ABSTRACT
        Abstracts of 34 research projects conducted in the
Austin (Texas) Independent School District (AISD) are presented. A
roster summarizing the projects by external researchers is also
included. The roster shows, for each project, the project number,
title, director, sponsor, schools where research was conducted, and
whether a full report is on file. This is the eighth year the AISD
has published abstracts of its research. The district's Department of
Management Information screens all proposals presented to the AISD
to: (1) include high quality research that meets the needs and
interests of the district; (2) exclude research that doesn't meet
criteria established by the district; and (3) protect the time and
energies of AISD staff and students. From June 15, 1985 to June 15,
1986, 14 of 22 proposals were approved. The bulk of this document
consists of the abstracts, which include project descriptions,
descriptions of results, implications of results, and implications
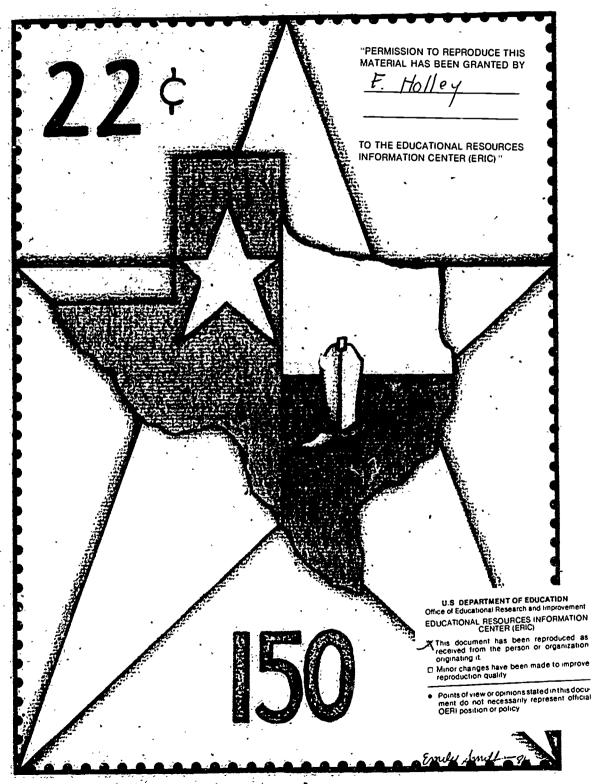for AISD. (JGL)

External Research in AISD:
Searching for Excellence

22 ¢

150

Drawing by Emily Smith, Austin High
McCallum Vocational Commercial Art

1985-86

2

85.M93

REPORT

Title: Research by External Agencies or Individuals in AISD

Contact Person: Glynn Ligon

SESQUICENTENNIAL TIDBIT

During this Sesquicentennial year of our State, it seemed prudent to look
back over the past 150 years (actually 14 years) of records kept on exter-
nal research. During this period, 427 proposals have been received--
73 were submitted in the first year (1973).

Because of increased demands on the time of teachers and administrators as
well as students, approval of external research has become more difficult
to obtain. Thus, a reduction in research proposals has occurred. Numbers
of proposals and acceptances over the past five years have been:

	1982	1983	1984	1985	1986
Proposals	22	22	31	22	22
Approvals	14	15	23	16	14

For the eighth year, we are publishing the abstracts of research projects
conducted within the Austin Independent School District by external
agencies or individuals, Each of these researchers has had to go through
a screening process in which AISD staff members from a variety of depart-
ments reviewed their proposals. This is to ensure that:

- The time and energies of AISD staff and students are protected.

- Only those projects meeting the criteria established by the
  district as conditions for participation in research are ap-
  pr

- High-qua ty research that fits the needs and interests of the
  District is promoted.

The Department of Management Information is the official point of first
contact for all proposals to conduct research in the District. Many of
these initial contacts are by phone or personal visit. Discussions at
that time often result in the immediate determination that proposals are
not viable. For those projects which do appear to be feasible, the re-
searcher is provided forms and instructions for a formal proposal. When
the formal proposal is received, a three-(or more) member administrative

review committee is appointed. The Department of Management Information makes a final decision on administrative approval or disapproval of the project based on the recommendations of the committee members. If approval is given, the Director works with the project director and appropriate AISD staff to select suitable schools and/or departments for the study. However, the principals on the selected campuses may decide that the research project would interfere with instructional efforts and disallow the project.

The researcher is required to provide an abstract for this volume as well as two copies of any dissertation, publication, or other report issuing from the study. These are kept on file at the Department of Management Information. The abstracts included in the publication are entirely the work of the authors named without the review or endorsement of the Department of Management Information.

A total of 22 proposals was reviewed between June 15, 1985, and June 15, 1986. Of these, 14 were approved (including one to be conducted during the next school year), one approved proposal was withdrawn, 7 proposals were disapproved, and one proposal is pending final decision.

4

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

Project Number	Title of Research Project	Project Director, Sponsor	Schools Where Being Conducted	Full Report on File
R83.03	The Impact of Basal Reader Characteristics on the Development of Reading Skill – a Longitudinal Study	Connie Juel Philip Gough Sponsor: University of Texas Faculty	Houston Elementary School	No
R84.03	Biological Investigations in High School Classrooms: A Cooperative Effort of Teachers, Students, and Scientists	Kathleen A. O'Sullivan Sponsor: Dr. Earl J. Montague, U.T.	Anderson, Crockett, and Travis High Schools	Yes
R84.04	The Effect of Parent-Teacher Communication and Problem Solving on the Educational Development of Underachieving Elementary Children	Craig A. Porterfield Sponsor: Martin Tombari, U.T.	Cook and Summitt Elementary Schools	Yes
R84.14	Organizational Factors Associated with Reducing Alienation in Schools Serving the Unpreferred Student	Jimmie L. Todd Sponsor: Dr. Mike Thomas, U.T.	W. R. Robbins Secondary School	No
R84.16	An Observational Study of Young Children Using Microcomputers	Celia Genishi Sponsor: University of Texas Faculty	Highland Park Elementary School	Yes
R84.19	The Effect of Brief, Structured Writing Practice on Children's Written Composition	Patricia O'Neal Willis Sponsor: Diane L. Schallert, U.T.	Becker, Brooke, and Cook Elementary Schools	No

- 3 -

6

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

Project Number	Title of Research Project	Project Director, Sponsor	Schools Where Being Conducted	Full Report on File
R84.21	Evaluating Students' Coping Style	James E. Gilliam Sponsor: University of Texas Faculty	Webb Elementary School	No
R84.22	Knowledge of Forms and Functions of Print in Preschool-Aged Children	Nancy Roser James Hoffman Sponsor: University of Texas Faculty	Allan, Brentwood, Brown, Casis, Dawson, Govalle, Harris, Joslin, Oak Springs, Odom, Pecan Springs, Pillow, Rosewood, Summitt, and Zilker Elementary Schools	No
R84.25	Characteristics of Limited English Proficient Students in LD, MR, and SH Programs	Alba A. Ortiz Sponsor: University of Texas Faculty	Central Office of Elementary Special Education	No
R84.27	Relationship Between Multiple Risk Factors and Child Outcome for Children of Adolescent Mothers	Anne Martin Sponsor: Dr. Keith Turner, U.T.	Travis and Johnston High Schools and the Teenage Parent Program housed at Allan Elementary School	Yes
R85.02	Neuropsychological Deficits and Spelling Performance of Dysphonetic Learning Disabled Children	Cheryl Hiltebeitel Sponsor: Dr. Cindy Carlson, U.T.	Cunningham, Langford, Oak Hill, Odom, Walnut Creek, Williams, and Winn Elementary Schools	Yes
R85.07	An Observational Study of the Teacher as Model of the Comprehension Process	Nancy Roser Sponsor: University of Texas Faculty	Casis Elementary School	No

- 4 -

7

8

AUSTIN INDEPENDENT SCHOOL DISTRICT

Department of Management Information

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

Project Number	Title of Research Project	Project Director, Sponsor	Schools Where Being Conducted	Full Report on File
R85.08	U.S. - Mexico Family Project (7th Grade Students)	Manual Ramirez, III Maurice Korman Sponsor: University of Texas Faculty	Fulmore, Pearce, and Martin Junior High Schools	No
R85.09	A Micro-Ethnographic Study of a Bilingual Kindergarten in Which Literature and Puppet Play Are Used as a Method of Enhancing Language Acquisition	Pat Seawell Sponsor: Dr. George Blanco, U.T.	Sanchez Elementary School	Yes
R85.10	Factors Influencing Children's Concepts of Health and Illness	Maria E. Defino Sponsor: Dr. Claire Ellen Weinstein, U.T.	Wooten Elementary	Yes
R85.11	Social, Psychological, and Cognitive Predictors of Social and Psychological Adjustment in Adolescents	Walter E. Jordan-Davis Sponsor: Dr. Charles J. Holahan, U.T.	Office of Research and Evaluation	No
R85.13	Effects of the Implementation of a Minimum Competency Testing Program on the Acquisition of Mathematics Skills	Evangelina Mangino Sponsor: Dr. Martin Tombari, U.T.	Office of Research and Evaluation	Yes
R85.17	Ethical Issues Confronting Nurses Employed in Hospitals, Public Schools, and Community Health Agencies	Marie B. Andrews Sponsor: Dr. Leonard D. Ponder, A&M University	AISD Health Services	No

-151-

10

AUSTIN INDEPENDENT SCHOOL DISTRICT

Department of anagement Information

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

Project Number	Title of Research Project	Project Director, Sponsor	Schools Where Being Conducted	Full Report on File
R85.19	Teaching and Learning: Personal Constructs of the Participants	Deborah Muscella Sponsor: Dr. Stephen Larsen, U.T.	Joslin Elementary School	No
R85.20	A Comprehensive Investigation of Process-Outcome Relationships in Physical Education	Stephen Silverman Sponsor: University of Texas Faculty	Burnet Junior High School	No
R86.01	An Eighteen Week Longitudinal Study on the Effects of the "No Pass-No Play" Rule, in the Austin Independent School District - Fall 1985	Linda A. Adams Sponsor: Dr. Ronald M. Brown, U.T.	Office of Research and Evaluation	No
R86.02	High School Principals: An Analysis of their Preparation and Involvement in Facilitating the Implementation of an Instructional Project	Ian M. Penny Sponsor: Gene Hall, W. Rutherford, U.T.	Travis, McCallum, Lanier, Anderson, Crockett, Johnston, LBJ, and Reagan High Schools	Yes
R86.03	Preparing for the World of Work: A Study of Learning Disabled Students	Susan Jorjorian Sponsor: Stephen C. Larsen, U.T.	Anderson, Crockett, Reagan, and Travis High Schools	No
R86.04	The Relationship between ESL Language Learning Attitudes and Linguistic Attainment among Recent Immigrant, Native Spanish-Speaking High School Students	Daniel Joseph Livesey Sponsor: Dr. George Blanco U.T.	Travis High School	No

