The Mid-South Educational Research Association (MSERA), organized in 1972, is a nonprofit organization with the purposes of encouraging quality educational research in the mid-South and promoting the application of the results of quality educational research in the schools. This volume contains abstracts of more than 300 discussion papers, symposia, displays, and training sessions. While many were written by long-time MSERA members, others are the contributions of graduate students and new members. Papers deal with elementary, secondary, and higher education. Although they focus on education in the United States, with emphasis on the mid-South, there are contributions with an international focus. The keynote address on performance assessment by Ronald A. Berk (not included among these abstracts) set the tone for other papers that run the gamut of educational research. Attachments include the MSERA Constitution and Bylaws, a list of participants, and lists of MSERA award winners. (SLD)
PROCEEDINGS OF THE
TWENTY-FOURTH ANNUAL MEETING
OF THE
MID-SOUTH EDUCATIONAL RESEARCH ASSOCIATION

CONTAINING THE ABSTRACTS OF DISCUSSION SESSIONS,
DISPLAY SESSIONS, SYMPOSIA,
AND TRAINING SESSIONS

JOHN R. PETRY, EDITOR
HERBERT L. MCCREE, ASSISTANT EDITOR
LORRAINE ALLEN
ELIZABETH WELCH
MELANIE PHARR

NOVEMBER 8-10, 1995
BILOXI, MISSISSIPPI
MSERA OFFICERS, DIRECTORS, AND EXECUTIVE SECRETARY

1995

OFFICERS

Glenelle Halpin--President
Auburn University

Diana Lancaster-Gardiner--Past President
LSU School of Dentistry

David Morse--Vice President/President Elect
Mississippi State University

Dot Reed--Secretary-Treasurer
HQ Air University, USAF

DIRECTORS

Anne Tishler (AL)
University of Montevallo

Bobby J. Franklin (LA)
State Department of Education

Robert Calvery (AR)
Southside School District

C. David Bell (At Large)
Arkansas Tech University

Brenda Sallion (KY)
Western Kentucky University

Barbara A. Lewis (At Large)
University of Alabama-Birmingham

Sheila Chauvin (LA)
Southeastern Louisiana University

Oneida L. Martin (At Large)
Tennessee Tech University

JoAnn Belk (MS)
Mississippi State University

Qaisar Sultana (At Large)
Eastern Kentucky University

Patty Davis-Wiley (TN)
The University of Tennessee

Beatrice Baldwin (LERA)
Southeastern Louisiana University

Arlene T. Amos (LEA)
Choctaw County (MS) Schools

EXECUTIVE SECRETARY

Judith A. Boser, The University of Tennessee, Knoxville
MSERA SESSIONS ARE OPEN ONLY TO MSERA MEMBERS WHO ARE REGISTERED AT THE ANNUAL MEETING. BADGES SHOULD BE WORN TO ALL SESSIONS TO ENSURE ADMISSION.

The Mid-South Educational Research Association was organized on March 20, 1972, on the campus of The University of Mississippi. It is a non-profit organization whose purpose is to encourage quality educational research in the mid-south and to promote in the schools the application of the results of quality educational research. Any person who supports the purpose of the Association is eligible to join the Association.
ACKNOWLEDGEMENTS

The program for the 1995 MSERA annual meeting is an impressive one as can be seen by reviewing the abstracts in the Proceedings. Much hard work went into making it so. You, the members of MSERA, responded to the call for participation in a most impressive manner. We have over 300 discussion papers, symposia, displays, and training sessions. Many of these are from MSERA members who have been active participants in the annual meeting year after year. Many others are from new members and graduate students who are most welcome in MSERA. To all of you whose work is reflected in these Proceedings, I say thanks.

The annual sessions would not proceed smoothly without the able leadership provided by the session chairs. Many of you volunteered to perform this valuable service, which is very much appreciated.

