENDENT SCHOOL DISTRICT'S CRITERION-REFERENCED TEST IN READING FOR GRADES ONE THROUGH SIX

Performance objectives have been selected by District administrators and teachers for use in the Dallas Independent School District's criterion-referenced testing program in reading for grades one through six. The objectives reflect the skills emphasized in the District's basal reading program. They have been specified at various levels to provide a broad coverage of relevant skills. Included in this report are objectives and word lists upon which six levels of tests have been developed for use by District teachers. This report has been prepared for teachers, parents, students, or any other person who is interested in a general description of the District's criterion-referenced reading program in grades one through six.

Additional Information:

72-167   Development of a Criterion-Referenced Testing Program, 1972, Margot A. Olson, 44 pp.

73-198   A General Description of the Dallas Independent School District's Criterion-Referenced Test in Reading for Grades One Through Six, 1972-73, Margot A. Olson, 49 pp.

73-199   Evaluation of Test Items for the Dallas Independent School District's Survey of Reading Skills, 1973, Margot A. Olson, 80 pp.

73-200   Technical Bulletin: Evaluation of Test Items for the Survey of Reading Skills, 1972-73, Margot A. Olson, 215 pp.

73-203   Evaluation of the Passages Selected for the Dallas Independent School District's Content - Referenced Reading Scale, 1973, Margot A. Olson, 42 pp.

EVALUATION OF TEST ITEMS FOR THE DALLAS INDEPENDENT
SCHOOL DISTRICT'S SURVEY OF READING SKILLS

Objectives of the Program: The Board of Education of the Dallas Independent School District (DISD) has established a District-wide criterion-referenced testing program in reading. As an initial phase of the development of this program, tests have been constructed for use at the elementary level. The purpose of this report is to present technical data for the preliminary forms of tests measuring specific reading skills at six levels of complexity. Based upon the reported analyses, the tests will be revised and prepared for use by District teachers and evaluators.

Sample: Sixty classrooms from 11 different schools across the District were selected upon the basis of their ethnic composition for tryouts of the preliminary test forms. The schools represented were the following:

Area	School	Grades
Area I	David Burnet	1-6
	Sudie Williams	1-6
Area II	Jefferson Davis	1-6
	Umphrey Lee	1-6
Area III	W. A. Blair	1-6
	John Ireland	1-6
Area IV	Oran Roberts	1-6
	A. S. Johnston	1-6
	Amelia Earhart	1-5
	Elisha M. Pease	1-3
	Maynard Jackson	4-6

Evaluation Design: Performance objectives were written to delineate skills relevant to the DISD's basal reading program. Item specifications to provide greater detail as to the type of items to be produced were written for each objective. Word lists were compiled to provide appropriate vocabulary for construction of test items. Two test forms (Forms A and B) developed by identical procedures were constructed to measure performance objectives for each of the six levels. The test forms included a total of 908 items to measure 99 performance objectives.

The tests were administered late in April, 1973. On the basis of location within the District, the examinees in half the classrooms received Form A, and the remainder of the examinees received Form B. Classroom teachers, who administered the tests, were instructed to follow a detailed examiner's manual provided with the tests. Prior to the data analysis phase of the study, opinions of the teachers who administered the test and of curriculum personnel were reviewed to eliminate test items which were faulty. Items identified by this means were either eliminated or set aside for revision.

The data analysis was primarily concerned with examination of item statistics. In constructing the tests, it was assumed that a good subtest for an objective would be composed of items with similar difficulties and that an examinee would be likely to answer all items either correctly or incorrectly. For these reasons, evaluation of the item-means and item-subtest correlations were emphasized in the data analysis phase of the study.

Evaluation Results: In general, it can be concluded that a large pool of acceptable items is available for compiling revised test forms. In considering each of the six levels, it is apparent that the three lower levels, Levels I, II, and III, of the tests are composed of subtests with less variability of item means than are Levels IV, V, and VI. When the increasing complexity of the content area, as well as the increasing emphasis on comprehension at the higher levels is considered, this result is not surprising.

Sufficient acceptable items are available to compose revised test forms at Levels I, II, and III. For nearly every objective, homogeneous subtests of four to eight items can be provided using existing items. Due to the increased variability of the item means at Levels IV, V, and VI, however, greater effort will be required for revising the test forms. Choice distributions will be reviewed and a number of subtests will be lengthened to insure accuracy of measurement similar to that at the lower levels.

Recommendations: According to specific recommendations made in this report, tests should be revised so that they are available for use by teachers and evaluators during the 1973-74 academic year. To facilitate future test development like this, it is recommended that specific channels between curriculum specialists within the District and Department of Research and Evaluation personnel be established to insure relevancy of objectives and test items.

Additional Information:

72-167 Development of a Criterion-Referenced Testing Program, 1972, Margot A. Olson, 44 pp.

73-198 A General Description of the Dallas Independent School
        District's Criterion-Referenced Test in Reading for Grades
        One through Six, 1972-73, Margot A. Olson, 49 pp.

73-199 Evaluation of Test Items for the Dallas Independent School
        District's Survey of Reading Skills, 1973, Margot A. Olson,
        80 pp.

73-200 Technical Bulletin: Evaluation of Test Items for the
        Survey of Reading Skills, 1972-73, Margot A. Olson, 215 pp.

73-203 Evaluation of the Passages Selected for the Dallas Indepen-
        dent School District's Content-Referenced Reading Scale,
        1973, Margot A. Olson, 42 pp.

PASSAGES SELECTED FOR DALLAS INDEPENDENT
SCHOOL DISTRICT'S CONTENT –
REFERENCED READING SCALE

Objectives of the Program: The Board of Education of the Dallas
Independent School District (DISD) has established a District-wide
criterion-referenced testing program in reading. As an initial
phase in the development of this program, a test composed of read-
ing selections of progressive levels of difficulties has been
constructed for use at the elementary level. For purposes of this
test, ability to decode and comprehend materials of a difficulty
similar to their assigned texts has been established as the mini-
mum criterion of acceptable performance.

Sample: Sixty classrooms from 11 different schools across the Dis-
trict were selected upon the basis of their ethnic composition for
purposes of evaluating the reading scale. The schools represented
were the following:

Area	School	Grades
I	David Burnet	1-6
	Sudie Williams	1-6
II	Jefferson Davis	1-6
	Umphrey Lee	1-6
III	W. A. Blair	1-6
	John Ireland	1-6
	Oran Roberts	1-6*
IV	A. S. Johnston	1-6
	Amelia Earhart	1-5
	Elisha M. Pease	1-3
	Maynard Jackson	4-6

*Two sixth-grade classrooms were sampled.

Evaluation Design: Reading selections from a scale developed by
F. G. King of Florida State University were adopted for use in the
DISD's test. Passages including at least 10 sentences and 150 words
were selected from general reading books appropriate for all levels
of elementary students. King modified the passages by deleting 10
words and replacing them with four multiple-choice alternatives.
Students were required to read the passages and select the appro-
priate word. In addition to using nine of King's passages, an addi-
tional passage, easier than King's least difficult passage, was

selected and modified by District staff.