- 9 -

11

12

AUSTIN INDEPENDENT SCHOOL DISTRICT
Department of Management Information

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

Project Number	Title of Research Project	Project Director, Sponsor	Schools Where Being Conducted	Full Report on File
R86.05	Effects of the Mural Method of Integrated Imagery on Recall, Retention, and Transfer	Marcia H. Lind Sponsor: Dr. Gary R. McKenzie, U.T.	Hill Elementary School	No
R86.07	A Cognitive Enrichment Approach to Teaching Mathematical Problem Solving	Carol Bell Katherine H. Kopp Sponsor: Carol Bell, AISD	Maplewood and Houston Elementary Schools	No
R86.08	United States – Mexico Family Study (kindergarten students)	Manuel Ramirez, III Maurice Korman Sponsor: University of Texas Faculty	Dawson, Langford, & Williams Elementary Schools	No
R86.11	Development of Teaching Strategies for use with Limited English Proficient Children Who Are Receiving Services for LD or Mild MR: Year II & III, Classroom Observation and Teacher Collaboration Phase	Ann C. Willig Sponsor: Dr. Alba A. Ortiz U.T.	Ortega, Sanchez, Campbell, Ridgetop, Wooldridge, Langford Elementary Schools and St. John's Special Early Childhood Program	No
R86.14	A Speech Discrimination Test for Spanish-speaking Hearing-Impaired Children	Frederick N. Martin Sponsor: University of Texas Faculty	Allison, Govalle, and Brooke Elementary Schools and AISD Regional Deaf Program	No
R86.15	Individual Differences in Comprehension Strategies During and After an Encounter with Difficult Text	Ellen Gagne Steve Rholes Sponsor: University of Texas Faculty	Brooke, Blackshear, St. Elmo, Joslin, Mathews, Zavala, Langford, Williams, and Patton Elementary Schools	No

– 7 –

13   14

AUSTIN INDEPENDENT SCHOOL DISTRICT
Department of Management Information

ROSTER OF RESEARCH PROJECTS BY EXTERNAL RESEARCHERS

Project Number	Title of Research Project	Project Director, Sponsor	Schools Where Being Conducted	Full Report on File
R86.16	The Effects of Visual Recall Questions During Prewriting on the Production of Descriptive Language in a Writing Task by Secondary Students	T. R. Vannatta Sponsor: Dr. Gary R. McKenzie, U.T.	Crockett High School	No
R86.17	Single Parent/Homemaker and Wage Earner: Techniques for Managing Dual Roles	Wilma Pitts Griffin Sponsor: University of Texas Faculty	Travis and Johnston High Schools and the Teenage Parent Program housed at Allan Elementary	No
R86.21	An Evaluation of the Art Enrichment Program Objectives - 1981-1985	Donna L. Vliet Sponsor: Dr. Jarvis Ulbricht, U.T.	Burnet, Fulmore, Lamar, Martin, Murchison, Pearce, and Porter Junior High Schools; Anderson, Austin, Crockett, McCallum, Reagan, Robbins, and Travis High Schools	No
R86.22	Using HONEY: An evaluation of strategies to promote effective use of Health Objectives in Nutrition Education for Youth (HONEY)	Sue Polasek Sponsor: Dr. Margaret Briley, U.T.	To be determined	No

-8-

15

16

The Impact of Basal Reader Characteristics on the
Development of Reading Skill--A Longitudinal Study

Abstract

Dr. Connie Juel, Ph.D. and Dr. Philip Gough, Ph.D.

Participating Schools: Houston Elementary

Description of Study: The purpose of the study was to describe development in word recognition, spelling, reading comprehension, and writing. We were particularly interested in how growth in each of these skills is influenced by incoming abilities, school developed skills, and basal reader characteristics.

Description of Results: This longitudinal study followed the growth in literacy of the same group of children as they went from first through fourth grade. Summarizing the main results so far: 1) Incoming phonemic awareness (i.e., the ability to distinguish and manipulate sounds in words, such as substituting a /k/ for /t/ in the word "part" to form "park") was the most potent predictor of skill in word recognition, spelling, and reading comprehension through second grade; 2) Children with poor entering phonemic awareness gained more in phonic skill and word recognition if they were placed in the basal series with more controlled vocabulary (i.e., American Book Company); 3) Children who finished first grade with poor skill in phonic analysis and poor word recognition progressed in second grade only if they had gained phonemic awareness and if they were not moved too quickly through their basals; 4) Many poor readers were placed in basals where they could read far less than 90% of the core vocabulary (i.e., on a "frustration" level); 5) Reading comprehension was largely determined by a child's skill in word recognition through second grade; 6) Listening comprehension began to influence reading comprehension after second grade; 7) Years in school affected children's skill in word analysis more than skill in vocabulary and listening comprehension.

Implications of Results: A strong relationship was found between word recognition and spelling. These two skills might well be taught together. Only a weak relationship was found between reading comprehension and writing. Writing appears to require more development in creating and organizing ideas.

Implications for AISD: 1) Since children did not learn spelling-sound relationships even though they had been exposed to significant amounts of print and LOMS - unless they had some phonemic awareness - the district might consider developing oral phonemic awareness training for the children who need it. 2) Pacing of poor readers through basals may need closer monitoring if these children are to be kept from being at "frustration" levels. 3) More may need to be done to expand the vocabulary and listening comprehension skills of children who enter school weak in these areas.

BIOLOGICAL INVESTIGATIONS IN HIGH SCHOOL CLASSROOMS:
A COOPERATIVE EFFORT OF TEACHERS, STUDENTS, AND SCIENTISTS

Abstract

Kathleen A. O'Sullivan, Ph.D.

Participating Schools: Anderson High School, Crockett High School, and Travis
High School.

Description of the Study: The purpose of this study was to evaluate the effects
of cooperative biological investigations on high school biology teachers,
students, and university scientists. Three investigations were conducted: (1)
an insect collection at Travis High School in October, 1983, (2) an
identification of seagrass seeds reserves at Crockett High School in February,
1984, and (3) a measurement of buckeye floral structures at Anderson High School
in April, 1984. All of the investigations included (1) teacher-presented lessons
on the topic, (2) teacher demonstrations of data collection procedures and
techniques, (3) student collection and recording/preparation of data, and (4) two
presentations by the cooperating scientist, one prior to and one following data
collection on the purpose and results of the investigation, respectively. For
some of the classes in each investigation these presentations were live; other
classes viewed videotapes of the presentations. Ten classes and four teachers
participated in the insects investigation, fourteen classes and six teachers
participated in the seeds investigation, and six classes and three teachers
participated in the flower investigation. Seven additional teachers and eight
additional classes served as controls. For each investigation measures of
science processes understanding and attitudes toward science (four scales for
students, seven scales for teachers) were administered to participating and
control teachers and classes. Participants also completed questionnaires
designed to elicit responses to particulars of the investigation. The three
scientists were interviewed to evaluate the reliability and usefulness of the
student-collected data and to elicit their reactions to the investigations.

Description of Results: Analyses on adjusted class means, N = 34, for all three
investigations indicated no significant differences on the science processes and
four scales of the attitudes toward science measures among the insects, seeds,
flowers, and control classes. For the Attitude to Inquiry Scale of the attitudes
toward science measure, the live group mean score was significantly (p = .033)
more positive than the video group mean score. Analyses on teacher scores on the
science processes and six of seven scales of the attitudes toward science
measures indicated no significant differences between the participating and
control group teachers. The participating teachers' score was significantly (p =
.028) more positive on the Social Implications of Science scale of the attitudes
toward science measure. The overall response of students to the investigations
themselves, as indicated on the questionnaires, was positive, with over half the
students in each investigation reporting that they enjoyed learning about the
topic this way and that they would like to participate in a different
investigation with another scientist. On the teacher questionnaire, all thirteen
teachers agreed that they enjoyed participating, working with a scientist, and
working on an open-ended investigation. All but one teacher, who was uncertain,
felt that the experience was worthwhile for students and eleven teachers felt
the experience was worthwhile for themselves (others uncertain). Twelve teachers

believed they had made a genuine contribution to a scientist's research and
eleven believed the same for their students (others uncertain). The interview
responses of the scientists indicated, with minor reservations, their
satisfaction with the collected data, their enjoyment of the experience, and
their willingness to contribute to secondary science education through such
investigations.

Implications of Results: Statistical analyses of the data collected on students'
and teachers' understanding of science processes and attitudes toward science
indicated that the cooperative investigations of the study had minimal effects as
measured by the instruments used. The difference for students on the Attitude to
Inquiry Scale, favoring the live treatment over the video treatment, and
supporting data from the student and teacher questionnaires suggested that the
use of videotapes appeared to diminish the impact of such experiences on
students' attitude to inquiry. The difference for teachers on the Social
Implications of Science Scale indicated that the experiences positively affected
teachers' attitudes toward the social implications of science. There as strong
descriptive evidence from the study that students enjoyed the invest.   ions and
that teachers perceived them as worthwhile for themselves and their su   ents.
The study demonstrated that intact classes of students could collect useful data
for a scientist and that the scientists considered their participation worth the
effort involved on their part.

Implications for AISD: The cooperative biological investigations of this study
had little or no effect on high school biology teachers' and students' process
skills understanding and attitudes toward science as indicated by scores on the
measures utilized in the study. However, teachers did consider the experiences
as worthwhile for both themselves and their students, students did report the
experiences as enjoyable learning, and the scientists perceived them as viable.
It should also be noted that regular, intact classes were involved; the
investigations were not intended for advanced classes or gifted students. With
reservations, the study indicated that such cooperative efforts have positive
potential for AISD biology teachers and their students and university scientists.

THE EFFECT OF PARENT-TEACHER COMMUNICATION AND
PROBLEM SOLVING ON THE EDUCATIONAL DEVELOPMENT
OF UNDERACHIEVING ELEMENTARY STUDENTS

Abstract

Craig A. Porterfield, M.A.

Participating Schools: Cook and Summitt Elementary Schools

Description of Study: The purpose of this study was to examine the
effects of establishing an ongoing, collaborative problem solving
relationship between elementary school teachers and the parents of
underachieving children.   During the spring of 1984, the study was
conducted with elementary school teachers from four AISD schools with
encouraging results.   The parents of two underachieving students from
each of their classes were randomly assigned to (a) be contacted by
telephone once a week for six consecutive weeks, or to (b) receive only
the usual teacher-parent communication.   The purpose of the frequent
telephone calls was for the teachers to get the parents to help them
figure out how to improve the school work and related problems of the
underachieving child.   Teachers attended a 7-hour workshop to learn some
specific techniques to achieve this purpose.   Compared to the children
whose parents were not contacted by teachers, children whose parents
were contacted by teachers showed greater gains in attitude toward
school, perceived academic competence and the percent of reading,
mathematics and language arts assignments completed and completed
correctly.   All of the teachers and all of the parents except one were
enthusiastic about the project and reported specific benefits for
themselves and the children.   A hypothesis was raised that the
misapplication of these methods (i.e., interacting with parents in an
authoritarian rather than a collaborative manner) results in negative
parent and student attitude.

There was only a total of five teacher participants in the spring, 1984,
study, however.   Therefore, it was deemed necessary to replicate the
study with a larger group of subjects in order to see if the results
were reliable.   The study was replicated with student teachers in the
fall of 1984 who were ostensibly required to participate as part of
their student teaching experience.

Description of the Results: Administrative problems at the sponsoring
university led to nonparticipation of most of the student teachers and
to rumors that some of the data and parent contacts were fabricated.
Therefore, the student-teacher data are not reliable enough to report in
detail in this abstract.   It is noted, however, that the results of the
student-teacher study were less consistent than the results of the
teacher study, and the student teachers were less enthusiastic about the
project than the elementary school teachers who had participated in the
spring of 1984.   Besides the fact that the spring teacher participants
did not seem to fabricate their data, they were voluntary participants

in the project, were more able to attend the follow-up training sessions and were better skilled in the problem-solving conference techniques than the student teachers.