Also acknowledged with appreciation is the tireless work by the Program Co-Chairs, Dawn Ossont and Gerald Halpin, and the Program Committee. Reviewing all of the proposals submitted and compiling the results in the annual program are a massive undertaking that all involved handling with distinction. A special thank you to Altamese Stroud-Hill and Sharon Campbell, who provided vital assistance in the program preparation process.

We owe an enormous debt of gratitude to John Petry for editing the Proceedings, to Diane Green for editing the Research, and to Jim McLean and Alan Kaufman for editing Research in the Schools. All perform very valuable services for MSERA.

Many others have been invaluable. David Morse and the Distinguished Awards Selection Committee performed the difficult task of selecting the most outstanding among a number of notable submissions. Qaisar Sultana and the Membership Committee, along with Jim Harris and the Graduate Student Committee, worked hard all year to get new members and graduate students involved in the organization. Diana Lancaster-Gardiner and the Nominations Committee brought to us an excellent slate of officers for 1996. Jim Flaitz and the Evaluation Committee made the assessment of the annual meeting possible.

As the person responsible for local arrangement, for the 1995 annual meeting, Larry Daniel was indispensable. Throughout the year, Dot Reed served commendably as Secretary-Treasurer. Judy Boser, as Executive Secretary, was always available to provide guidance and to be of assistance. Members of the Board advised and assisted whenever called upon.

It has truly been a pleasure to have worked with all of you this year. My sincere gratitude and heartfelt thanks to you all!

Glennelle Halpin
MSERA President, 1995
1995 MSERA ANNUAL MEETING

Broadwater East Resort
Biloxi, Mississippi
November 8-10, 1995

Program Highlights

DAILY

REGISTRATION: 8:00 A.M., South Promenade (Second Floor)

TUESDAY

Board Meeting, 2:00 P.M.
Board Dinner, 7:30 P.M.

WEDNESDAY

NEW MEMBER AND GRADUATE STUDENT BREAKFAST,
7:30 A.M., Caprice Room

KEYNOTE ADDRESS:
DR. RONALD A. BERK, JOHNS HOPKINS UNIVERSITY, 6:00 P.M., Topaz Room

PRESIDENT'S RECEPTION, 7:00 P.M., Emerald and Crystal Rooms

THURSDAY

NEW MEMBER AND GRADUATE STUDENT BREAKFAST,
7:30 A.M., Caprice Room

MSERA BUSINESS MEETING, 5:30 P.M., Topaz Room

JOINT UNIVERSITIES RECEPTION, 6:30 P.M., Emerald and Crystal Rooms

FRIDAY

PAST PRESIDENTS' BREAKFAST, 7:15 A.M., Caprice Room

OUTSTANDING PAPER AND DISSERTATION AWARDS
SUBMISSION PAPER PRESENTATIONS, 8:00 A.M.--Noon, Petit Bois Room
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSERA OFFICERS AND DIRECTORS, 1995</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>v</td>
</tr>
<tr>
<td>PROGRAM HIGHLIGHTS</td>
<td>vii</td>
</tr>
<tr>
<td>ABSTRACTS OF DISCUSSION SESSIONS, DISPLAY</td>
<td>1</td>
</tr>
<tr>
<td>SESSIONS, SYMPOSIA, AND TRAINING SESSIONS</td>
<td></td>
</tr>
<tr>
<td>MSERA CONSTITUTION AND BYLAWS</td>
<td>153</td>
</tr>
<tr>
<td>PAST PRESIDENTS OF MSERA AND AWARD WINNERS</td>
<td>161</td>
</tr>
<tr>
<td>INDEX OF PARTICIPANTS</td>
<td>165</td>
</tr>
</tbody>
</table>
ABSTRACTS OF DISCUSSION SESSIONS, DISPLAY SESSIONS, SYMPOSIA, AND TRAINING SESSIONS
Current interest exists in reform in special education. As a part of this reform movement, increasing demands are being made for teaching students with disabilities in mainstream settings. Thus, in order to help students with disabilities learn in traditional classrooms, it is imperative for regular classroom teachers to learn to use a variety of materials and teaching techniques. The purpose of this presentation is to present a research review on teaching reading comprehension in content-area classes. As part of this review, descriptive and experimental studies on reading comprehension in general will be discussed, followed by a discussion of the conceptual base for using content-adaptations with students with learning disabilities. Specifically, the most effective content organization and instructional procedures will be identified, with particular emphasis placed on the use of strategies such as advance organizer, mnemonic devices, and visual displays. For each strategy, participants will be provided with: (1) a review of literature with both learning disabled and nonlearning disabled populations, (2) advantages and disadvantages of the strategy, (3) continuing questions about the strategy, and (4) an examination of methodological issues. Finally, implications for teachers working with students with learning disabilities and implications for future research will be discussed.