For purposes of equating scores from the test to students' ability
to decode and comprehend their texts, additional tests were devel-
oped to measure students' ability to read sampled passages from 40
of the texts adopted by the District. Both types of tests were ad-
ministered early in April, 1973, by the classroom teachers. The
teachers were requested to follow detailed instructions for adminis-
tration and to complete very short questionnaires about the tests.

A readability formula was developed, using the structural character-
istics and scores from the 40 sampled texts. Using the readability
formula, a basis for assigning criterion scores for each grade level
on the reading scale was established. In addition, the item statis-
tics of the reading scale were evaluated.

Evaluation Results: The data supported the assumption that the texts
sampled for this study increased in complexity of structural charac-
teristics and reading difficulty as they were associated with higher
grade levels. The passages used in the reading scale likewise re-
presented a wide range of reading complexity and difficulty. A suit-
able readability formula, based on average sentence length, average
word length, proportion of different words, and preparation of words
not on the Dale List of 769 Words, was derived for use in interpreting
scores from the reading scale.

The item statistics and reliabilities of the reading scale passages
revealed a number of satisfactory items and passages. Due to in-
creased error from guessing and chance successes, the reliabilities
of the passages tended to decrease somewhat as the passages became more
difficult. The reliabilities of the 10 passages ranged from .56 to .88
when calculated across all grade levels; the reliability of the entire
scale was .96 when calculated across all grade levels.

Recommendations: Based on the criterion scores for each grade level,
several recommendations for improving the usability of the scale were
suggested. The recommendations were made primarily to eliminate
passages of nearly the same difficulty and to establish a different
criterion score for each grade level. It was also recommended that
item statistics be closely examined as a basis for improving the
scalability of the passages. A last recommendation was offered in
regard to administering only part of the scale to first- and second-
graders so that they are not frustrated by attempting very difficult
passages.

Once the improvements have been completed, a satisfactory scale to ascertain whether students can read materials at difficulties similar to their assigned texts should be available.

Additional Information:

73-203	Evaluation of the Passages Selected for the Dallas Independent School District's Content-Referenced Reading Scale, 1973, Margot A. Olson, 42 pp.
72-167	Development of a Criterion-Referenced Testing Program, 1972, Margot A. Olson, 44 pp.
73-199	Evaluation of Test Items for the Dallas Independent School District's Survey of Reading Skills, 1973, Margot A. Olson, 80 pp.
73-200	Technical Bulletin: Evaluation of Test Items for the Survey of Reading Skills, 1972-73, Margot A. Olson, 215 pp.
73-198	A General Description of the Dallas Independent School District's Criterion-Referenced Test in Reading for Grades One through Six, 1972-73, Margot A. Olson, 44 pp.

TECHNICAL BULLETIN: EVALUATION OF TEST ITEMS
FOR THE SURVEY OF READING SKILLS

The contents of this bulletin might more appropriately be considered
appendices to Research Report No. 73-199, Evaluation of the Items for the
Survey of Reading Skills. Due to the nature and volume of materials
necessary to document the investigation described in Report No. 73-199,
it was considered more reasonable to include the materials in a separate
report. Most readers will have little reason to review the Technical
Bulletin. However, the materials will be available to readers who wish
to study the report in depth. Of particular interest will be the copies
of the preliminary forms of the tests. Other contents, item specifications,
Harper & Row Word List, and correspondence, will probably be of secondary
interest.

Additional Information:

73-200   Technical Bulletin: Evaluation of
                  Test Items for the Survey of Reading
                  Skills, 1972-73, Margot A. Olson, 215 pp.

73-199   Evaluation of Test Items for the
                  Dallas Independent School District's
                  Survey of Reading Skills, 1973,
                  Margot A. Olson, 80 pp.

72-167   Development of a Criterion-Referenced
                  Testing Program, 1972, Margot A. Olson, 44 pp.

73-198   A General Description of the Dallas
                  Independent School District's Criterion-
                  Referenced Test in Reading for Grades One
                  through Six, 1972-73, Margot A. Olson, 49 pp.

73-203   Evaluation of the Passages Selected for the
                  Dallas Independent School District's Content-
                  Referenced Reading Scale, 1973, Margot A. Olson,
                  42 pp.

THE DALLAS APPROACH TO SYSTEMATIC
RESEARCH AND EVALUATION
IN DEVELOPMENT

William J. Webster
Deputy Assistant Superintendent
Research and Evaluation
Dallas Independent School District

The basic evaluation, research, and development model
utilized in the Dallas Independent School Dis :rict is pre-
sented. The approach involves the application of Stuffle-
beam's CIPP evaluation model in conjunction with a strong
quantitative research emphasis to provide basic information
used in the development process. The District's longitudinal
research and evaluation program is discussed as it relates
to the provision of basic context data as well as to project
evaluation support. The basic model used in project evalua-
tion is explicated as well as the resource commitments re-
quired to implement the model. Explication is aided by the
use of numerous examples drawn from the reports generated by
the District's Department of Research and Evaluation. Finally,
the method of communicating information to decision-makers is
outlined. The process is relatively unique among public
school systems.

The major purposes of the Research and Evaluation Department of the Dallas

Independent School District are to provide useful information to decision-makers

and to serve as an accountability agent to the District's various constituents.

The remainder of this paper discusses the strategies used to accomplish these

purposes.

Organizing For Evaluation

The Department of Research and Evaluation is organized into three branches.

The first, System-Wide Testing, is responsible for the design and implementation

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of the District's system-wide norm-referenced and criterion-referenced

testing programs. The second, System-Wide Evaluation, performs the longi-

tudinal and cross-sectional research and evaluation necessary to supply

major District decision-makers with information about the overall functioning

of the District's programs. The third, Developmental Project Evaluation,

evaluates specific developmental projects to ascertain the effects of these

projects on developing specific student abilities in areas that generally

need additional mediation to that which is provided by the District's general

academic program. Figure 1 displays the organizational structure of the De-

partment of Research and Evaluation.

The Department of Research and Evaluation is housed in the Development

Division. Thus, the Deputy Assistant Superintendent-Research and Evaluation

reports to the Associate Superintendent-Development, one of the District's two

Associate Superintendents. The Associate Superintendent-Development oversees

all developmental activities in the District.

Guba and Stufflebeam (1970) suggested that a "well-tempered" evaluation

unit should have six organizational components plus an Administrative section.

Figure 2 shows how the Dallas unit performs the functions outlined by Guba and

Stufflebeam with the three branches enumerated above.