Implications of Results: The 1984-85 study did not add any new implications because of the administrative problems at the sponsoring university noted above, which led to nonparticipation of most of the student teachers and to rumors that some of the data and parent contacts were fabricated. Based on only five teachers, the spring, 1984, study still needs to be replicated with a larger group of subjects. As noted in the 1983-84 abstract, the preliminary impressions of the spring, 1984, study were that, when elementary teachers use the prescribed methods on an ongoing basis to get the parents of underachieving children to help them figure out how to resolve the children's work performance and related problems, the students improve their work performance and attitude toward school. A hypothesis was raised that the misapplication of these methods (i.e., interacting with parents in an authoritarian rather than a collaborative manner) results in negative parent and student attitude.

Implications for AISD: As noted in the 1983-84 abstract, the preliminary impressions of the spring, 1984, study were (a) that the types of skills taught in this project would be very valuable to AISD teachers who want to improve their abilities to get parents to help them figure out how to improve the school problems of underachieving children, and (b) that the ongoing use of these methods can lead to improved student work performance and attitude. These results still need to be replicated with a larger group of teachers to see if they are reliable.

ORGANIZATIONAL FACTORS ASSOCIATED WITH
REDUCING ALIENATION IN SCHOOLS SERVING
THE UNPREFERRED STUDENT

Abstract

Jimmie L. Todd

<u>Participating Schools</u>: Robbins High School

<u>Description of Study</u>: The purpose of the study was to identify whether
the organizational structure of alternative schools impacted the
students' attitude toward school and their alienation from school.
Examined in this study were whether or not the teachers control
strategies and the organizational characteristics (hierarchy of
authority, rules and regulations, and impersonalization) influenced
the students' attitude toward school and their alienation from
school. The study was limited to alternative schools in Texas
which have been in operation five or more years.

<u>Description of Results</u>: The data is in the process of being analyzed.
A complete report will be filed with Austin Independent School District
when the study is completed.

<u>Implications of Results</u>: The implications will be forthcoming upon
completion of data analysis.

<u>Implications of AISD</u>: The study will provide Austin Independent
School District with knowledge of which components of an alternative
school are associated with reducing students' alienation from school
and improving their attitude toward school. These implications will
be included in the dissertation and abstract.

22

An Observational Study of Young Children Using Microcomputers

Abstract

Celia Genishi, Ph.D., and Pamela McCollum, Ph.D.

Participating School: Highland Park Elementary

Description of Study: The purpose of this study was to observe how
kindergarteners and first graders used the computer language Logo in
a computer laboratory setting. As they use Logo, children learn
fundamentals of programming; with their commands they create geometric
shapes and other graphics. Creating these graphics on their own de-
pends on children's abilities to learn the appropriate commands and to
problem solve. Our primary interest was in testing the claim that the
use of Logo leads to considerable social interaction and talk among
children, as well as problem solving. We collected 22 hours of video-
tape, which recorded the children's activity with the computer and each
other, as well as their actual keystrokes on the computer, over a
3-month period in the spring.

Description of Results: Using a case study approach, we have thus far
transcribed the videotapes of seven of eight focal kindergarten children.
In a preliminary analysis we described the kinds of talk five children
engaged in as they used Logo. The unit of analysis was the Turn, de-
fined as one speakers' utterances, including at least one complete
proposition, bounded either by other speakers' utterances or notable
pauses. Coding categories were assigned to each turn to begin to deter-
mine the nature of children's talk. These categories were applied in
mutually exclusive pairs: Task-related vs. Nontask-related; Other-
directed vs. Self-directed; Child-child vs. Teacher-child; and Coopera-
tive vs. Argumentative. For the six class sessions transcribed, the
mean number of Turns was 212 (range: 78 - 384 turns per session). The
mean percentage of Task-related turns was 95% (range: 91 - 99.997%);
Nontask-related turns were 5% (range: .003 - 9%). The mean percentage
of Other-directed turns was 91% (range: 81 - 99.994%) while Self-directed
turns were 9% (range: .006 - 19%). Child-child turns accounted for the
majority of the turns of talk with a mean percentage of 62% (range: 49 -
82%); Teacher-child turns occurred 38% of the time (range: 18 - 51%).
Cooperative turns made up 97% (range: 91 - 100%), while Argumentative
turns only occurred in 3% of the turns (range: 0 - 9%). Finally, an
average of 97% of turns of talk were categorized as Non-playful (range:
95 - 100%), and 3% (range: 0 - 5%) were Playful.

More recently we did a more refined analysis of two of the kindergarten-
ers. We analyzed Self-initiated Interactions, Attention-getting,
Reporting, Explaining, Directing, Requesting, Confirming, and Giving
and Getting Help. Incidents in which children experienced difficulty
because of lack of familiarity with computer terms (e.g., program bug)
were also studied. In both of these analyses of talk, we found that the
teacher's role was crucial. She was always in demand, and children were
unable to solve certain problems without her help.

Implications of Results: The kindergarten children's competence in
managing their computing environment was striking and their enthusiasm
and confidence, evident. Logo presented a variety of learning opportuni-
ties in a short period of time that seem well suited to problem solving
and utilizing social skills. The collaborative behavior, which flourished
in the kindergarten lab, was encouraged by the kindergarten teacher's
verbal prompts and her relative inaccessibility. It was empowered by the
children's sophistication and knowledge. In general, this study supports
the findings of previous reports that Logo invites collaboration while
computing and that computing continues to be a social activity even after
the novelty of going to the lab wears off. It also raises the question of
how self-guiding the Logo program is. The major implications for practice
are that (1) Logo leads not only to learning about creating graphics and
varied geometric shapes; it also encourages children to learn from each
other as they practice social and linguistic skills. (2) For kinder-
garten children, using Logo may require a considerable amount of teacher
intervention.

Implications for AISD: Since the findings we reported are based on only
one classroom and one teacher, they are clearly not generalizable to the
school district. What we observed, however, suggests that using Logo is
an appropriate activity for kindergarteners. It was not too difficult
for the children we observed, and it clearly encouraged collaborative
learning. In schools where there is a computer laboratory, teachers may
want to explicitly tell children to ask other children for help. In
schools wher. children use computers in the regular classroom on their
own, the teacher may need to make herself/himself available, so that
children can get enough information to move along in the Logo program.
Logo does not impress us as self-guiding, at least at the kindergarten
level.

The Effect of Brief, Structured Writing Practice
on Children's Written Composition

Interim Report

Pat O'Neal Willis

Participating Schools: Brooke, Becker, Cook.

Description of Study: The purpose of this study is to examine the effect of a year-long writing program on the overall quality of children's written compositions. The program was incorporated into the curriculum of one sixth grade teacher who had complete charge of its daily administration.

The treatment consisted of brief, consistent, structured writing practice administered three times per week. Each session was introduced by means of guided fantasy which was used as a catalyst for text design. Following the presentation of the guided fantasy, students wrote for ten minutes without stopping. They were allowed to write about the topic presented in the fantasy or about another topic of their choice. The goal of each ten-minute session was to produce the first draft of a text. Mechanics of writing (i.e., handwriting, spelling, and punctuation) were de-emphasized during this initial writing period. De-emphasizing mechanics was important because it encouraged writers to devote their whole attention to creating the message conveyed by the text. Guided fantasy was important because it allowed students to experience textual content before they wrote about it.

The effect of this treatment is being measured by comparing the target group to two control groups where different types of writing practice have been used as a part of the regular curriculum. Two teachers, who are considered outstanding educators, volunteered to participate. Their participation in the study allowed a check of whether any improvement observed in the treatment might be attributed simply to teacher effects. In the first control group, brief unstructured daily writing practice took place. This practice involved students' writing in journals. In the second teacher's classroom, daily writing was not a practice. Writing in this classroom consisted of weekly assignment of formal papers which were submitted to the teacher for a grade.

The comparison of writing ability among the three groups is being measured by analyzing students' performance on five formal, in-class writing assignments administered during the spring at one-month intervals. The product of these combined assignments was 330 written texts.

Status of Study: Data for this study have been collected but all are not available for analysis at this time.

Impact of the Data Collection Procedure: A videotape describing the
instructional method used with the treatment group was completed in
January, 1985. The tape, entitled "Writing Aerobics," was aired on
AISD's education channel this spring.

Due to the success demonstrated by the treatment group, two principals
requested and obtained permission to expand the program on a six-week
trial basis. This pilot project was designed to impact more teachers and
students and to expand the scope of the Writing Aerobics technique to
include peer editing and second draft revision for content. Late in the
spring of 1985, four teachers were trained to use the Writing Aerobics
technique with their students. Two teachers were based at Brooke and two
at Ortega. Three were regular classroom teachers (6th grade) and one was
a Chapter I reading teacher. The Chapter 1 teacher used the program with
eleven 4th-grade students who ranked lowest on the Iowa Test of Basic
Skills (ITBS) at Brooke. Approximately 90 students were involved in this
six-week pilot study. In addition to the Chapter I students, the sample
group included one Aim-High class from Brooke, and a high-middle to
middle level group, and a low-middle to low-achieving class from Ortega.
Approximately one-third of these 90 students scored below the thirteenth
percentile in reading and language arts on the ITBS.

The four teachers were trained by means of an orientation inservice,
demonstration lessons, and guided implementation of the technique with
their own language arts classes.

In addition to the student writing program, an adult writing program was
established to allow teachers to experience the writing program first
hand. Teachers wrote at home on a topic of their choosing and shared
that composition with fellow writers in the group. Meetings were held on
a weekly basis over a seven-week period.

Teachers and students were surveyed before and after the pilot project to
assess the effectiveness of the intervention on teacher and student
participants. Results of those surveys are summarized below.

Impact on Students:

(1) There was a positive effect, across the board, on students of all
ability levels. Without exception, at the end of six weeks, all 90
students were writing better, revising better, listening better, and
commenting more knowledgeably on the literary features of other students'
texts.

(2) There was an air of mutual respect and "professional acceptance" that
developed as students came to know one another as literary beings.

(3) Students' development of pride in their own compositions was notice-
able.

(4) Teachers noted an emergence of shy, withdrawn students into the
mainstream of classroom life that occurred through sharing compositions.

(5) The writing program became a socially acceptable vehicle for expressing feelings.

(6) The program offered an opportunity for teachers and peers to provide each student with positive, ego-boosting individual attention two to three times weekly through sharing compositions orally.

(7) There was a total absence of discipline problems during writing and sharing times.

(8) Teachers noted the coherence of student compositions, irrespective of ability level.

(9) There was an increasing desire by students to hear positive comments and constructive criticism regarding their own work.

(10) Teachers commented that peer critiquing had a generalized impact on the writing of students who served as audience.

Impact on Teachers:

(1) All teachers were enthusiastic about the results of the experiment and intend to continue the program.

(2) There was increased interest on the part of teachers not included in the project.

(3) There was high interest and strong desire to continue the adult writing group. Teachers felt this group helped them to enjoy writing more and feel more confident and relaxed about writing. They felt motivated to write due to their commitment to the group. Teachers commented that listening to and critiquing others' writing helped them to improve their own listening skills. Participation in the group caused teachers to stretch themselves int_.lectually. It also offered a forum where they could get to know other professional educators in a more personal way. This caused them to feel less isolated professionally.

(4) Teachers commented that they saw the adult writing group as providing a forum where educators, through writing, could express and share personal and professional ideas, thoughts, frustrations, and hopes. They viewed this collegeal networking as an opportunity for professional growth.

Impact on Principals:

(1) The two principals involved at Brooke and Ortega were enthusiastic about the results of this pilot project and wish it to continue.

(2) The principal of Maplewood is interested in joining the project. She is especially interested in learning the technique herself so that she can share it with her staff. She would like to include in the project one teacher of the visually impaired, one resource teacher, and one regular classroom teacher.

Implications for AISD:

(1) Staff might be expanded to include regular teachers from grades 4-6
as well as special area teachers and principals. Teacher networking
could be encouraged through establishment of other adult writing groups.