"THE DIFFERENTIAL EFFECTS OF TWO SYSTEMATIC READING COMPREHENSION APPROACHES WITH STUDENTS WITH LEARNING DISABILITIES"

Karen J. Rabren and Craig Darch, Auburn University

The study compared two highly dissimilar approaches of teaching reading comprehension: explicit rule-based instruction and basal reader activity-based instruction. The rule-based model emphasized teaching students to apply specific rules and procedures to comprehend text. The basal reader activity-based approach focused on motivational activities to develop the reader's interest in the text in order to improve her/his comprehension.

In this study 40 students with learning disabilities in several schools were randomly assigned to treatment groups: explicit rule-based or basal reader activity-based instructional groups. Daily instructional sessions lasting 40 minutes were conducted for two weeks. The two groups were compared on retells of stories, results from unit tests, a transfer measure, and a maintenance measure. Finally, an attitude/satisfaction scale was used to determine if students showed a preference for either instructional method.

Multivariate analysis of variance (MANOVA) was used to test the null hypothesis as they related to the retells, unit tests, and transfer measures. The Wilks' lambda test of significance was set at the >.05 level. Results of this study suggest that students with learning
disabilities can benefit from explicit rule-based instruction. Students also showed a preference for instruction that was structured and rule-based.

"THE USE OF COMPREHENSION STRATEGIES BY TWO GROUPS OF FOURTH-GRADE STUDENTS: TEACHERS' AND STUDENTS' PERSPECTIVES"

Craig Darch, Auburn University

The purpose of the present study was to gain an understanding of why students with learning disabilities choose to use certain reading comprehension strategies to better understand why they comprehend text poorly. To accomplish this, both teachers' and students' were interviewed to understand more fully how they attempt to gain meaning from text.

A case study approach focusing on students' use of reading comprehension strategies as well as their perceptions of instruction they received was used in this study. Ten fourth-grade students, five with learning disabilities and five in general education, were interviewed after reading a story to determine their strategy use and perceptions of instruction they had received. In addition, two teachers, one teacher of the learning disabled and one fourth-grade general education teacher were interviewed.

Results indicated that students with learning disabilities fail to employ text-based comprehension strategies and instead use inadequate techniques when reading text. Data taken from interviews were consistent in documenting differences in the strategic comprehension behavior of students with learning disabilities and the strategies used by general education students. The students' self-reports, their estimated comprehension performance, and the teachers' perceptions of the comprehension ability suggest that there are differences in the strategic comprehension behavior of students with learning disabilities and general education students.

9:00 a.m.-9:50 a.m  TRENDS IN EDUCATIONAL AND SCHOOL PSYCHOLOGY RESEARCH JOURNALS OVER THE PAST TWENTY YEARS (Symposium).................................Ship Isle Room

Organizer: Daniel H. Robinson, Mississippi State University
Discussant: Christopher H. Skinner, Mississippi State University
Presenters:

"THE PROPORTION OF EXPERIMENTAL ARTICLES APPEARING IN THE EDUCATIONAL RESEARCH JOURNAL OVER THE PAST TWENTY YEARS"
Andrew D. Katayama, Mississippi State University