Figure 2. *Degree of Agreement Between The Dallas Model and The
CIPP Model*

Function (CIPP)   *Execution (Dallas)*

Context Evaluation   *Extensive context evaluation is carried
on by the System-Wide Evaluation Branch.*

Input Evaluation   *Input evaluation is not done by the De-
partment of Research and Evaluation.*

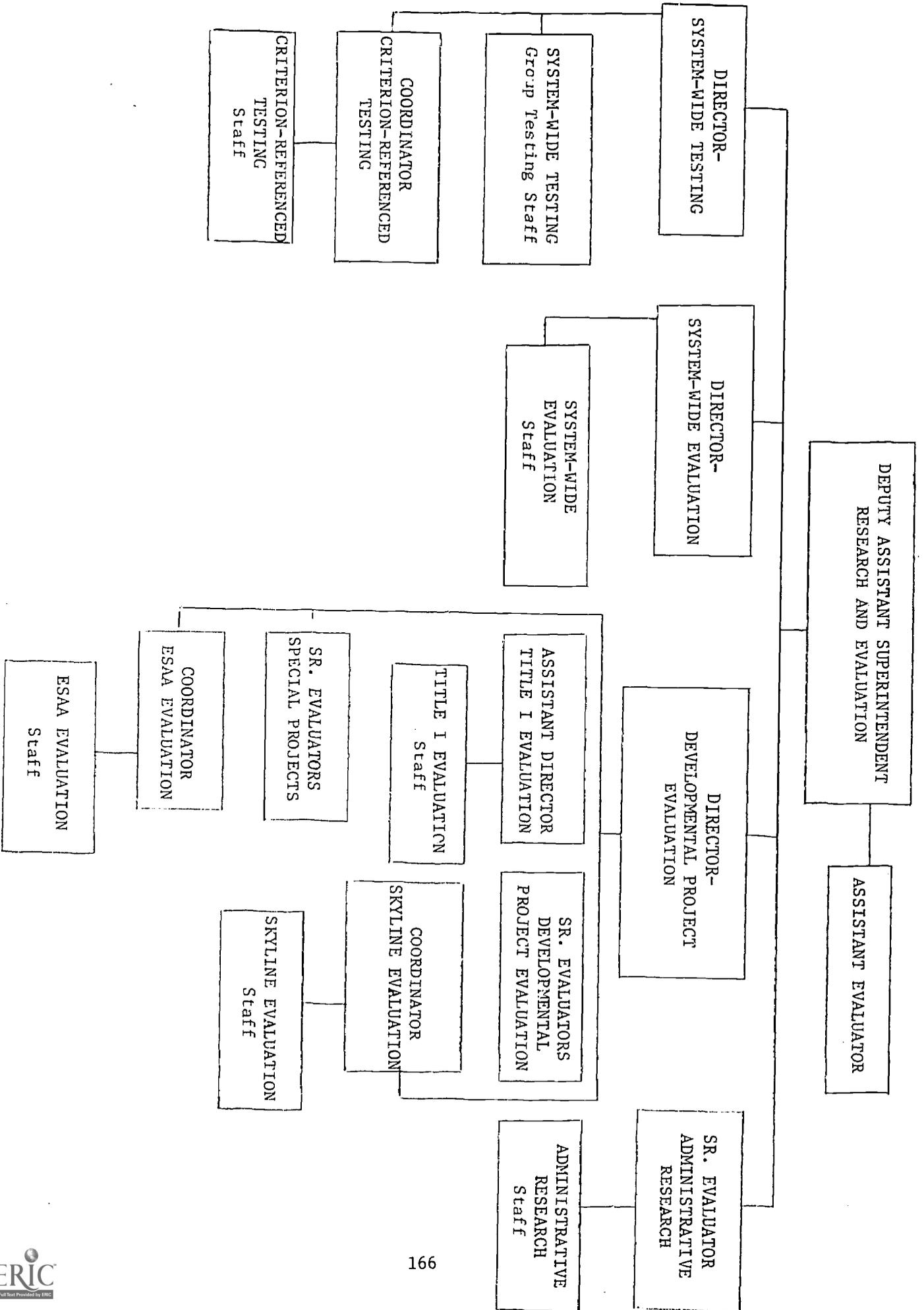|	
	Rather it is done by the Planning Department in conjunction with various project personnel. The exception to this is pilot testing which Guba and Stufflebeam include under Input Evaluation, but which is done under the umbrella of process-product evaluation in Dallas.
Process-Product Evaluation	*Extensive process-product evaluation is done by the Developmental Project Evaluation Branch.*
Services	*The System-Wide Testing Branch provides many of the services described by Guba and Stufflebeam. However, each of the other two branches have their own personnel to aid the principal investigator on a project in devising instruments, making arrangements for information collection, scheduling, supervising information collection, etc.*
Information Processing	*The System-Wide Evaluation and Developmental Project Evaluation Branches have data processing sections to aid in information processing. The statistical analyses, however, are set up by the principal investigators on each project.*
Reporting	*All reports are written by the principal investigators on the various projects. They are the ones who are most familiar with the project. They interface with project personnel relative to results. The Deputy Assistant Superintendent-Research and Evaluation interfaces directly with the Associate Superintendent-Development, the General Superintendent, and a committee of the Board of Education on all evaluation reports.*
Administration	*Administrative functions are carried on by the Deputy Assistant Superintendent-Research and Evaluation, his Administrative Assistant, and the various Directors and Supervisors in the Department.*

The functions alluded to in Figure 2 are detailed below.

CONTEXT EVALUATION

The System-Wide Evaluation Branch operates the District's Institutional Research Program. Webster and Schuhmacher (1971) described the program in detail. Basically, this program has five major functions:

1. The provision of a baseline of status information that describes the domain of concern, i.e., the decision arena of the parent agency;

2. The identification, creation of, awareness of, and rank ordering of the needs, problems, and opportunities that confront the parent agency;

3. The provision of the basis for stating change objectives;

4. The organization and highlighting of context information in terms of its relevance, scope, and importance;

5. The creation of reports on context information for various audiences.

Figure 3 outlines the scope of the District's Institutional Research Program. Also included in Figure 3 is a projection of the number of man/days to be spent in each endeavor during the 1972-1973 school year. These projections were taken from "A Plan For The Use of Research and Evaluation Resources, 1972-73" (Webster, et. al., 1972). To aid the reader in interpreting the resource commitments each position type is briefly described below. For detailed job descriptions, see "Department of Research and Evaluation: Job Descriptions and Minimum Qualifications".

1. Evaluator - Consultant level or above. Ph.D. or close with a major emphasis in research design, measurement, and statistics.

2. Programmer – At least a B.A. in computer science or
   mathematics.

3. Research Assistant – B.A. level personnel with major
   emphasis in the Behavioral Sciences, Mathematics,
   Computer Science, or Education.