(2) Academic content should be expanded to include these writing tasks:
rough draft composition, second drafts (revised for content), and third
drafts (revised for mechanics). Sharing could be done in both large and
small group settings. This writing technique could be expanded to
include other content areas (e.g., social studies and science).

(3) Written products could include a kit for grades 4 to 6 (story
starters, manual, audio tapes of story starters), a monograph on facili-
tating emotional growth through written composition, and periodic journal
articles.

28

EVALUATING CHILDREN'S COPING STYLE

Abstract

James E. Gilliam, Ph.D.

Participating School: Webb Elementary School

Description of Study: The purpose of this research was to gather data on
the concept of coping. Specifically the researcher was interested in de-
terming how elementary age students respond to social stressors. An exper-
imental edition of the Test of Coping Style was designed and administered
to 66 students at Webb Elementary School. The Test of Coping Style is a 24
item open-ended questionnaire which asks students what they would do in re-
sponse to a stressful event. For example, "What would you do if someone
tried to pick a fight with you?" Items of this nature were posed and the
students wrote in their answers.

Description of Results: Data are currently being analyzed. Preliminary
analysis indicates that the sample subjects utilize ten basic styles for
coping with stressful social events. These styles and behavioral examples
are:

    Aggression- take some form of action to remove the source of the
             stress. (eg. fight, swear, insult, etc.)

    Assertion- do something to inform the person that what s/he is doing
             is not liked by the subject. (eg. confront the person,
             tell him/her what it is that is not desired; ask the
             person to stop doing whatever it is that is causing stress.)

    Compliance- object or succumb to the demands made by the person. (eg. go
             along, let him/her have his/her way, give in.)

    Control- take some action to gain some control of the situation.
             (eg. call for help, tell someone what is happening, problem
             solve.)

    Denial- say or do something to not recognize the stess. (eg. pretend,
             try to make the person laugh, make excuses.)

    Emotion- react with some strong feeling. (eg. cry, get angry, feel hurt,
             feel guilty.)

    Ignore- not respond. (eg. move away, be quiet, not do anything.)

Non Compliance — do something in opposition to what the person
                expects. (eg. defy, argue, disobey,)

Withdrawal- withdraw and attempt to avoid the situation. (eg. be
            quiet, pout, sulk.)

These common or basic styles of coping are being further analyzed to de-
termine what common factors are present.

Implications of Results: Elementary age school students do appear to use
certain styles of coping when reacting to stress. Given knowledge of an
individual student's coping style, teachers can better prepare for inter-
acting with the student, and can plan behavioral strategies to accomodate
the student's needs and develop activities to teach the student more adapt-
ive coping methods.

Implications for AISD: If further data analysis confirms that certain
students predictably respond to social stress in school by specific coping
techniques and the Test of Coping Style can identify what students are
likely to react in what ways, preventive planning can occur to lessen
disturbances in school.

30

KNOWLEDGE OF FORMS AND FUNCTIONS
OF PRINT IN PRESCHOOL-AGED CHILDREN

Abstract

Nancy Roser, Ph.D. and James Hoffman, Ph.D.

<u>Participating Schools</u>: Allan Elementary, Brentwood Elementary, Brown Elementary, Casis Elementary, Dawson Elementary, Govalle Elementary, Harris Elementary, Joslin Elementary, Oak Springs Elementary, Odom Elementary, Pecan Springs Elementary, Pillow Elementary, Rosewood Elementary, Summitt Elementary, and Zilker Elementary.

<u>Description of Study</u>: The purpose of this study is to advance our understanding of early literacy by describing the developing knowledge of forms and functions of print in two-, three-, four-, and five-year-old children prior to formal literacy instruction. All preschool children are younger siblings of successful first grade readers who were nominated by their teachers. Sixty-three young children have been interviewed about various examples of written language presented in a set of slides. The print examples represented multiple forms and functions of written language sampled from the environment (e.g., a STOP sign) and books (e.g., a nursery rhyme). Additional perspectives on the children's print awareness came from a writing sample, a book handling task, and a parent interview. The parent interview focused on (1) the characteristics of the home environment in which the children are nurtured, (2) parental expectations for success of their children as 'readers', and (3) parental attributions for their children's success in reading.

<u>Description of Results</u>: Analysis continues; however, preliminary results (1) support the contention that young prereaders, especially those from homes which had already fostered a successful first grade reader, hold broad and accurate notions of print forms and functions reflecting a reader's knowledge of print, and (2) suggest that children are not only read to, but are also exposed to both adult and sibling reading models. In addition to ongoing analysis, we are presently engaged in the two-year follow-up of the preschool children's progress toward literacy.

<u>Implications of Results</u>: Through this study we hope to be able to describe pattrns of growth in knowledge of forms and functions of print among two-, three-, four-, and five-year-old siblings of successful first grade readers. Parental data, considered in combination with other facets of the study, should advance our understanding of the relationship of the home environment to early literacy development.

<u>Implications for AISD</u>: We will develop a brochure for parents describing our findings related to early literacy development in homes fostering at least one successful AISD first grade reader.

Characteristics of Limited English Proficient Students
in LD, MR, and SH Programs

Abstract

Alba A. Ortiz, Ph.D.

Participating Schools: AISD was one of three school districts in Texas
participating in this study. Subjects were handicapped Hispanic students
in grades two through five who were being served in classes for the
communication disordered, learning disabled, or mildly mentally retarded.
There was no direct involvement of AISD schools, as all student data were
obtained from central office files.

Description of Study: The purpose of this study was to identify referral,
assessment and intervention practices that result in the provision of
effective special education services for limited English proficient (LEP)
and bilingual students. Data which described characteristics at the time
of initial placement for a population of approximately 360 mildly mentally
retarded, learning disabled, and communication disordered students who were
receiving special education services were collected from each school
district. The various practices, instruments, and procedures used by the
districts in referral, assessment, and placement of LEP and non-LEP
Hispanics in special education were examined. During the second year of
the study, follow-up data were collected for all students who had had a
3-year reevaluation.

Description of Results: Data for the LD sample across the three
participating districts have been analyzed. Because there were an
insufficient number of MR students in the district, AISD was not included
in analysis of data on MR students. Analyses of speech data are in
process, as are analyses of follow-up data for all subjects.

Data revealed that participating districts used essentially the same
procedures to assess and place LEP students in special education as were
used for Anglo students. Due to a lack of current language proficiency
data, and because appropriate assessment procedures are generally not
available, it was not possible to determine whether the subjects were
actually learning disabled or were in the process of acquiring English at
the time of placement in special education. For some students, significant
discrepancies between intelligence and achievement, the operational
definition of a learning disability, may have been an artifact of testing
conducted in English.

Implications of Results: This study provided an initial data base upon
which to base recommendations for policies and procedures related to
special education services for handicapped LEP students in Texas. The LD
report includes these recommendations.

Implications for AISD: Analysis of results by district should yield
information which can be used by the district to adapt the special
education referral, assessment, and placement process to more effectively
serve LEP students.

This study is being conducted by the Handicapped Minority Research
Institute on Language Proficiency, Department of Special Education, The
University of Texas at Austin.

Relationship Between Multiple Risk Factors
and Child Outcome for Children of Adolescent Mothers

Abstract

Anne Martin, Ph.D.

Participating Schools: Johnston High School, Travis High
School, and Allen Elementary School Teenage Parent Program.

Description of Study: Numerous studies have identified
children of adolescent parents as a group at risk medically,
cognitively, and socially. However, little research has
looked at differences within a group of children of teenage
mothers in order to predict which children within this pop-
ulation are at greatest risk. The purpose of the present
study was to identify which of the factors discussed in the
literature on adolescent parenthood were most predictive
of developmental delay for children of adolescent mothers.

Description of Results: Seven factors were found to be most
predictive of the developmental status of the child. These
factors were used to form the following decision rule index:
1) Was the child's birth weight below 5½ lbs.? 2) Was the
mother's weight gain during pregnancy less than 15 lbs.?
3) Was the length of pregnancy less than 8 months? 4) Was
there more than one complication at the time of birth?
5) Was the hospital stay at birth more than 10 days? 6) Has
the child been hospitalized any since birth? 7) Did the
mother receive special education services while in school?
An answer of yes to two or more of these questions indicated
a high risk of developmental delay/handicapping condition.
The use of this decision rule index accurately predicted
the developmental status of 92% of the 106 subjects.

Implications of Results: The great majority of children
screened for this study tested normal in their development,
suggesting that the majority of the young mothers and their
families had been able to provide their child with at least
the minimum care needed to insure normal development. How-
ever, when two or more of the risk conditions listed above
were present, the likelihood of developmental delay was
great. The potent impact of medical/health concerns and
the mother's own developmental status was highlighted. No
environmental characteristics (such as income level, ethni-
city, or family composition) were as highly predictive as
were these more biologically oriented factors.

34

<u>Implications for AISD</u>: The results presented above are
necessarily tentative since the decision rule index has
been used with only one sample in determining its predic-
tive usefulness. However, with this caution in mind, it
appears that the decision rule index may offer a quick
guide to suggest which children of adolescent mothers are
at greatest risk of developmental delay and in need of
further assessment. This information could be of use to
those AISD programs and staff who work with adolescent
parents in helping them receive needed services for their
children.

Neuropsychological Deficits and Spelling Performance of Dysphonetic
Learning Disabled Children

Abstract

Cheryl Hiltebeitel

Participating Schools: Cunningham, Langford, Oak Hill, Odom, Walnut
Creek, Williams, and Winn Elementary Schools

Description of Study: The purpose of this study was to delineate some of
the neuropsychological deficits that may be found for learning disabled
children who demonstrate an inability to spell with phonetic accuracy
(dysphonetic subtype). Four neuropsychological tests of auditory-verbal
function were administered to 21 fourth- and fifth-grade boys
classified as dysphonetic by the Boder Test of Reading-Spelling Patterns
and to 20 of their normally-achieving peers. Step-wise discriminant
analysis was employed to determine whether or not scores on these
measures could discriminate between the two groups. Supplementary
inform.tion concerning intellectual abilities and achievement levels also
was obtained from the children's school records, in order to examine
possible patterns in the data for the dysphonetic children.

Description of Results: Two of the auditory-verbal measures were found
to discriminate between the two groups of children with 75.61% accuracy.
These were the Speech Sounds Perception Test, a test which involves
listening to a series of nonsense words and selecting a written word
which matches each of the orally presented words, and an Auditory Closure
Test, which presents the child with sequences of isolated sound elements
that must be blended into recognizable words. Scores on a Sentence
Memory Test and a Verbal Fluency Test did not discriminate between the
two groups of children. In contrast to expectations, however, a
significant difference was not obtained because a number of the normally-
achieving children performed poorly on these two latter measures.
Inspection of the intelligence data revealed that most of the dysphonetics
earned lower scores in the verbal domain than in the nonverbal domain.

Implications of Results: These results support the hypothesis that
dysphonetic children experience some degree of auditory-verbal
dysfunction, although pervasive deficits were not manifested in terms of
poor performance on all four of the auditory-verbal measures.
Nevertheless, performance deficits on these measures, which have been
associated with dysfunction of the left cerebral hemisphere, allow the
suggestion that specific brain-related deficits may be found in the
subtype of learning disabled children characterized by poor appreciation
of the phonetic features of words that are necessary for accurate
spelling.