"THE PROPORTION OF EXPERIMENTAL ARTICLES APPEARING IN THE JOURNAL OF EDUCATIONAL PSYCHOLOGY OVER THE PAST TWENTY YEARS"
Daiken McKay, Mississippi State University

"THE PROPORTION OF EXPERIMENTAL ARTICLES APPEARING IN CONTEMPORARY EDUCATIONAL PSYCHOLOGY OVER THE PAST SEVENTEEN YEARS"
Ai-Chun Fan, Mississippi State University

"AN ANALYSIS OF THE TYPE OF ARTICLES APPEARING IN THE JOURNAL OF SCHOOL PSYCHOLOGY OVER THE PAST FIVE YEARS"
Sheri L. Robinson, Mississippi State University
WEDNESDAY, NOVEMBER 8, 1995

"AN ANALYSIS OF THE TYPE OF ARTICLES APPEARING IN SCHOOL PSYCHOLOGY REVIEWS OVER THE PAST FIVE YEARS"
Carla Brown, Mississippi State University

Articles appearing in five different journals (Journal of Educational Psychology, Contemporary Educational Psychology, and American Educational Research Journal) were analyzed to determine trends in research over the past 20 years. One of the initial findings was that in recent years the proportion of experimental articles in the American Educational Research Journal has decreased, the proportion of experimental articles in the Journal of Educational Psychology has remained unchanged, and the proportion of experimental articles in Contemporary Educational Psychology has increased. Other areas investigated included percentage of males and females on the editing board, average number of co-authors per each article, percentage of males and females for first and secondary authors, average number of pages per each article, and related topics.

9:00 a.m.-9:50 a.m. ADMINISTRATION (Display Session).................Deer Isle Room

Presenters: "ADMINISTRATOR COMPENSATION MODEL"
Randell Foxworth and Jack Blendinger, Mississippi State University

Many K-12 school districts are interested in establishing fair and equitable methods for compensating administrators. Too many of the presently used methods incorporate subjectivity and ambiguity. Subjective and ambiguous compensation plans result in inequitable salaries and staff dissension.

The purpose of this display is to present an administrative compensation model for school districts being piloted in Mississippi. The model incorporates focused interviews, written job descriptions, and comparable salary data to create a customized salary formula. The formula includes factors such as length of contract, duty, employee supervision, responsibility and specialization, experience, student supervision, and level of education. The formula is sensitive to district needs and state regulations, objective, computer spreadsheet compatible (adjustments and upgrades easily made), and adaptable to most situations. To date, the model has been used to generate four compensation plans that have been approved by local school boards.

"PROFESSIONAL PORTFOLIO PREPARATION FOR ADMINISTRATORS"
Rebecca G. Williams and Linda T. Jones, Mississippi State University

Portfolios are used by many professionals to showcase creative and unique talents. Educators are now beginning to make use of portfolios. The National Board for Professional Teaching Standards has advocated portfolios as a way of examining a teacher's work, colleges of education are using portfolios in teacher education programs, and portfolios are used in teacher evaluation systems.

Portfolios provide a means of demonstrating accomplishments that can be used by administrators as well as teachers. The administrative portfolio is an effective tool for use in the job search process.

The rationale for development of an administrative portfolio, suggested contents, organization, and presentation are discussed. A completed portfolio is displayed and explained. A handout includes basic information and helpful hints for the development of a professional administrative portfolio.
WEDNESDAY, NOVEMBER 8, 1995

9:00 a.m.-10:50 a.m. WHAT IN THE WORLD HAS HAPPENED TO GEOGRAPHY? INSTRUCTIONAL STRATEGIES FOR INTEGRATED CURRICULUM IN THE SECONDARY SCHOOL (Training Session)......Petit Bois Room

Trainers: Roben W. Smith and Marsha Chusmir Shapiro, Ormond Beach (FL) Middle School

A social studies program, based on the application of research on effective instructional strategies and learning styles, was developed and piloted at the middle school level. The program, designed to integrate social studies, language arts, and the fine arts, incorporated cooperative learning and hands-on activities. Students with diverse learning styles were excited and motivated as their active involvement and the connection to other fields of interest made social studies more relevant. These World Cultures classes, initially provided to gifted seventh-grade students, were further adapted for non-gifted and low-level learners.