4. Data Technician – A high school diploma.

Figure 3. *The Scope of The District's Institutional Research
Program*

Project	Estimated Required Resources In Man/Days			
	Evaluator	Programmer	Research Assistant	Data Technician
1. *Data file development and maintenance. An extremely vital activity which is pre-requisite to successful execution of most system-wide evaluation projects.*	75	75	120	350
2. *Dropout study. Implementation of the longitudinal design. Emphasis this year will be placed on identification and pre-diction of dropout on an individual basis.*	50	35	20	65
3. *Individualization of Instruction (Elementary). This study will be designed and implemented with the intention of providing valuable information to the operations division relative to its success in attaining its major priority goal.*	86	25	180	74

4.	Individualization of Instruction (Secondary).	86	25	180	74
5.	Special investigations to satisfy *ad hoc* information needs of District decision-makers.	100	50	50	40
6.	Measurement profiles. Expanded reporting of system-wide testing results with particular emphasis on provision of interpretive material.	80	75	30	45
7.	Drug survey. Continued monitoring of drug usage among Dallas children.	35	10	8	23
8.	Measurement study. Investigation of the utility of standardized tests used in the DISD.	22	20	20	8
9.	ITED Longitudinal study. An investigation of patterns and trends in student performance since 1962.	20	10	10	5
10.	Teacher profiles. Descriptive data relative to characteristics of DISD teachers.	30	30	30	20
11.	Follow-up study. A simple survey-type study intended to identify vocational and educational pursuits of DISD graduates.	20	10	10	5
12.	Teacher-student characteristics study. A series of interrelated studies designed to identify student and teacher characteristics which interact to affect student achievement (Design).	150	0	55	0

13. *Projection studies. Population and enrollment projections for school attendance zones in the DISD.* 25   10   20   5

14. *CAT-MRT Comparability. An investigation of the feasibility of substituting the CAT for the MRT as a posttest for Title I students.* 20   20   0   5

15. *Grading and reporting. A study of the concomitants and effects of current and proposed grading practices (on hold).* 0   0   0   0

16. *Socioeconomic study. A study of the socioeconomic patterns of the Dallas community and how they relate to the schools.* 75   50   50   30

17. *Interaction patterns. A study of the interaction patterns among Dallas teachers and students.* 75   0   120   20

18. *Study of Dominant Values. A study of the dominant values of various school communities in Dallas (Design).* 25   0   0   0

19. *Geocoding. A study to investigate the feasibility of determining geographic coordinates of individual student residences for purposes of school planning.* 20   20   10   71

20. *Expanded capability for Research Data Processing.* 1   30   0   0

Figure 4 shows specific project time allocations. Study of these data should further enlighten the reader relative to the types of tasks performed by each position type.

Figure 4. *Specific Institutional Research Project Time Allocations*

Project/Task	Estimated Required Resources In Man/Days			
	Evaluator	Programmer	Research Assistant	Data Technician
1. Data File Development and Maintenance				
Develop Data Processing Specifications	5	5		
Write Computer Programs	15	15		
Coding and Hand Processing			120	350
Computer Processing	40	40		
Write Reports	15	15		
	75	75	120	350
2. Dropout				
Develop Data Processing Specifications	15	7	5	
Write Computer Programs	6	21		
Coding and Hand Processing			5	46
Computer Processing	15	7		
Write Reports	11		5	
Type, Print, and Dissemi-·nate Reports	3		5	19
	50	35	20	65
3. Individualization of Instruction (Elementary)				
Define Problem	5			
Review Literature	10		15	

Develop Instruments	10	1	7	5
Specify Sample	3			
Schedule Data Collection	2		3	
Develop Data Processing Specifications	5	3	3	
Write Computer Programs	3	15		
Write Formal Design	15		7	
Type, Print, and Disseminate Design	2		3	10
Collect Observation Data	2		106	
Collect Testing Data	1		30	
Coding and Hand Processing	1		3	44
Computer Processing	10	6		
Write Reports	15			
Type, Print, and Disseminate Reports	2		3	15
	86	25	180	74

4. *Individualization of Instruction (Secondary)*

Define Problem	5			
Review Literature	10		15	
Develop Instruments	10	1	7	5
Specify Sample	3			
Schedule Data Collection	2		3	
Develop Data Processing Specifications	5	3	3	
Write Computer Programs	3	15		
Write Formal Design	15		7	
Type, Print, and Disseminate Design	2		3	10
Collect Observation Data	2		106	
Collect Testing Data	1		30	
Coding and Hand Processing	1		3	44
Computer Processing	10	6		
Write Reports	15			
Type, Print, and Disseminate Reports	2		3	15
	86	25	180	74

5. *Measurement Profiles*

Develop Data Processing Specifications	20	5		
Write Computer Programs	10	40		
Coding and Hand Processing			10	40
Computer Processing	10	30		
Write Reports	30		15	
Type, Print, and Disseminate Reports	10		5	5
	80	75	30	45

6. Drug Survey

Develop Instruments	3		2	6
Specify Sample	2			
Schedule Data Collection	1			
Develop Data Processing Specifications	3			
Write Computer Programs	5	5		
Collect Testing Data	2			
Coding and Hand Processing	1		5	13
Computer Processing		5		
Write Reports	15			
Type, Print, and Disseminate Reports	3		1	4
	35	10	8	23

7. Measurement Study

Write Computer Programs	4	10		
Coding and Hand Processing			2	
Computer Processing	4	10		
Write Reports	13		15	
Type, Print, and Disseminate Reports	1		3	8
	22	20	20	8

8. ITED Longitudinal Study

Develop Data Processing Specifications	4	1		
Write Computer Programs	4	9		
Coding and Hand Processing			2	2
Computer Processing	4			
Write Reports	7		6	
Type, Print, and Disseminate Reports	1		2	3
	20	10	10	5

9. Teacher Profiles

Define Problem	7		3	
Develop Instruments	3	1	2	5
Schedule Data Collection			1	
Develop Data Processing Specifications	6	6	4	
Write Computer Programs		17		
Coding and Hand Processing			2	15
Computer Processing	6	6	2	
Write Reports	6		13	
Type, Print, and Disseminate Reports	2		3	10
	30	30	30	30

10. Follow-up

	Col1	Col2	Col3	Col4
Develop Instruments	4		2	
Schedule Data Collection	2			
Develop Data Processing Specifications	2		1	
Write Computer Programs		5		
Coding and Hand Processing	2		4	4
Computer Processing		5		
Write Reports	8		2	
Type, Print, and Disseminate Reports	2		1	1
	20	10	10	5

11. Teacher-Student Characteristics

	Col1	Col2	Col3	Col4
Define Problem	25		5	
Review Literature	40		40	
Develop Instruments	5		5	
Specify Sample	10			
Write Formal Design	70		5	
	150	0	55	0

12. Projection Studies

	Col1	Col2	Col3	Col4
Define Problem	5			
Review Literature	5			
Develop Data Processing Specifications	2	1		
Write Computer Programs		7		
Coding and Hand Processing				3
Computer Processing	3	2		
Write Reports	9			
Type, Print, and Disseminate Reports	1			2
	25	10	0	5

13. CAT-MRT

	Col1	Col2	Col3	Col4
Define Problem	1			
Specify Sample	1			
Develop Data Processing Specifications	2	4		
Write Computer Programs	5	8		
Coding and Hand Processing				4
Computer Processing	5	8		
Write Reports	5			
Type, Print, and Disseminate Reports	1			
	20	20	0	5

14. *Socioeconomic Study*

Define Problem	5			
Review Literature	5			
Develop Instruments	2			
Specify Sample	3			
Schedule Data Collection	5			
Develop Data Processing Specifications	5	5		
Write Computer Programs		40		
Write Formal Design	15		5	
Collect Observation Data	20		40	
Coding and Hand Processing				30
Computer Processing		5	5	
Write Reports	15			
	75	50	50	30

15. *Interaction*

Review Literature	10			
Collect Observation Data	50		120	
Coding and Hand Processing				20
Write Reports	15			
	75	0	120	20

16. *Study of Dominant Values*

Review Literature	10			
Develop Instruments	5			
Write Formal Design	10			
	25	0	0	0

17. *Geocoding*

Develop Data Processing Specifications	5	5		
Write Computer Programs	5	10		
Write Formal Design	10			
Coding and Hand Processing	0	0	10	40
	20	15	10	40

The Institutional Research Program largely involves a vast context evalua-tion system. In addition to the broad research and evaluation plans previously outlined, the availability of a systematic, continuous, sequential, iterative, flexible, open-ended, and divisible data base provides invaluable support to

evaluation efforts related to the many special programs and projects of the District. The Institutional Research data base provides much of the basic information required for the evaluation of these projects and programs and thus reduces the cost of project evaluation.