Implications for AISD: Conclusions derived from these results may prove
to impact educational planning for students with a learning disability
manifested in this type of spelling difficulty. The results provide
preliminary evidence for brain-related limitations which may affect the
way in which these learning disabled children can learn to read and spell.
Because of their limitations, these children may be unable to benefit
from remedial activities based upon repetition of phonics instruction.
Thus, more accurate delineation of the impaired functions should direct
the selection of the specific remedial approach that is most appropriate
for this population.

An Observational Study of the Teacher as
Model of the Comprehension Process

Abstract

Nancy L. Roser

Participating Schools: Casis Elementary.

Description of Study: The purpose of this investigation was to describe the language interactions of teachers and young children as they responded to selected examples of literature during storytime in kindergarten and first grade. Audio- and/or videotape recordings were made three-times weekly over a period of eight weeks in each of two classrooms. Teachers read a total of 24 books varying in genre and in teacher-pupil familiarity with the titles. In addition to analyses of the form, type, and focus of language responses, teacher language was inspected and analyzed to determine how teachers of beginners model the process of comprehension while reading aloud.

Description of Results: In previous studies of booksharing both between parents and young children and preschool teachers and their classes, results have indicated that adults assume different language roles in home and school settings. An inspection of the language interaction patterns between these teachers and children as text was shared aloud seemed a likely method for gaining insight into the ways young children attempt to construct meaning, as well as for investigating how the adult reader aids children in becoming active processors of text. These preliminary results (based on analyses of adult language) represent an attempt to induct and represent the teacher's model of comprehension based on the teachers' uses of language. Results indicate that teacher talk in response to text signalled these beginners that: 1) text holds answers to their questions; 2) readers can make predictions about text; 3) the accumulation of story details allow for assimilation of story events; 4) books record stories that are true and that are fanciful; 5) readers can wonder and think about the logic of events; 6) stories sometimes require additional information or background knowledge to be understood; and 7) readers can link their experiences with those in books. Children's responses to text mirror the form and focus of their teachers.

Implications of Results: Teachers of young children demonstrate a wide range of attempts to ensure comprehension of stories and books read aloud. These behaviors included activating background knowledge, clarifying vocabulary, encouraging speculation, prediction, comparison making and supporting inferences, and linking literature thematically. Children in both classes demonstrated levels of comprehension typically connected with higher grade and achievement levels. The storytime comprehension behavior of these prereaders and early readers then do not corroborate existing literature which indicates that comprehension is not "taught." Both teachers indicated well-developed models of teaching reading comprehension and these language behaviors correlate with childrens' responses to text shared aloud. Researchers have just begun to study storytime (sometimes called a "literacy event") as a possible crucial element in children's acquisition of reading. If teachers are to better help children become increasingly literate, they must become more sensitive to the ways of orchestrating instructional events that will have an effect on student participation and learning. By studying the strategies of effective teachers and

38

their effects on pupils' comprehension, we can gain access to the potential of the teacher as a model of reader-thinker as a step toward better teaching of reading comprehension.

Implications for AISD: Tapes and transcripts from these model teachers may serve for inservice sessions with others interested in the potential of storytime in their classrooms. Publications from this work will appear in Language Arts and other professional journals.

U.S.-Mexico Family Project (7th Grade Students)

Abstract

Manuel Ramirez III, Ph.D. and Maurice Korman, Ph.D.

Participating Schools: The purpose of this cross-cultural study is
to identify characteristics of children and families which are related
to success in school. The study is assessing interaction patterns in
middle class Anglo and Mexican American families in Austin and those
of Mexican families in Monterrey, Mexico. In addition, the values, and
intellectual as well as personality characteristics of these families
and individuals are being investigated and contrasted.

Description of Results: Preliminary findings from the questionnaires
and interviews indicate that the families of academically successful
children in all three cultures are more cohesive and cooperative than
the families of children who are experiencing problems of academic
achievement.

Implications of Results: To do primary prevention with respect to
school failure it is necessary to encourage parents to be more involved
with their children and to spend more time with them.

Implications for the AISD: Drop-out prevention programs need to focus
on how families at risk can begin to utilize some of the approaches and
techniques of socialization used by the families of successful children.

40

A MICRO-ETHNOGRAPHIC STUDY OF A BILINGUAL KINDERGARTEN
IN WHICH LITERATURE AND PUPPET PLAY ARE USED
AS A METHOL OF ENHANCING LANGUAGE ACQUISITION

Abstract

Rita P. Seawell, Ph.D.

Participating School: Sanchez Elementary

Description of Study: The present study had two main purposes: (1) to create an activity in which young children could acquire language authentically, and (2) to identify and describe aspects of that activity which appeared to enhance their language acquisition.

Description of Results: Fourteen hours of audio and videotapes of a class of 25 children, grouped in triads and dyads for a literature/puppet play activity in which Spanish and English books were read, were analyzed to describe the manner in which the activity fostered language growth. In order to do this the data were separated into three broad categories: literature-related language, communicative strategies, and emergent literacy patterns. Literature-related language was subcategorized into narrative language (dramatizing and impersonating) and comprehension language (correcting another, paraphasing/extending, and drawing conclusions). Communicative strategies were subcategorized into simulation strategies (prompting, echoing/repeating, creative constructing, and recalling) and code-switching strategies (maintaining, supporting self, supporting another). Emergent literacy patterns were subcategorized into pretending to read, matching the written with the spoken language, and anticipating learning to read as a desirable achievement. Findings included: (a) during the literature/puppet play activity the language used was more diverse and often more complex than that generally found in adult-child or child-child interactions; (b) during the literature/puppet play activity simulation and code-switching enabled the children to sustain communication; (c) during the literature/puppet play activity the children found abundant opportunities in which to pretend to read and to acknowledge the graphophonic connection; several children voiced pride in being able to read, and all appeared to find the activity engaging. It was concluded that literature and related puppet play can provide young bilingual children with an engaging way to experience language growth in both their languages.

Implications of Results: Children's literature and related puppet play can provide young bilingual children with an engaging way to experience language growth in both their languages. Therefore, if the goal is to foster language growth among young bilingual children, a literature/puppet play activity might be one of the ways this goal could be achieved.

Implications for AISD: The results presented above are necessarily
tentative since they were based on a total of only 25 children.
However, if the findings of this study are further substantiated, it
would appear that a literature/puppet play activity might be
advantageous to young bilingual children in this school district.

FACTORS INFLUENCING CHILDREN'S CONCEPTS
OF HEALTH AND ILLNESS

Abstract

Maria E. Defino, Ph.D.

Participating Schools: Wooten Elementary

Description of Study: Healthy children and children with
chronic illnesses were invited to participate in a study
designed to increase our understanding of the ways in which
children make sense of health and illness. The participants
were interviewed with the Concepts of Illness (CI) protocol
(healthy children were interviewed twice), and responded to
the Nowicki-Strickland Internal-External Locus of Control
(NSIE) measure. In this manner it was possible to assess
the test-retest reliability of the CI protocol, in addition
to indicating whether or not relationships exist between
children's health, personality factors, and conceptualiza-
tions of health and illness.

Description of Results: Several findings resulted from this
research. First, the CI protocol was characterized by high
test-retest reliability ($r = 0.95$, $p < .001$); this reflected
the 100% rate of agreement between independent readers of
children's interview protocols. Second, there was no
substantial relationship between children's health status
(e.g., healthy versus having a chronic illness) and the ways
in which children in the study made sense of health and
illness, even though those with chronic illnesses seemed to
use more medical jargon in their explanations. Third, there
was a significant negative correlation ($r = -.36$, $p < .05$)
between children's NSIE scores and their CI protocol scores.

Implications of Results: The CI protocol appears to be
worthy of continued use in research, due to its satisfactory
measurement properties. Three areas needing further
investigation are: 1) the role of locus of control as a
moderator in children's concepts of health and illness;
2) the utility of the CI protocol in medical/applied
settings; and 3) the discriminant validity of the CI
protocol.

Implications for AISD: Student learning in AISD does not
seem to have been influenced in any way by this study; all
interview sessions were held during noninstructional time
outside of the school building. Children did report having
enjoyed the sessions, however.

Social, Psychological, and Cognitive Predictors
of Social and Psychological Adjustment
in Adolescents

Abstract

Walter E. Jordan-Davis

Participating Schools: None. This study will utilize data contained on the Office of Research and Evaluation research files (Youth Needs Survey File).

Description of Study: The objective of this proposed study is to construct a prediction model that aids in the understanding of adolescents' (junior and senior high school students) and the social, psychological and cognitive factors which influence their social and psychological adjustment. This study will examine the relationship of adolescents with significant others (such as parents, peers, and teachers), along with socio-demographic and family characteristics to determine the casual process of adjustment. Because the study is based on an existing data base, no student or teacher time is required.

Description of Results: Results of the study should support the following hypotheses: 1) adolescents respond to the environment on the basis of the cognitions or meanings that elements of the environment have for them as individuals; 2) societal/cultural meanings are modified through individual interpretation of the interaction between socio-demographic psychological, and environmental constraints. Path analysis techniques will be used to examine these relationships.

Implications of Results: The purpose of this proposed paper is to investigate the structure of adolescents' perceptions about themselves and others. A central concern of this investigation will be to provide a useful framework that can contribute directly to the understanding of the cognitive states and processes which mediate adolescents'; sociopsychological adjustment. The study will employ a socioecological framework to explore the interaction of social, psychological, and cognitive structures affecting adolescents. The contributions of this study will include a clearer understanding of the cognitive processes mediating various types of school-related social experiences.

Implications for AISD: The results of this study should assist the District in working towards the primary prevention of the social and psychological problems confronting adolescents. This study will provide the District with a more complete understanding of students' interactions between a school's social-environmental setting and of students' individual cognitive adaptation to that environment. Such understanding could help the District in refining student assistance programs.

EFFECTS OF THE IMPLEMENTATION OF A MINIMUM COMPETENCY
TESTING PROGRAM ON THE ACQUISITION
OF MATHEMATICS SKILLS

Abstract

Evangelina Lucia Mangino, Ph.D.

Participating Schools: The data used in this study was obtained from the 1979, 1981, and 1983 Sequential Tests of Educational Progress (STEP) files. Students selected were those tested with form 2A of the STEP, regardless of which school they attended. Because the study used computer files, there were no schools participating directly.

Description of study: The study investigated the effect of the implementation of the Texas Assessment of Basic Skills (TABS) on the rate of acquisition of basic and high-level mathematics skills of a sample of ninth grade students in the Austin Independent School District.

The mathematics items from the STEP were used to measure basic and high-level skills of students tested in the ninth grade in 1979 (one year before the implementation of the TABS), 1981, and 1983 (one and three years after the state-mandated testing program began). Previous achievement (eighth-grade average) was used as a covariate in the data analyses.

Separate regression analysis were conducted for basic skills and high-level skills. Seven regression models were used to test linearity of the regression lines, the difference between intercepts, and the interaction between previous achievement and year tested.

Description of Results: The results indicate a significant increase in acquisition of basic skills between 1979 and 1981, but no significant change between 1981 and 1983. The increase was constant at all levels of previous achievement.

A significant interaction between year tested and previous achievement was found for high-level skills, such that low-achieving and high-achieving students were affected

differently by the introduction of the minimum competency test.

Low achieving students (i.e., "C" and "D" students) showed a dramatic increase in the acquisition of high-level skills between 1979 and 1983. No change was detected from 1979 to 1981. High achievers ("A" students) showed a slight decline in the acquisition of high-level skills from 1979 to 1983.

Implication of Results: A strong emphasis on basic skills is helpful in increasing the rate of acquisition of basic skills of all students but if caution is not exercised by teachers, high achievers may suffer a detrimental decline on the rate of acquisition of high level skills.