The objective of this training session is to provide participants with rationale and procedures for the implementation of integrated curriculum techniques and diverse learning strategies. The session includes an overview slide presentation, including examples of specific student activities and materials. Participants will also engage in sample activities. Attendants will gain an understanding of the variations these instructional methods require when dealing with different student ability levels and also will consider the effects of psychological multi-stimulus instruction on teachers.

10:00 a.m.-10:50 a.m. MATHEMATICS (Discussion Session)......................Atlantic Room

Presider: Mark Davenport, Auburn University

Presenters: "AN INVESTIGATION COMPARING TWO APPROACHES TO FRESHMAN COLLEGE MATHEMATICS"

William A. Rieck, University of Southwestern Louisiana

The purpose of this investigation was to compare the effectiveness of two courses in freshman college mathematics. Traditional Algebra for College Students was compared with Integrated Collegiate Mathematics, constructed based on the standards of the National Council of Teachers of Mathematics. A total of 140 students were involved in the experiment, which compared cognitive growth and attitudinal changes.

A Likert-type instrument was developed to assess specific attitudinal elements desired by the mathematicians. A split test correlation was calculated, and then the Spearman-Brown formula for full test reliability was applied (r=.812). A Fisher r to z converted the r value to a p value of p<.001. The instrument was again used at the end of the course and a two-tailed paired t-test applied.

Traditional classes did not show significant growth (p=.2967), whereas the experimental classes showed significant positive change (p<.001). An F test was used to determine differences between groups (p=.0016). Pre- and posttesting revealed significant cognitive growth by each group (p<.001) with the difference between groups not being significant (p=.1723). It was concluded that the new math course was a viable alternative to the traditional course for most students.

"A COMPARISON OF GENDER DIFFERENCES INVOLVING ATTITUDES TOWARDS MATHEMATICS"

Sonja Y. Harrington, The University of Alabama
The purpose of the study was to investigate gender differences involving attitudes towards mathematics. A sample of 150 University of Alabama undergraduate students, enrolled in the course, Introduction to Mathematics Reasoning II, were asked to participate in the experimentation of attitudes on mathematics. The assessment used for the study is the Math Attitude Inventory (MAI), which consists of statements relating to a student's attitude toward mathematics.

An independent, two-sample t-test was employed to analyze the mean responses of males and females on their attitudes towards mathematics. The comparison of males and females was nonsignificant (p=.242), indicating that there is no difference between the attitudes of males and females.

Because the MAI was a newly-developed instrument used in previous studies, a reliability coefficient was determined for internal consistency. In addition, a factor analysis of the 54 items was implemented to examine six distinct areas of the MAI. Further research, such as descriptive statistics of attitudes among males and females involving mathematics, was also studied.

"RESTRUCTURING FOR IMPROVEMENT IN ACHIEVEMENT: SINGLE-SEX VERSUS MIXED-SEX CLASSES IN MATHEMATICS"

Stella Brown Wear, The University of Alabama

The purpose of the study was to compare the achievement gains of single-sex mathematics classes to mixed-sex mathematics classes. The study was requested by school board members to test this method of restructuring.

The 101 subjects tested were from six pre-algebra eighth-grade classes in west Alabama. Two classes were all male (n=29), two were all female (n=40), and two were mixed (n=32). Using a California Algebra Aptitude test as the achievement instrument, a pretest was given in January with a posttest in May.

A t-test was used to compare the test scores of the females in the all-female classes to the females in the mixed classes and the males in the all-male classes to the males in the mixed classes. The changes in the single-sex classes were greater than in the mixed sex classes.