INPUT EVALUATION

Input evaluation is not done by the Department of Research and Evaluation. Due to the nature of input evaluation, subject matter specialists are often required. Because of the District's policy of evaluators remaining independent of projects to assure objective reporting, the Department of Research and Evaluation hires specialists in research and evaluation methodology, computer science, and psychological measurement; not subject matter specialists that would have to be hired specifically for and assigned to specific projects. This is not to say that input evaluation is not done in Dallas. On the contrary, it is done by the Planning Department in conjunction with project personnel.

The exception to this is pilot testing. One of the services provided to projects by the Department of Research and Evaluation is that of pilot design testing. These tasks are performed by evaluators from the Developmental Project Evaluation Branch.

PROCESS-PRODUCT EVALUATION

The Developmental Project Evaluation Branch is responsible for the bulk of the process-product evaluation that is done in Dallas. The major functions fulfilled by the Developmental Project Evaluation Branch include:

1. The detection or prediction of defects in the procedural design

for a program or in its implementation;

2. The provision of data for preprogrammed decisions;

3. The measurement and interpretation of program attainments during the term of the project;

4. The measurement and interpretation of program attainments at the end of the project cycle;

5. The maintenance of a program implementation record;

6. The determination of the concomitants of student success in a program;

7. The determination of program cost-effectiveness;

8. The organization and highlighting of project evaluation information in terms of its relevance, scope, and importance to various diverse decision-makers; and

9. The creation of reports of project evaluation for various audiences.

Figure 5 outlines the evaluation process as it relates to project evaluation in Dallas. The example for which man/days are projected is the Targeted Achievement In Reading Program, an evaluation of reading achievement and its concomitants that involves four developmental reading programs and some 11,000 students.

Figure 5. The Project Evaluation Process

           TARGETED ACHIEVEMENT IN READING PROGRAM   *Man/Days Budget*

   1. Program Objectives

      1.1 Meet with decision-makers and program managers

<div style="text-align: right">*to determine the program objectives.*   4</div>

   1.2 *Refine objectives through thorough*
        analysis, review of literature, ques-
<div style="text-align: right">*tioning decision-makers, etc.*   3</div>

2. *Information Regarding Program Decisions*

   2.1 *Using the objectives, meet with decision-*
        makers, etc. to generate a list of the
        critical decisions to be made concerning
<div style="text-align: right">*the objectives and the program.*   3</div>

   2.2 *Determine the types of information necessary*
<div style="text-align: right">*to make the various decisions.*   4</div>

   2.3 *Estimate the critical decisions and plan*
        the information sources so critical decisions
<div style="text-align: right">*receive the most information.*   3</div>

3. *Define Measurable Objectives and Related Decisions*

   3.1 *Work with project personnel to mold objec-*
<div style="text-align: right">*tives so that they may be measured.*   2</div>

   3.2 *Operationalize basis for decision-making to*
<div style="text-align: right">*relate to measured achievement of objectives.*   2</div>

4. *Plan Evaluation Dissemination*

   4.1 *Identify the various audiences of the evalua-*
        tion report and estimate their level of
<div style="text-align: right">*sophistication of the intended audience.*   1</div>

5. *Identify Measuring Instruments*

   5.1 *Review objectives and decisions and evaluate*
        existing instruments to determine those which
<div style="text-align: right">*can be employed in the evaluation.*   4</div>

   5.2 *Determine areas where no satisfactory instru-*
        ments are available and develop complete
        specifications of instruments that are to be
<div style="text-align: right">*constructed.*   5</div>

6. *Instrument Development and Testing*

<div style="text-align: right">   6.1 *Develop needed instruments.*   10</div>

   6.2 *Test new instruments, if necessary, on a sample*
<div style="text-align: right">*of subjects.*   10</div>

   6.3 *Refine new instruments on the basis of these*
<div style="text-align: right">*tests.*   4</div>

   6.4 *Test administration of any non-conventional*
        instruments or observation procedures (e.g.,
<div style="text-align: right">*interaction analysis).*   10</div>

7. *Information Collection Scheduling*

7.1 *Specify sampling procedures to be employed.*   5
7.2 *Determine the schedule of observations and the instruments to be administered at each observation point.*   5
7.3 *Schedule the personnel needed to administer instruments.*   2

8. *Organization of Data Analysis*

8.1 *Determine various formats of data including card and tape format specifications at various stages of collection and analysis. Specify processing necessary to put data into correct format at each stage of analysis.*   7
8.2 *Plan non-statistical analysis of data and resources necessary to perform analysis.*   3
8.3 *Plan statistical analysis of data and programs necessary to analyze data.*   5
8.4 *Determine which programs are already written and are ready to use, which programs are written but need modifications to handle data in its intended formats and which programs need to be written with specifications of these programs.*   3

9. *Formal Evaluation Design*

9.1 *Prepare design including specification of*   25

    9.1.1 *Objectives*
    9.1.2 *Instrumentation*
    9.1.3 *Analysis methodology*
    9.1.4 *Data collection and reporting schedules*
    9.1.5 *Sampling procedures*
    9.1.6 *Data analysis schedules*
    9.1.7 *Final reporting schedules*

9.2 *Type, print, and collate.*   5
9.3 *Disseminate formal design.*   1

10. *Computer Program Development*

10.1 *Develop necessary programs for analysis.*   35
10.2 *Make necessary modification of existing programs.*   5
10.3 *Run all programs to be used on sample data in the proper medium and format. Construct sample data to simulate problem in actual data (mispunching, missing data, etc.).*   3

11. *Process Evaluation*

    11.1 *Collect or supervise and coordinate collection of process evaluation information.*   30

    11.2 *Prepare process evaluation information for analysis.*   4

12. *Product Evaluation*

    12.1 *Collect or supervise and coordinate the collection of product evaluation information.*   30

    12.2 *Prepare product evaluation information for analysis.*   20

13. *Interim Data Analysis*

    13.1 *Organize interim data.*   10
    13.2 *Perform analysis of interim data.*   4