Implications for AISD: Teachers and administrators need to be advised of the results of this study, to encourage them to pay particular attention to the needs of high achievers at the same time that they are covering the skills included in the minimum competency testing program. Using basic skills or essential elements as the sole or primary guide for developing curriculum restricts the scope to the detriment of high-achieving students.

46

ETHICAL ISSUES CONFRONTING NURSES EMPLOYED IN HOSPITALS,
PUBLIC SCHOOLS, AND COMMUNITY HEALTH AGENCIES

Abstract

Marie B. Andrews, R.N., M.S.

Participating Schools: The population for this study included all
nurses employed in the Independent School Districts of Austin, Houston,
Dallas, Fort Worth, and San Antonio; all nurses employed in the county
and city health departments and the Visiting Nurse Associations of those
five cities; and all nurses who were members of the Texas Nurses Asso-
ciation in Districts 3, 4, 5, 8, and 9 who were employed in hospitals.

Description of Study: A Delphi respondent panel composed of eighteen
nurses employed by hospitals, public schools, and community health
agencies compiled a list of fifty-five ethical dilemmas. Two scales
were attached to the list of dilemmas. The list was sent to the popu-
lation identified above. The nurses used the two scales to indicate
the frequency with which they encountered the dilemmas in their nursing
practice, and the importance which they attached to the dilemmas.

Description of Results: Questionnaires were completed and returned by
219 hospital nurses, 221 public school nurses, and 247 community health
nurses, for a total of 687 responses. Analysis of the data is in
progress.

Implications of Results: This study will provide a basis for the
development of programs and courses to help nurses acquire skills in
resolving ethical dilemmas by identifying those dilemmas most likely to
be encountered in three specific areas of nursing practice. Specific
course content may be planned to teach nurses problem-solving and
ethical decision-making techniques, with emphasis upon those dilemmas
which nurses can realistically expect to encounter.

Implications for AISD: This study is not directly related to student
education in the public schools. Indirectly, it could eventually
benefit students as more school nurses become more aware of ethical
dilemmas, and develop skills in dealing with those dilemmas.

TEACHING AND LEARNING:
PERSONAL CONSTRUCTS OF THE PARTICIPANTS

Abstract

Deborah Muscella

Participating Schools: Jerry Joslin Elementary School

Description of Study: The purpose of the study was: 1) to compare the beliefs about school learning among kindergarten children, their parents, and teachers; 2) to examine the influence of the classroom learning environment on changes in the beliefs which kindergarten children had about school learning; and 3) to compare the beliefs of lower and middle income minority and non-minority children. Pictorial stimuli of classroom learning events were used to elicit personal constructs and preference rank order of classroom learning events.

Description of Results: All participants--parents, teachers, and children--viewed the classroom learning environment in two dimensions: participant configuration and learning activities. Participant configuration was delineated into large and small groups, and learning activities were dichotomized into teacher and child-structured activities. Comparisons of parents, teachers, and children indicated that the adults preferred large group activities of the particpant configuration dimension; whereas, children had strong prefereces for the child-directed activities of the learning activities dimension. Comparisons of the beliefs of teachers and children over a four month period indicated that children consistently preferred the participant configuration of small groups, while teachers preferred teacher-directed activities in the beginning of the school year but the child-structured learning activities dimension by the second semester. Children from middle income families preferred learning events which were child-structured. Children from low income and Hispanic families viewed the participant configuration as being more important; however, children from low income families preferred small group activities of this dimension, while Hispanic children, regardless of economic group, showed preferences for the large group activities of the participant configuration dimension.

Implication of Results: Parents, children, and teachers attended differently to the structure of learning activities and group size. Since children preferred small group settings in which they could provide input into the activity, large group, teacher-structured tasks, those classroom learning dimensions preferred by adults, may be a less effective learning vehicle than small group learning. Since the size of the group had considerable but different importance for both low income and Hispanic students sensitvity and flexibility to instructional group size is an important factor in designing the curriculum. Child-structured activities, a highly salient learning dimension for children, suggest that learning centers and structured play settings are an important part of the curriculum for young children.

Implications for AISD: The study was exploratory and included eight children from the AISD school and 24 children from two other school districts; therefore, generalizability of the results is limited. Coonsidering this caveat, it appears that the current structure of the AISD kindergarten curriculum, with an emphasis on independent learning, small group structure, and learning center activities needs to be fostered and encouraged. In addition, awareness of differences among varying income and ethnic groups preferences for classroom learning activities argues for flexibility in both group structure and learning activities.

A COMPREHENSIVE INVESTIGATION OF
PROCESS-OUTCOME RELATIONSHIPS IN PHYSICAL EDUCATION

Abstract

Stephen Silverman, Ed.D.

Participating Schools: Burnet Junior High School

Description of Study: The purpose of this study is to describe the
relationships between teacher and student process variables and
achievement in a physical education setting. In addition, the
relationship of selected presage and context variables with
achievement will be determined. Students were pretested on two
volleyball skills, teachers instructed for seven class sessions, and
then students were posttested. All instruction was videotaped and
students were identified by a numbered pinnie for subsequent coding of
process variables. The data from the two classes at Burnet Junior
High School is being combined with data from eight classes at a school
outside AISD.

Description of Results: Since this data collection occurred late in
the academic year results are not available at this time. Pretest,
posttest, teacher and student process data currently are being added
to a data set with data from other classes. It is anticipated that
results of the relationships of residual achievement with presage and
context variables will be available in the next few weeks. An initial
process-outcome study investigating the relationship of the type and
quality of practice trials with achievement has begun and results
should be available in the Fall. (Approximately 800 hours of
videotape coding for process variables is necessary to complete this
study.) Other studies will be completed off the videotape data base
subsequent to completion of the practice trial study.

Implications of Results: Although results are not available at this
time, the completion of the school based data collection indicates
that a controlled large-scale study of instructional effectiveness in
physical education can occur in an ecologically valid environment.

Implications for AISD: As results become available the information
about student practice and motor skill learning should help teachers
plan for instruction in physical education so that learning is
enhanced within the bounds of the school physical education setting.

HIGH SCHOOL PRINCIPALS: AN ANALYSIS OF THEIR PREPARATION AND INVOLVEMENT IN FACILITATING THE IMPLEMENTATION OF AN INSTRUCTIONAL PROJECT

Abstract

Ian Malcolm Penny, B.A., DipT.

Participating Schools: The participating high schools were Travis, McCallum, Lanier, Anderson, Crockett, Johnston, Lyndon Baines Johnson, and Reagan.

Description of Study: To ascertain high school principals' perceptions of the adequacy of the district preparation and on going support for their role in facilitating the adoption of an instructional program (BEST) in schools.

Description of Results: Principals highlighted the value of the preparation and conduct of workshops for trainers and the support material produced for the project. They also made suggestions to improve the program which included; the importance of using examples in workshops at an appropriate level for participants; avoiding development activities `ust before the commencement of the school year; detailing the responsibilities for the implementation of the project at all levels; more training for principals and assistant principals in coaching, monitoring and feedback skills; and approaching the Local Education Center to learn of ways in which they can support and complement the project. The concerns expressed in the study through the Change Facilitator Stages of Concern Questionnaire indicated that several principals had individual concerns for issues other than the project itself, which if not satisfied may further reduce their involvement.

Implications of Results: The high school principals clearly identified their needs and concerns about the project in the interviews and through the Change Facilitators Stages of Concern Questionnaire. This questionnaire was quite successful in ascertaining individual concerns, revealing individual concerns profiles which could greatly assist an assessment of the principals' developmental needs. Some profiles implied concerns which if not satisfied could further restrict the principals involvement in the project and reduce the level of adoption of the project by teachers. Most principals recognized they had a responsibility for the management of the project, which stimulated them to review their personal skills to do this. However few principals were actively involved in seeking individual development. There was little indication that the project had at this point changed principals' priorities or objectives about their role. Most principals appeared to be waiting for a further district initiative especially concerning role clarification and the development of coaching, monitoring and feedback skills.

Implications for AISD: The study has indicated that the district should explore ways of actively monitoring the responses of high school principals to the project, taking account of their concerns to help maximize their involvement. The study did not reveal that district

personnel were currently performing this role, which may indicate that
the district lacks personnel with such skills. If the district wishes
to have the project fully adopted by schools then it is believed that
appropriate personnel should be more actively working with some
principals to monitor, support and train them for their role. This may
be achieved using a person actively involved with the project as a key
district facilitator or by training several persons to accomplish this
role.

PREPARING FOR THE WORLD OF WORK:
A STUDY OF LEARNING DISABLED STUDENTS

Abstract

Susan Stephens Jorjorian, M.A.

Participating Schools: Anderson, Crockett, Reagan, & Travis igh
Schools plus five schools from other districts.

Description of Study: The purpose of this investigation was to examine
the performance of students who had different levels of work experience
and vocational education on measures of occupational aptitude, interest,
and knowledge. The sample consisted of 84 special education students
identified as learning disabled and 64 regular education students who
had no reported disabilities. The OASIS Aptitude Survey and Interest
Schedule, which measure 6 specific aptitudes and 12 interest areas, and
the occupational knowledge subtest of the Test of Practical Knowledge
were administered. Students also completed a questionnaire about work
experience and vocational education coursework. School records were
read for vocational education and demographic data.

Description of Results: Two-way and three-way analysis of variance
were used to analyze the data. Results of the analyses indicate that
the special education group performed significantly lower than the
regular education group on measures of aptitude and occupational
knowledge. Students in both regular and special education who had
employment experience were found to have significantly higher means on
measures of aptitude and occupational knowledge than groups with no
employment experience. The group of special education students who had
courses in regular education vocational skills training demonstrated more
clearly defined interests and greater occupational knowledge than
students who had special education pre-vocational and on-the-job
training.

Implication of Results: Learning disabled and non-disabled adolescents
who have had employment experience appear to be better prepared for the
world of work than their peers who have not been employed. Special
education students who have had specific vocational skills training
show greater readiness for work than those who have had only special
education vocational courses.

Implications for AISD: The nature of the study was explorative, and the
results imply directions for further research and evaluation, rather
than suggestions for educational programming practices. In light of the
results, a program evaluation of the effectiveness of various vocational
education.options for learning disabled students would be warrented.
The findings on employment experience imply that students who have held
a job while in high school may be better prepared for the world of work
than students who have no employment experience.

THE RELATIONSHIP BETWEEN ESL LANGUAGE LEARNING
ATTITUDES AND LINGUISTIC ATTAINMENT AMONG
RECENT IMMIGRANT, NATIVE SPANISH-SPEAKING HIGH
SCHOOL STUDENTS

Abstract

Daniel J. Livesey

Participating Schools : Travis High School (and one other school
outside the district)

Description of the Study : The purpose of the present study was to
determine the degree of relationship between attitudes toward ESL
learning behaviors as measured through a specially developed
questionnaire and linguistic attainment as measured by standardized
tests and videotaped samples of free speech. This study attempts to
predict language learning performance as other major researchers,
including Lambert, Gardner and Oller, have from attitude data since
it has been found that attitudes operate independently of aptitude to
influence performance. This study departs from previous approaches in
that it benefits from Ajzen and Fishbein's reseach based Theory of
Reasoned Action which calls for assessing only salient attitudes
about behaviors as opposed to attitudes about objects not known to be
salient and predicting behaviors, in this case, language learning
behaviors, from data about intentions to engage in such behaviors.
Predicting from data on intentions to engage in learning behaviors
and not from actitudinal data has advantages since much can intervene
between the formation of an attitude and subsequent behaviors such as
special circumstances which cause individuals to act inconsistently
with previously held attitudes. To check the prediction abilities of
both types of instruments, the criterion behaviors were predicted
from both. The learning behaviors upon which the students focus in
the attitude questionnaire are ones about which ti.., have strong
feelings as assessed through a separate survey of salient learning
attitudes which are attitudes held to be uppermost on the minds of
the students. Data from such attitude questionnaires insure greater
relationship with subsequent behavioral intentions and behaviors than
that which could have been expected in studies conducted previous to
this one. Although not called for in the Theory of Reasoned Action,
the results of the attitude questionnaire were predicted from data on
nonverbal behavior variables (defined by Mehrabian and Eggen)
obtained by videotaping classroom instruction.