A qualitative component of teacher journaling was conducted. The teachers of the single-sex classes noted changes in behavior. They described them as being more active learners, more self-confident, and more interested.

Since the single-sex classes showed more improvement than the mixed-sex classes, the school board has requested a continuation of this study for the 1995-1996 school year.

10:00 a.m.-10:50 a.m VOCATIONAL EDUCATION (Discussion Session).........Pacific Room

Presider: Rita G. Bryan, Mississippi State University

Presenters: "THE POTENTIAL OF TECH PREP PROGRAMS"

Warren A. Land, Mississippi State University, and Elizabeth R. Land, Mississippi University for Women

The primary purpose of this study was to determine the best and most current information concerning Tech Prep and its potential for helping to solve some current educational problems. Specifically, this study was directed toward a review of the current research literature as a means of learning more about the Tech Prep Program and the contributions it could make in helping to improve the educational program of secondary students.

While Tech Prep was viewed as having potential value for all students, its greatest contribution may be for the large group of middle-ability students. This group is estimated to be
between 40% and 60% of the secondary student body including some potential drop-outs. It is estimated that between 30 and 35 states have such a program or have plans to implement one.

Specifically, the research literature suggested that a strong feature of this program was to assist students to see the relationship between the role and value of the theoretical academics in solving practical problems. If these students could apply the academic theory to the practical they would be motivated to learn the academic subject matter.

"IMPLEMENTATION OF OUTCOMES-BASED ACCREDITATION TO ASSURE QUALITY IN TECHNICAL EDUCATION"

Harry L. Bowman and G. Wayne Brown, Council on Occupational Education

Institutional accreditation began in the United States during the 1890s with the initial purpose of promoting standardization among schools of common types; e.g., high schools (COPA, 1990; Bogue & Saunders, 1992). Since the 1950s, accreditation has assumed a major role in assuring educational quality as a requirement for postsecondary institutions to participate in federal student financial aid programs. The purpose of this presentation is to describe a new accrediting system for occupational education that focuses on the outcomes of workforce preparation programs.

Occupational education accreditation as practiced historically has utilized a set of standards pertaining to all aspects of the institution that are applied by institutional personnel to conduct a self-study of the institution and an independent team of technical educators-evaluators to conduct an on-site assessment based on the same standards. While the process remains the same, the new system of occupational education quality assurance (COEI, 1994; COEI, 1995) places major emphases on three components: (1) occupational skill standards as the basis for program design, (2) skill assessment/certification as the basis for assessing program effectiveness with individuals, and (3) job placement of training recipients as the basis for assessing institutional effectiveness in meeting job market needs.

The presentation encompasses a comprehensive view of the new accrediting system to illustrate the essential dimensions of quality assurance for technical education and its importance to students, employers of graduates, funding sources, and the public.

"AFFECTIVE STUDENT RESPONSES TO DIRECT AND INDIRECT REFUSAL LETTERS"

Gwendolyn N. Smith, Rebecca F. Nolan, and Yong Dai, Louisiana State University in Shreveport

The purpose of the study was to investigate students' perception of "direct" or "indirect" job refusal letters. Ninety students enrolled in business communication classes were presented with either a "direct" or "indirect" refusal letter and asked to rate their perception of the letter on a semantic differential scale with a series of 19 bipolar adjectives.

A multivariate analysis of variance was performed using these bipolar adjectives as dependent variables. Two factors investigated were gender and approach (i.e., direct vs. indirect). Univariate analyses were performed for each pair of bipolar adjectives.

The main effect of writing approach was significant for three of 19 dependent measures (efficient vs. inefficient, valuable vs. worthless, and straightforward vs. devious). Inspection of the appropriate means indicated that subjects tended to respond to the direct approach in a more positive way. No overall significant gender difference was found. Females did tend to be different from males on one dependent measure (bold vs. timid).
The purpose of this study was to analyze and compare state report cards in eight western states (California, Oregon, Colorado, Arizona, Nevada, New Mexico, Utah, and Texas). "Report cards" on schools have become common in many states. Little attention has been given to the value and uses of "report card" data.