14. *Formative Evaluation Reports*

    14.1 *Prepare formative evaluation reports.*   6
    14.2 *Type, print, and collate formative evaluation reports.*   3
    14.3 *Disseminate formative evaluation reports.*   1

15. *Summative Data Analysis*

    15.1 *Organize summative data.*   5
    15.2 *Perform analysis of summative data.*   20

16. *Summative Evaluation Reports*

    16.1 *Prepare the various summative evaluation reports for each audience including objectives, findings, and recommendations expressed in an appropriate manner for the intended audience. This preparation includes the abstract of the report.*   15
    16.2 *Have report carefully proof-read and corrected.*   3
    16.3 *Type, print, and collate the summative evaluation reports.*   5
    16.4 *Disseminate the summative evaluation reports to project personnel and the Board Evaluation Committee.*   1

17. *Interpretation of Reports*

    17.1 *Meet with project personnel to interpret reports.*   2

17.2 Meet with Board Evaluation Committee to aid
in report interpretation.   1

18. Further Report Dissemination

18.1 Disseminate summative evaluation reports to
District administrators and to the Board of
Education.   2

19. Report Feedback

19.1 Meet with decision-makers to obtain feedback
regarding the report with the purpose of im-
proving reporting activities.   3
19.2 Prepare informal report of recommendations
regarding reporting activities.

Since the Department of Research and Evaluation fulfills an accountability

function, care must be taken to assure objective evaluation. Therefore, all

evaluation personnel, regardless of their assignment, are treated as members

of the central research and evaluation staff. Their continued employment is

not contingent upon continued funding of the specific developmental project or

projects to which they may be assigned. Experience suggests that this arrange-

ment leads to increased objectivity on the part of evaluators. On extremely

controversial projects, outside auditors, generally fron Educational Testing

Services, are used for additional credibility. Figure 6, taken from the

District's Policy Manual, outlines the District's guidelines for project evalua-

tion.

Figure 6. Dallas Guidelines For Project Evaluation

Recognizing the need to ensure the credibility of evaluation
reports, all project evaluation staff assigned to projects which
the' Department of Research and Evaluation has the responsibility
for evaluating will be directly responsible to the Deputy Assistant
Superintendent-Research and Evaluation. In addition to ensuring

*the cred'bility of evaluation reports, central control
of evaluation personnel will allow for the most efficient
use of human resources. Thus, evaluation personnel, re-
gardless of location, will be staff members of the Research
and Evaluation Department and as such subject to the
following conditions:*

I. *Dissemination and Utilization of Evaluation Information*

    A.   *Availability of evaluation information, prior
to its formal presentation to the Board of
Education, will be limited to those individuals
who have an established need to know. Normally,
this would include project officials, as well
as the evaluation personnel associated with the
project.*

    B.   *The proprietary nature of evaluation information
must be respected. The proper functions of
evaluation are to provide continuous feedback to
project officials and to furnish relevant infor-
mation to District decision-makers.*

    C.   *All individuals who have access to evaluation
information must be cognizant of its proper
functions and of ethical considerations apply-
ing to the misuse of such information. Evalua-
tion personnel, particularly, are expected to
process information in accord with responsible
reporting procedures.*

II. *Scope of Work*

    A.   *What to evaluate, when to evaluate, and how to
evaluate will be determined by personnel from
Research and Evaluation in consultation with
those charged with the responsibility for making
decisions about the operation of the project.*

    B.   *Assignment of duties for evaluation personnel
shall be made by the Deputy Assistant Superin-
tendent-Research and Evaluation or his designee.*

    C.   *All evaluation reports will be delivered simul-
taneously to the project manager and the Deputy
Assistant Superintendent-Research and Evaluation.
The Deputy Assistant Superintendent-Research and
Evaluation will then forward evaluation reports*

to the Associate Superintendent, Development,
for presentation to the Evaluation Committee
of the Board of Education.

III. Employment

A. All evaluation personnel will be recommended
for employment, promotion, or termination of
employment by the Deputy Assistant Superin-
tendent-Research and Evaluation after consul-
tation with the Project Director.

B. The Deputy Assistant Superintendent-Research
and Evaluation will recommend placement of all
personnel.

C. Terms of employment will be the same as comparable
central office positions. The employment security
of evaluation personnel assigned to projects will
not be dependent upon the continued implementation
of specific projects to which they may be assigned.

D. All leaves of absence and vacations will be subject
to approval by the Deputy Assistant Superintendent-
Research and Evaluation after consultation with the
Project Director.

IV. Local Regulations and Negotiations

A. All evaluators placed in locations other than the
Central Administration Building shall be subject
to the same rules and regulations as other admin-
istrators in that location, with the exception of
those items specified under Sections II and III
above.

B. All disagreements relative to the functions of
project evaluation personnel will be negotiated
by the Deputy Assistant Superintendent-Research
and Evaluation and personnel responsible for
making decisions relative to the project.

Figure 7 outlines the scope of the District's Developmental Project

Evaluation. Job types are about the same as described for System-Wide

Evaluation.

Figure 7. The Scope of The District's Developmental Project
            Evaluation

Project	Estimated Required Resources In Man/Days			
	Evaluator	Programmer	Research Assistant	Data Technician
Targeted Achievement in Reading Program	145	67	57	47
Physical Education	35	12	9	8
Cognitive ECE	65	18	21	22
Comprehensive Music	46	8	18	14
Dunbar Science	45	9	17	17
Learning Through Piano-Dallas Plan	35	7	12	12
Talent Education	40	8	12	13
Visual Art Program	53	12	19	19
Bilingual Multicultural Education Program	218	34	42	36
Summer Reading Program	43	6	15	15
Multiage Classes	70	9	28	34
Reading Clinics	48	8	18	18
Multicultural Social Education	65	12	34	36
Elementary Counselors	62	8	20	18
General Title I evaluation	48	17	16	13
Reading Programs at Dunbar	82	11	21	20
Dunbar Developmental Math Program and QED	52	11	21	20

Skyline Career Development Center

Project	Evaluator	Programmer	Research Assistant	Data Technician
Context Evaluation	45	115	40	70
Process Evaluation	67	0	200	70
Product Evaluation	200	58	200	70
Audit Function	290	58	40	30

Developmental Projects

Project	Evaluator	Programmer	Research Assistant	Data Technician
Right to Read	64	31	30	34
Teacher Centers	59	27	35	35
Open-Area Schools	74	32	70	44
Special Education (Plan A)	121	10	2	22
Special Education (Long.)	100	2	2	23
Time Sharing Network	37	13	15	22
Principals Evaluation	30	0	10	0
Drug Program	55	27	36	38
E.S.A.P.	221	10	-	-
Law in a Changing Society	48	-	10	-
Basal Reading	62	25	15	20
Special Projects	60	20	-	-

Formal evaluation designs are done for all projects. Generally, the
following criteria are used in judging the quality of individual evaluation
designs. In order to be considered an adequate design, all of the following
questions must be answered in the affirmative.

1. Are the objectives of the program adequately stated?

2. Are the decision situations to be served adequately defined?

3. Are the evaluation questions of interest adequately delineated
   and do they adhere to the decision situations to be served?