Description of the Results : Preliminary analyses show a positive,
near linear relationship between the responses on the attitude

questionnaire and the language and reading subtests of the
standardized achievement test used in the schools. A similar
relationship was also found between the proficiency scores derived of
the end of year language dominance tests and the responses on the
attitude questionnaire. Preliminary analysis of the videotaped free
speech samples indicate that some students were more capable of
expressing thoughts than would be expected given standardized test
score outcomes. In general, the more fluent students showed more
positive attitudes toward engaging in the learning behaviors than
those deemed less proficient. Similar, albeit stronger positive
relationships were found between the intentions scales and the
criterion measures. Certain nonverbal behavioral variables were found
to correlate with the scores obtained from the attitude
questionnaires.

<u>Implications of Results</u> : For research purposes, the results show
that prediction of linguistic performance from attitude data gathered
in a way consistent with the Theory of Reasoned Action has advantages
over previous approaches to attitude assessment and performance
prediction. Since linguistic attainment is highly related to
attitudes toward the learning behaviors involved and intentions to
engage in those behaviors, instructional staff and school counselors
should be aware of those students who may have particularly
ineffective attitudinal sets. Students whose attitudes are not
strongly conducive to engaging in the learning behaviors necessary
for appreciable progress in learning English need to be involved in
an affective type intervention for the purpose of causing their
learning attitudes to change in a positive direction since greater
achievement can subsequently be expected. Certain nonverbal behaviors
such as posture and head movements are immediate cues about existing
attitudes toward the learning behaviors for the instructor to take
into account while teaching.

<u>Implications for AISD</u> : Teachers involved in ESL or foreign language
instruction can learn much about their students attitudes toward the
learning behaviors they will be called upon to engage in by assessing
salient learning attitudes and administering an attitude
questionnaire based upon the results of the salient attitude survey.
Doing this early on in the school year makes it possible to identify
students needing a more positive attitude set so that an intervention
can be planned for early on in the school year while increasing the
chances for appreciable language learning progress. Concerning
nonverbal behavior, certain postures and types of physical movements
serve as immediate feedback for the instructor about the attitudes
students have about engaging in ongoing learning behaviors which the
teacher can consider while teaching or when planning instruction.

Effects of the Mural Method of Integrated Imagery
on Recall, Retention, and Transfer

Abstract

Marcia H. Lind, Ph. D.

Participating school: Hill Elementary

Description of study: The purpose of this study was to determine the
effectiveness of a particular arrangement of multiple integrated
imagery known as the "mural method," when used by elementary-
aged students as a strategy for remembering information about the
geographic regions of Texas. Comparisons of immediate recall,
long-term retention, and transfer of learned strategies to new
learning situations were made among three randomly assigned groups
of fourth-graders: Group A- those who studied texts supplemented by
experimenter-provided mural arrangements of figures representing key
facts and access mnemonics, Group B-those who studied the same texts
and were instructed in the technique of creating their own murals con-
taining figures representing key facts and access mnemonics, and Group
C-those who studied the identical texts supplemented with separate
pictures of the same figures, but with no access mnemonics.

Description of results:Among-group differences were found at all
three levels of recall. On ten-item posttests administered immediately
following three sessions, Group A (those using experimenter-provided
murals) obtained a mean score of 9.25, compared to mean scores of 8.95
by Group B (those being trained to create murals), and 8.19 for Group
C (those using no imagery). More striking differences occured among
the treatment groups when all subjects were tested for retention after
an interim of eleven days, including a holiday from school. The mean
scores on the twenty-item retention test ranged from 14.2 for Group
A to 6.36 for Group C, with Group B achieving a mean score of 10.4.
The group using the mural method of integrated imagery more than
doubled the number of correct answers given by the group studying with
an approach comparable to regular textbook-type instruction (Group C).
After all groups were presented new material at the same time and
asked to study it for a given amount of time, the members of both
imagery groups (Groups A and B) utilized the mural method without
prompting to assist their studying. Those who had simply observed
modeling of the technique (Group A) had a mean score of 13.2, more
than those who had been instructed in the technique (Group B), whose
mean score was 10.2, and those who studied without imagery (Group C),
whose mean score was 8.8.

Implications of results: When intermediate-aged children are presented
factual information and expected to remember it, supplementing the
text with a teacher-made mural, containing meaningfully arranged

figures representing the key facts and an access mnemonic, seems to
bring about both substantially greater immediate recall and long-term
retention of these facts than textual supplements containing separate
figures and no access mnemonic. Students taught to create their own
murals of related figures and mnemonics also appear to retain infor-
mation better than their peers who supplement the text with separate,
unrelated figures and no imagery strategy. Students who have seen
the mural method of integrated imagery modeled appear able to transfer
the strategy to a new learning situation as well as, if not better
than, students who have been instructed in generating their own ima-
gery. Therefore, the conclusion might be made that time spent in the
instruction of students in imagery construction might be replaced by
good modeling of the strategy by a teacher using previously prepared
murals. The mural method can be used by a teacher to supplement most
textual materials, and it can be taught and tested within normal class-
room situations.

Implications for AISD: Teachers can be taught the technique of creating
murals to supplement textual materials from many subject areas,
especially in the area of the social sciences. They also can be
trained to utilize these murals effectively to bring about substantial
student retention of the required textual information presented. Murals
made for specific units of study can be reused many times. They are
inexpensive and easy to store. Once teachers learn the process of the
mural method of multiple integrated imagery, they should be able to
utilize it to assist student recall of factual information in many
areas, perhaps bringing about gains in scores on standardized tests,
as well as assisting students in "learning how to learn." The mural
method of multiple integrated imagery is a viable strategy teachers
can utilize to improve student learning of factual information.

A Cognitive Enrichment Approach to
Teaching Mathematical Problem Solving

Abstract

Katherine H. Kopp, Ph.D. and Carol H. Bell, M.S.

Participating Schools: Maplewood Elementary and Josephine Houston
Elementary.

Description of Study: The purpose of the present study was to determine
the effectiveness of an approach to improve student's performance in
mathematical problem solving. Teachers who volunteered to participate
in the project were trained to implement a cognitive enrichment approach
to teaching mathematical problem solving. The teachers studied 15
prerequisites to thinking skills (cognitive functions) which they taught
students to utilize while solving mathematical problems. The teachers
were given 60 mathematical word problems, four for each of 15 cognitive
functions. In addition, they were given 15 cognitive enrichment lessons
which were to be used to teach each cognitive function. The teachers
were given mathematical word problems appropriate to their grade level
four days a week for 15 weeks. They were expected to focus on one
cognitive function per week, teaching a cognitive enrichment lesson
along with a given word problem four days a week. Sixty-seven students
from one second grade, two fifth and two sixth grade classes at
Maplewood Elementary School participated in the cognitive enrichment
program. Thirty-three students from three classes of the same grade
levels from Josephine Houston Elementary School served as the control
for the study. These students were taught the same mathematical word
problems as the experimental group. They did not receive the cognitive
enrichment lessons.

Description of Results: Teachers participating in the experimental
group made many favorable comments about the approach. Their comments
focused on changes in student problem solving behavior which were
readily observable in the classroom. In addition, the teachers stated
that they found the training insightful and appropriate for teaching
problem solving. They implemented one cognitive function lesson for
each of fifteen cognitive functions and presented most of the word
problems. Teachers of control group classes implemented the word
problems on a regular basis as well.

An analysis of demographic data on control and experimental
subjects reflected numerous differences between the two groups. There
were fifty percent fewer subjects in the control group. Fifty percent
of the experimental group subjects were black to 18 percent of the
control group subjects. In turn, forty-five percent of control group
subjects were Hispanic to 17 percent of experimental group subjects.
Forty-nine percent of experimental group subjects were considered to be
from low income families based on qualifications for the free school
program. Only 36 percent of the control subjects were in this category.

Students' subtest scores for mathematical problem solving were analyzed from Spring 1985 and Spring, 1986 administrations of the Iowa Test of Basic Skills. The gain scores for both experimental and control classes reflected student improvement in every class with the exception of the sixth grade control class. Neither the experimental nor the control classes varied significantly for pre and post percentile scores as measured by the Wilcoxin Matched Pairs Signed Ranks test, except for the second grade control class. When all experimental students were compared to all control students, no significant difference in gain scores was found.

Implications of Results: The major implication of the results suggests that the question of the effectiveness of this approach to teaching problem solving needs to be investigated further for several reasons. First, the teachers were enthusiastic about the approach and felt they observed changes not clearly discernible from the data even though almost all groups showed improvement. In fact, a post analysis of the test utilized to study changes in problem solving proved to be assessing only a small portion of skills taught through the intervention procedure. Second, the control group received a part of the treatment which may prove to be the important variable for improvement in problem solving performance. Namely, the teachers in both groups spent five to ten minutes several times a week teaching students to solve word problems. The significant difference in the experimental intervention may have been detected to a point that the effects could not be assessed. Teachers were supposed to have been given four cognitive functions lessons for each of their four problems covering five functions. Instead, they were given one lesson for all four problems and asked to review the given function each day.

Therefore, this study should be replicated with specific modifications including the following: 1) three groups of subjects where one group implements the cognitive approach with word problems, a second group implements the word problems only, and a third group implements the traditional math program, 2) teachers in the first experimental group should be given a cognitive function lesson for every word problem, and 3) another assessment device should be utilized along with the ITBS that focuses on all problem solving skills being taught.

Implications for AISD: Students in this school system as well as many others are not making needed progress in learning to solve mathematical problems. Cognitive education approaches are proving to be effective in helping students learn generic problem solving skills. The theory behind the approach presented in this study has been applied to an impressive number of situations in which it has been proven empirically to be an effective approach. It is very important for the future of Austin's children that every effort be made to properly investigate potentially successful interventions as they are applied to mathematical problem solving.

U.S.-Mexico Family Project (K Grade Students)

Abstract

Manuel Ramirez III, Ph.D. and Maurice Korman, Ph.D.

Plans for this study were still under development at the time this publication appeared.

DEVELOPMENT OF TEACHING STRATEGIES FOR USE WITH
LIMITED ENGLISH PROFICIENT CHILDREN WHO ARE RECEIVING
SERVICES FOR LD OR MILD MR: YEARS II AND III, CLASSROOM
OBSERVATION AND TEACHER COLLABORATION PHASE

Abstract

Ann C. Willig, Ph.D. and Alba Ortiz, Ph.D.
Handicapped Minority Research Institute
The University of Texas

Participating Schools: Ridgetop Elementary, Ortega Elementary, Sanchez Elementary, and others to be be selected.