The study examined areas commonly reported in state report cards including: (1) state and/or national instruments to measure student outcome, (2) district and/or school-level data, (3) demographic categories (teacher training, gender, race, teacher salaries, expenditure per pupils, etc.), (4) state outcome expectations for the district/school based on other educational factors, and (5) statistical procedures used by these state to evaluate data.

The findings include: (1) student outcome is evaluated by a variety of instruments (SAT, ACT, CAT, respective state instrument, etc.), (2) some states use demographic data to project the district’s/school’s student outcome, and (3) states tend to omit data relating to school organizations, school climate, parent involvement, instructional methodologies, ethical/moral issues, etc.

State report cards are in the embryonic stage of development. Neither student outcome data nor other reported factors are used to their fullest advantage. Little is understood about each area of data; even less is known about the real relationships between such areas.

"NEVADA'S HIGH SCHOOL REPORT CARDS ON SCHOOLS: WHAT PARENTS, EDUCATORS, OR POLICY MAKERS CAN GLEAN FROM STATE REPORT CARDS"

Gordon C. Bobbett, Educational Consultant, Knoxville, Tennessee; Russell L. French, The University of Tennessee, Knoxville; Charles M. Achilles, Eastern Michigan University; and David Smith, Nevada Department of Education

The development of report cards (RC) on schools has become common in a number of states. What can parents, educators, or policy makers learn from examining these state RCs? Using Nevada's 1992-93 high school (n=46) RC data this study examined 23 student outcome areas (e.g., SAT (verbal, math, composite), ACT, and Nevada's ninth-grade and twelfth-grade proficiency tests) along with 44 demographic areas (DA) including attendance, enrollments, transiency, counselor/student ratio, teacher experience (new, 1-3 years, 4-6 years, etc.), teacher degrees (BA, MA, PHD), migrant students, gifted and talented, free lunch, dropout, English as a second language, classes (English, math, science, social studies) taught by a teacher outside license area, class size in English, math, science, social studies. Descriptive, correlational, and regression analysis (stepwise, multiple, and partial correlation) statistics were used to evaluate each DA's association with student outcome (p<.05).

Findings included: (1) attendance, students participating in gifted/talented programs, and the number of parent/teacher conferences had significantly positive relationships with student outcome, (2) the percentage of teachers with a BA degree and English as second language had negative relationships to outcome, (3) DAs have different associations with nationally-designed, norm-referenced tests and state-designed, criterion-referenced outcome tests, and (4) most DAs have no important relationship to outcome.
"DIFFERENCES AND SIMILARITIES BETWEEN SCHOOL-LEVEL AND DISTRICT-LEVEL DATA IN TEXAS REPORT CARDS"

Gordon C. Bobbett, Educational Consultant and Researcher, Knoxville, Tennessee; Russell L. French, The University of Tennessee, Knoxville; and Charles M. Achilles, Eastern Michigan University

The purpose of this research report was to examine the relationships between national and state-designed student outcome indicators and district-level or school-level data reported in Texas report cards (RC). Second, the study examined the relationships between the associations of school-level data and district-level data in that state.

Using Texas 1993-94 high school and district-level RC data, this study examined the relationships between student outcome indicators and other RC demographic areas (DA). Outcome indicators included both mean district and school ACT scores, SAT scores, and Texas Assessment of Academic Skills (e.g., total test, reading, math, and writing). The DAs included attendance, student enrollment, race (percent Native American, Hispanic, white, black), economically disadvantaged, expenditure per student (by instructor, school administrator, and other), limited English proficiency, graduation rate, average teacher salary by experience, teacher permits (e.g., temporary, emergency, special assignment, vocational, non-renewable), retention rate, gender, enrollment, and teacher's years of experience.