4. Are the data to be collected adequately specified and do they
   match the evaluation questions of interest? Are all questions
   adequately investigated?

5. Are the relevant populations and sampling procedures for data
   collection adequately described? Is there reason to believe
   that the experimental and control groups are comparable?

6. Are the instruments for data collection adequately described?
   Are they related to the objectives of the program. Are they
   valid and reliable for the population being studied?

7. Are schedules specified for information collection? Are they
   realistic?

8. Are formats and means for coding, organizing, storing, and
   retrieving data specified?

9. Are data analysis procedures specified? Are the analysis
   procedures specified appropriate for providing useful infor-
   mation relative to achievement of the objectives of the program
   and the research questions of interest?

10. Is the evaluation schedule present and, given staff and resource availability, is it realistic?

11. Is the evaluation design likely to provide useful (i.e., valid, reliable, objective) information?

12. Are there provisions made for process evaluation (i.e., for observing the project in operation) to determine whether or not it is functioning according to specifications?

13. Are there provisions made for adequate interim evaluation?

14. Is a schedule specified for reporting relevant information to specified decision-makers? Is the schedule realistic?

15. Is the budget adequate to carry out the proposed evaluation?

SERVICES

Guba and Stufflebeam (1970) assigned the following functions to the Services section:

1. To develop and maintain contact with and access to a variety of information sources, including such disparate sources as the research literature's relevant substantive experts, examples of good practice, and the subjects within the domain of the master agency (e.g., teachers, children, etc.);

2. To devise instruments for tapping each information source;

3. To make appropriate arrangements for the collection of information as needed, including original clearances, access, scheduling, testing, etc.;

4. To supervise the actual information collection in the field.

In Dallas, the System-Wide Testing Branch performs many of the func-
tions described above. However, both the System-Wide Evaluation Branch
and the Developmental Project Evaluation Branch have Research Assistants
assigned to them. The following services are performed by Research Assis-
tants:

1. Classroom visitation and observation.

2. Instrument administration.

3. Quality control on testing data.

4. Literature review

5. Editing and proofreading.

6. Limited instrument design.

7. Limited data processing.

8. Limited evaluation report writing.

9. Limited administrative assistance.

Thus, although the principal investigator on a given project is responsible
for all phases of the evaluation of that project, he has help in the afore-
mentioned areas from the Research Assistants assigned to his Branch. All clear-
ances are obtained at the Assistant Superintendent level.

INFORMATION PROCESSING

The functions of a viable information section are as follows:

1. To process all incoming information into storable form. In
   the main this is a coding and statistical analysis function.

2. To develop computer applications; i.e., to write relevant
   computer programs.

3. To store the information in various forms.

4. To retrieve and report available information in a variety of formats.

Both the System-Wide Evaluation and Developmental Project Evaluation Branches have data processing sections to fulfill the aforementioned tasks. In addition, the District's Data Processing Department provides information processing help when possible. Most of the Consultant level evaluators are also excellent programmers and do some of the more involved programming relative to the projects that they are working on. In all cases, it is one of the functions of the evaluator to create the specifications for data analysis, although a programmer may implement the analysis.

The aforementioned arrangement is the most successful of the numerous that have been tried in Dallas. A central data processing staff was not acceptable because priorities kept getting shuffled and evaluation reports were never completed on time. A general Research and Evaluation Information Section also failed because of problems with priorities. With the present system, programmers are attached to specific Branches and only have to worry about one set of priorities, that of the Branch to which they are attached.

REPORTING

A specific Reports Section does not exist in Dallas. In the formative days of the evaluation unit such a section did exist and proved to be more of a detriment than an attribute. The principal investigator is the individual who is most familiar with the evaluation and he, therefore, is the one who writes the various evaluation reports and communicates the results to decision-

makers. Thus, the technically oriented evaluators fulfill the role of
interfacers and avoid the situation where the entire District is wondering
what the group of technocrats who never interact with anyone do for a
living.

Two basic types of evaluation reports are written (this is of course
in addition to the numerous informal interim reports that are supplied pro-
ject management). The first is a rather lengthy report discussing the
evaluation in depth and detailing the methodology that was used. This report
is for project personnel, project management, the Associate Superintendent-
Development, the General Superintendent, and the Evaluation Committee of the
Board of Education (functions to be discussed shortly).

The second is a much shorter report, seldom running more than three pages.
This report is essentially an executive summary of the longer report. It
appears at the front of the longer report as an abstract, and is forwarded
by itself to District teachers and principals, the Board of Education, and
the news media. Figure 8 gives an example of an Executive Summary.

Figure 8. *An Executive Summary Of The Educator's Self-Appraisal*
(ESA) Program

Objectives of the Program: The Educator's Self-Appraisal
Program utilizes a videotape feedback system to train and
encourage elementary classroom teachers to use more en-
couraging verbal and non-verbal expressions, higher level
cognitive and affective objectives, and open methods in
their classroom behavior, as well as to foster more favor-
able attitudes toward the teaching profession and greater
perceived effectiveness in their teaching. The objectives
of the program are consistent with latest findings in
teacher education and the methods are consistent with the
research results relative to modeling behavior.

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Sample: Eight elementary schools were included in the study. The four experimental schools were Fannin, Knight, Casa View, and De Golyer, while Crockett, Field, Reinhardt, and Nathan Adams made up the control schools.

Evaluation Design: Four experimental and four control schools were compared relative to the objectives of the program. Experimental schools were schools in which classroom teachers participated in the ESA program. Control schools were schools that were similar to experimental schools on all relevant variables except that classroom teachers in those schools were not exposed to the program. Variables compared were teacher mastery of the major objectives of ESA, teacher attitudes, student achievement, and student attitudes. These variables were assessed prior to the beginning of the ESA program and at its conclusion. Descriptive and inferential methodology were used to analyze program outcomes.

Evaluation Results: There was evidence to support the conclusion that the ESA program partially met its objectives. In the areas of Cognitive Objectives and Non-Verbal behavior, a clear trend in favor of the experimental treatment was, as was the case with teacher attitudes, toward planning for teaching and their own effectiveness. There was also evidence to suggest that certain teachers profited a great deal from the program. Teachers having relatively little teaching experience, receiving recent degrees, and possessing a readiness to modify their behavior in accordance with the objectives of ESA profited the most from the program.

There were two areas in which the program, as implemented in Dallas, appeared to need reinforcement. These areas were those of Affective Objectives, and Method. There was scant evidence to suggest that the program even minimally met its objectives in those areas. In addition, there was no conclusive evidence linking the training program to student outcomes in the areas of achievement and attitudes.

Recommendations of Project Evaluator to Project Management: The results of this evaluation suggest a number of recommendations. First, it seems important that increased emphasis be placed on teacher training in the areas of Affective Objectives and Method. This must be done in order to increase the probability of accomplishing the basic objectives of the training program.