Description of Study: The major goal of this four-year study is the development and testing of modules to train both bilingual and monolingual Special Education teachers in the most effective intervention strategies to use with LD and EMR children who are Limited English Proficient. In order to ensure that the intervention strategies included in the final modules will be useful for teachers and will prove to be effective in the classroom, the modules will be based on active collaboration with classroom teachers and will be developed over a four-year period. Year I included preparatory and pilot activities. Year II, currently under way, is an observational year designed to document types of teaching strategies currently utilized and to identify practices which hold promise for the optimization of instruction for LEP students. Special Education teachers are being observed, interviewed, and often videotaped as part of this process. In Year III, a select group of teachers will collaborate with researchers in training module development. The teacher/researcher teams will refine suggested practices and determine their apparent effectiveness and the feasibility of their use through continuous trials, guided by mutual feedback and discussion. Year IV will include final module development and a formal study of the effectiveness of training uninitated teachers using these modules. Teachers' utilization of the training as well as the progress of their students will be examined.

Description of Results: Year II of the study was initiated in AISD in April, 1986 and will continue in the fall of 1986. Results for dissemination will be in the form of tested teacher training modules which have a projected completion date in 1988.

Implications of Results: The completed modules will be useful for inservice training of both bilingual and monolingual special education teachers who serve Limited English Proficient children. It is expected that the modules will orient teachers to specific ways in which they can incorporate language development activities into group instruction while building upon individual bilingual children's specific levels of language proficiency.

Implications for AISD: AISD teachers who participate in the project will have opportunities to engage in mutual feedback with researchers for the purpose of improving instruction for their LEP students. Upon completion of the project, training modules will be made available to AISD personnel.

A Speech Discrimination Test for Spanish-speaking Hearing-impaired Children

Abstract

Frederick N. Martin, Ph.D and Pamela K. Burda, B.S.

PARTICIPATING SCHOOLS

The following schools have been contacted,and are willing to participate:

* AISD Regional Deaf Program
* Allison Elementary
* Govalle Elementary
* Brooke Elementary

DESCRIPTION OF STUDY

This study involves a picture-pointing speech discrimination test for Spanish-speaking hearing-impaired children that can be administered by non-Spanish-speaking audiologists. Twenty-five bisyllabic words are recorded on a two-tract audio tape. This allows the words to be delivered to the child in Spanish and to the audiologist in English. Finally, a score is derived by subtracting four percentage points for each word the child misses. This score will reflect the child's ability to discriminate speech in his/her primary language.

DESCRIPTION OF RESULTS

No data have been obtained at the present time.

IMPLICATIONS OF RESULTS

N/A

IMPLICATIONS FOR AISD

N/A

Individual Differences in Comprehension Strategies During and After an
Encounter with Difficult Text

Abstract

Steve Rholes, Ph.D. and Ellen Gagne, Ph.D.

Participating Schools: Undetermined at the present time.

Description of Study: There are two phases to the study. The first
phase involves administering two personality measures (a total of
thirty items) to 100-200 fifth and sixth graders. Scores on these
measures will be used to identify 40 students who fall into extreme
groups for further study. The two groups to be studied further have
been referred to as "helpless-" versus "mastery-oriented." Helpless
students tend to attribute failure to low ability and tend to give up
rather easily. Mastery-oriented students tend to attribute failure to
things other than low ability (such as low effort or too difficult a
task) and tend to try hard when things get tough. Previous research
has shown that helpless- versus mastery-orientation is unrelated to
ability or past success child. Capable students with a
helpless-orientation may be wasting a good deal of their potential.

The second phase of the study involves a 2 X 2 design with Helpless
versus Mastery being one factor and Confusing Initial Paragraph versus
No Confusing Initial Paragraph being the other factor. Students will
work individually with a researcher on a comprehension lesson. The
topic of the lesson is some basic principles of psychology, including
modeling and the priciple of reinforcement. For half of the students
an early part of the reading selection is written in a vague manner,
making it difficult to understand, while for half, this part is clear.
For all students, the rest of the selection is clear, informative, and
interesting. Students selected for this phase of the study will
"think aloud" which means they will read aloud and also say what
thoughts are going through their mind as they read. The dependent
variables are 1) thoughts while reading, and 2) reading comprehension
scores for the part of the passage that follows the difficult part.

Anticipated Contribution to the Field: Research on motivation and its
interaction with cognitive processes during learning is very active
right now. However, little work has been done with elementary school
students to find out their cognitive processes following a difficult
learning task. If these can be described, successful strategies for
dealing with difficult material can then be taught to students who
don't use such strategies.

Another contribution this study will make is in assessing the
potential of a personality approach to motivation. The personality
measures we are using look quite promising as tools for identification
of students who may have motivation problems.

Potential Implications for AISD: FIRST PHASE: We can make students'

scores on the motivation tests available to teachers along with a
written description that should assist in the interpretation of these
scores. Basically, these scores would help teachers identify students
who may have a tendency to be easily discouraged by failure and who
therefore may need extra encouragement. We would be happy to provide
teachers with descriptions of interventions that have been successful
in moving helpless students to become more mastery-oriented or to
conduct an interservice workshop on this general topic. We could
also, if this fits in the a curriculum area for fifth and sixth
graders, discuss students' scores with them and what they mean,
emphasizing motivational tendencies and useful strategies for dealing
with failure experiences.

SECOND PHASE: Students selected for the reading comprehension part of
the study would receive instruction in how to "think aloud" while
reading and would then practice doing this. Thinking aloud while
reading can be used to help students become more aware of their own
comprehension processes and thus may help them become better at
monitoring their own comprehension. The researchers would give
students positive feedback on any type of useful comprehension process
that was revealed. Finally, in addition to learning something about
their own comprehension processes, students will learn a little about
some basic principles of psychology.

The Effects of Visual Recall Questions
During Prewriting on the Production of
Descriptive Language in a Writing Task
by Secondary Students

Abstract

T. R. Vannatta

Participating Schools: Crockett High School

Description of Study: The purpose of the present study was to
determine: (1) if having students use a visual recall strategy in
prewriting would have a measureable effect on the production of
descriptive language; (2) if students will spontaneously use the
visual recall without a cue in a second writing sample; (3) if
students who spontaneously use the visual recall strategy
produce better descriptive language when they are compared to
other students who do not use the visual recall strategy.

Description of Results: Very preliminary measurements of
comparisons of the number of adjectives used by the control
group and treatment group(visual recall strategy) indicate that
there was some experimental effect created. Ratings by
independent raters are to follow. All the measurements will have
to be completed before any results can be arrived at.

Implications of Results: If the preliminary findings are verified
by the the final results of the analysis, the implication of the
study is that visual recall strategies should become integral to the
prewriting for descriptive essay tasks. Tne classroom implications
could be(pending final results) that mental strategies, like
recalling a series of visual details before writing, cannot be
assumed to be automatic and should be an active part of
prewriting activities.

Implications for AISD: Since only two classes are involved and
final analysis is not complete, the results of the study can only be

cautiously generalized. If the final results follow the preliminary findings, the study suggests that visual recall strategies could be used effectively to teach descriptive writing skills to secondary students.

Single Parent/Homemaker and Wage Earner:
Techniques for Managing Dual Roles

Abstract

Wilma Pitts Griffin, Ph.D.; Daun M. Anderson, Ph.D.;
Karrol Kitt, Ph.D.; and Maureen Grasso, Ph.D.

<u>Participating Schools</u>: Travis High School
                             Johnston High School
                             Teenage Parent Program

<u>Description of Study</u>: The purpose of this study was to examine the lifestyles of teen and adult
custodial single parents. The subjects completed a questionnaire which addressed the following
areas: (a) satisfaction with ability to manage personal, work, and parental responsibilities;
(b) perceived levels of stress in work and home settings; (c) adequacy and dependability of
sources of income; and (d) satisfaction with child care arrangements. The questionnaire was
administered to teen single parents (ages 14 to 19) who were enrolled in high school parent
programs in urban areas throughout Texas. Adult respondents were obtained through
community-based programs in the same cities. There were approximately equal numbers of
teens and adults in the sample of 152 subjects. Over 80 percent of the teens and their
child(ren) lived with relatives. Only 20 percent of the adult single parents and their
child(ren) lived with relatives or other adults. Fifty percent of the teens were black, thirty
percent were white, and twenty percent were Hispanic. There were larger percentages of white
and Hispanic respondents in the adult group (approximately 40 percent from each of these two
ethnic groups). Twenty percent of the adult sample was black.

<u>Description of Results</u>: Preliminary findings indicated that both the teen and adult groups were
dissatisfied with their ability to manage aspects of their personal lives, money, jobs, and their
relationships with and parental responsibilities to their child(ren). Dating and establishing
personal friendships were sources of dissatisfaction for respondents in both age groups. Feeling
good about self also was a major problem cited by both groups. Both the adults and teens said
they had difficulty in managing money. The teens indicated greater dissatisfaction with their
ability to find a suitable job (60 percent of the teens were employed part-time), and the adults
were more dissatisfied with their ability to find a job with work hours that met their needs or
allowed for time off when they needed to be with their child(ren). Ninety percent of the adults
were employed full-time. Defining the role of their child(ren)'s other parent was a source of
concern or dissatisfaction to teens and adults alike. The teens, however, experienced greater
feelings of dissatisfaction with their ability to handle conflict and relate to their own relatives
and those of the other parent than did the adults, while adults were more concerned than the
teens about finding adequate support systems and building relationships with their own
child(ren). The adults also indicated more dissatisfication than the teens with their ability to
discipline their child(ren).

A larger proportion of the adult group (65 percent) than the teen group indicated moderate to high levels of stress in their home lives and in their work settings. Over 50 percent of the teens; however, also said they felt considerable stress in their homes. On the other hand, nearly the same proportion of the teen and adult groups (60 percent) said they were often or always satisfied with their home lives as well as their jobs.

Over two-thirds of the teens and one-third of the adults reported that their incomes were adequate to buy necessities and some additional wanted items. Fifty percent of the teens reported receiving financial support from relatives. Only 10 percent of the adults received money from relatives, but over 50 percent of them received child support income from their child(ren)'s other parent. Twice as many of the adults as teens viewed their incomes as inadequate to meet even the basic necessities. Dependability of child support income was a greater concern for adults, with 60 percent indicating that this income was undependable.

Although a variety of child care arrangements was reported by the respondents, the largest proportion of both groups (over 50 percent) had relatives caring for their children either in their own homes or elsewhere. Twenty-five percent of the teen and adult groups had placed one or more children in licensed day care centers or before/after school c: 'g programs. Satisfaction with most aspects of child care arrangements was high for both groups. Only suitability of surroundings was a concern when the child was cared for by an unlicensed caregiver in a location other than the parent's home.

Implications of Results: The teens as well as the adults apparently could be assisted by encouraging them to build personal support systems through identification of appropriate community resources and establishment of personal relationships with supportive friends and significant others. In order to assist further in stress reduction, both groups would be helped by developing management strategies that take into account the demands of the uniqueness of their roles and responsibilities as single parents as well as the typical needs of persons in their age groups.

Implications for AISD: The apparent lack of immediate concern among the teen parents regarding income adequacy and dependability suggests implications for planning educational programs to meet their needs. Teachers in teen parent programs could build on the teen parents' interests in finding suitable jobs, while emphasizing the need to prepare for and obtain the kinds of jobs which will meet financial needs dependably as family needs change. In addition, information in relation to community resources, support systems, and reducing stress through management techniques could be provided in programs for teen parents.

Abstract

Donna Vliet, B.A.

Participating Schools: 8 Junior High Schools and 7 High Schools

Description of Study: The purpose of this study is to evaluate
the nine objectives of the AISD's Art Enrichment Program from
1981-1985. I have chosen the 35 students who were in the Program
for at least 3 years and developed a questionnaire addressing the
objectives.

Description of Results: Not available at this time.

Implications of Results: Not available at this time.

Implications for AISD: Not available at this time.

(As of June 30,1986, 30 students have completed the questionnaire.)