*Second, given the lack of conclusive evidence to suggest
that the program did a great deal more for the majority
of teachers than was accomplished through mere video-
taping of control group teachers, and, given the evidence
that suggests that the program did a great deal for
teachers with certain characteristics, possessing the
salient characteristics who have been diagnosed as having
weaknesses in the areas addressed by the objectives of
ESA. For purposes of placement, the Research and Evalua-
tion Branch will provide Staff Development with pre-
assessment norms based on the complete 1970-71 ESA sample.*

*It is the evaluator's opinion that the ESA program can
form a vital part of the District's Staff Development
Program if implemented on a small scale with selected
teachers. The results of this study, plus numerous stu-
dies reported in the literature, suggest that teachers
cannot be coerced into training programs of the ESA type
with any reasonable expectation of success. In order for
the program to be successful, the teachers involved must
be aware of the behaviors expected of them and believe
that mastery of those behaviors will increase their
effectiveness as classroom teachers. Without this commit-
ment on the part of classroom teachers involved in the
program, the program will probably fail. Therefore, in
addition to possessing the characteristics mentioned above,
teacher trainees should probably be volunteers.*

*The cost of continued implementation of the ESA program is
minimal. The necessary equipment is available. Thus, the
major cost is one of teacher time. Given teachers who want
to participate in the training program and need the skills
that ESA stresses, the cost would appear to be worthwhile.
This recommendation assumes increased emphasis on training
in the areas of Affective Objectives and Method.*

Additional Information:

*70-3   Design for the Evaluation of the Educator's Self-
         Appraisal Program*

*70-58   The Effects of the ᴿducator's Self-Appraisal Program
         on Teacher and Student Behavior*

Information is forwarded to project personnel as it becomes available.

Figure 6 listed the guidelines for providing information to project personnel.

In addition to the provision of information to involved decision-makers, all evaluation reports are taken to the Evaluation Committee of the Board of Education. This Committee is a permanent committee consisting of four Board members and allows Research and Evaluation personnel to interact directly with the Board on evaluation results, problems, and issues. Figure 9 outlines the policy statement regarding the functions of the Evaluation Committee of the Board of Education:

Figure 9. Functions of the Educational Evaluation Committee of the Board of Education

The Evaluation Committee reviews evaluation and other appropriate information, monitors the development and accountability functions of the District, evaluates the total educational program evaluation, research and development efforts, and studies and reports the State's legislative program.

Functions

1. *Continuously assess and report to the Board the District's needs for program research and evaluation information; monitor, review, and report to the Board program research and evaluation information; and identify and report to the Board unmet program evaluation and research information needs.*

2. *Identify alternatives and recommend priorities to the Board for providing needed evaluation and research information; assess the consequences of alternative approaches to providing needed evaluation and research information; and report to the Board recommended priorities for providing needed program evaluation and research information.*

3. *Report to the Board recommended priorities for obtaining and utilizing funds and other resources in educational program evaluation, research and development; and receive and review management recommendations regarding utilizing of educational program evaluation, research and development resources.*

4. *Evaluate and report to the Board the District's educational program evaluation, research and development efforts; receive and review reports of educational research, evaluation and development, educational audit, and cost-effectiveness studies and reports; and report to the Board the Committee's evaluation of the District's educational development efforts.*

Probably the single most important factor in determining whether or not an evaluation report is useful is timeliness. An evaluation report that is submitted after the decision has been made is useless. Therefore, all evaluation reports are completed by the Department of Research and Evaluation prior to July 15 of a given year. Budget decisions are generally made by the Board in late July and early August. Although it is a hardship on research and evaluation personnel, this policy has paid dividends in top management and Board support for systematic evaluation.

ADMINISTRATION

Administrative functions are outlined in Figure 10. Every supervisor on the staff is responsible for some administrative tasks. By the same token, no individual is a full-time administrator. Personnel must be practicing evaluators first, administrators second. In this way, it is hoped that admin-

istrators in the Research and Evaluation Department will remain in close
touch with the methodology and practice of evaluation.

Figure 10. Administrative Functions

Task	Estimated Required Resources In Man/Days		
	Manager	Research Assistant	Data Technician
1. Plan and prepare the budget for the Department of Research and Evaluation.	15	30	10
2. Establish, and revise as appropriate, guidelines and priorities for the work flow of the Research and Evaluation Department.	90	5	0
3. Make input to, review, and interact with Research and Evaluation members on all documents produced by the Department of Research and Evaluation.	72	0	0
4. Conceptualize new uses and methodologies for Research and Evaluation activities.	12	0	0
5. Represent the Department of Research and Evaluation at numerous regularly scheduled and ad hoc meetings with District decision-makers and community representatives.	75	0	0
6. Assure the technical quality of all documents produced by the Department of Research and Evaluation.	10	40	5

7.	Manage the activities of the Department of Research and Evaluation.	75	195	25
8.	Report, as requested, on the status of Research and Evaluation activities in the District.	20	20	0
9.	Recruit qualified personnel to fill positions in the Department of Research and Evaluation.	35	10	0
10.	Make provisions for the professional development of Research and Evaluation staff.	116	0	0
11.	Provide technical assistance to evaluation sections of District proposals.	30	0	0
12.	Maintain communication with other agencies engaged in research and evaluation activities.	97	120	0
13.	Provide staff training services in evaluation technology to operation and support departments of the District.	130	0	0

REQUIRED RESOURCES

The major resource required for the implementation of a research and evaluation strategy similar to the one outlined in this paper is a General Superintendent that is aware of the benefits of objective data and is supportive of such an effort. Beyond this, production is required to show other top administrative staff, the Board of Education (although in Dallas we are also blessed with some Board members who have been extremely supportive of research

and evaluation activities from the beginning), project managers, and other concerned personnel the value of objective data in making decisions.

Beyond this, a competent research and evaluation staff is essential. Staff members must possess considerable expertise in measurement, mathematical statistics, research and evaluation methodology, computer programming, data processing and analysis, and report generation. The type of analysis and reporting done in Dallas requires specialists who are dedicated to improving education through competent research and evaluation, and who are often willing to give up weekends and vacations to meet the heavy requirements of the job.

On a more technical basis, a systematic testing program including both standardized and criterion-referenced instruments, and sufficient computer time and facilities to maintain the requisite data bases and to permit the accomplishment of the considerable data anlysis required are essential. The Department of Research and Evaluation has access to a Burroughs System 5500 from 5:00 P.M. to 7:00 A.M. every night and on most weekends. Needless to say, close cooperation with the Data Processing Department is important.

On a more abstract level, a commitment on the part of District decision-makers to go with objective data as the basis for decisions rather than with palpitations of the heart is essential. This may be the hardest resource of all to achieve, but if achieved, will lead to research and evaluation data actually being used in decisions rather than merely being viewed as interesting phenomena.

Finally, from the standpoint of accountability, an administration that recognizes that all trials are not going to be successes, and that is willing to report both successes and failures to the public, is important. In Dallas, all research and evaluation reports, be they successes or failures, go to the

Evaluation Committee of the Board of Education. This Committee meets in

an open meeting, that is, a meeting which the press is free to attend. The

results of this policy have occasionally been temporarily disasterous, but

in the long run have proven to be beneficial to the District from a public

accountability standpoint.

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