This project used both descriptive and inferential (e.g., Pearson product moment correlation, stepwise regression, and exploratory multiple regression) statistical analyses (p≤.05).

The findings included: (1) social economic status DAs and attendance have the closest association with student outcome, (2) DA relationships between student outcome and district-level data and school-level are different, and (3) the majority of DAs had no relationship to student outcome.

10:00 a.m.-10:50 a.m. UNDERGRADUATE STUDENT VIEWS OF STUDENTS WITH DISABILITIES (Symposium)
Organizer: Frederick Woodall, Delta State University
Presenters: "IMPACT OF DISABILITIES ON HIGHER EDUCATION STUDENTS" Frederick Woodall and Jesse Woodall, Delta State University

Colleges and universities have too often ignored the needs of disabled students. This unfortunate tradition has been corrected somewhat during the past decade as institutions have sought to come closer to compliance with the Americans with Disabilities Act. A review of common disabilities and successful means of working with disabled college students is presented. Finally, the issue of how disabled students are viewed by other students is raised.

"UNDERGRADUATES VIEWS OF DISABLED STUDENTS: SURVEY METHODS AND RESULTS"
Milton R. Wilder, J. Reid Jones, Keith McKelson, and Jeff Muncier, Delta State University

Undergraduates (n=220) enrolled in an required physical education class at a southeastern university volunteered to complete a 73-item survey concerning the impact of disabilities on college students. Seven items were asked concerning each of 10 disabilities affecting college students. Generally, results demonstrated that students regarded the impact of physical limitations to be of lesser importance than either sensory or cognitive limitations.
WEDNESDAY, NOVEMBER 8, 1995

(p<.01). Disabilities related to speaking and hearing were viewed as having a negative impact on social relationships (p<.01). Other results from the survey are presented in separate papers.

"EMOTIONAL DISABILITIES AND THE COLLEGE STUDENT"
Lisa Ross and May Whittington, Delta State University

Undergraduates viewed emotional disabilities as the most likely of 10 disabilities to affect graduation rates (p<.01) and social interactions (p<.01). Further, emotionally disabled students were rated the least preferred subjects for volunteer efforts (p<.01). The negative attitudes toward these students and possible means of counseling them were discussed.

"VOLUNTEER EFFORTS AND DISABLED STUDENTS"
Mary Alice Cates and Alinda Sledge, Delta State University

While universities must provide adequate financial resources for disabled students, one cost-effective means of addressing their needs may be found in service-learning programs. The majority of 220 students responding to the survey indicated that they would serve as a volunteer with disabled students. Females were significantly more likely to volunteer than were males (p<.01). There was no preference for volunteering among the 10 types of disabilities with the exception of emotional disabilities.

10:00 a.m.-10:50 a.m. PROFESSIONAL DEVELOPMENT SCHOOLS
(Display Session)..........................................................................................Deer Isle Room

Presenters:
"EXTENDING THE CONVERSATION: A PROFESSIONAL EXCHANGE PROGRAM"

Pamela C. Boyd, Auburn University, and Emily Sparrow, Auburn (AL) City Schools

The Auburn University/Auburn City School Professional Exchange Program is an effort to create a sense of community that will facilitate reform in education, both in teacher education and in the public schools. Collaboration efforts centered on the elementary language arts and the secondary social studies curriculum. This specific exchange involved an elementary language arts professor, a secondary social studies professor, a secondary social studies teacher, and a group of elementary teachers.

The professional exchange program is a dynamic program that changes as needs arise and as teachers and faculty are available for collaboration. The term professional exchange refers to the exchange of the work of one professional for the work of another, but the exchange goes far beyond that. Each quarter our school/university partnerships mature. This professional exchange program has taken our efforts to a new level. Collaborations that involve both elementary and secondary at the public school and teacher education level have extended the conversation to include the exchange of ideas, time, and talents of a whole community of learners.

"A FIELD-BASED MODEL FOR TRAINING SUPERVISING TEACHERS"

Jane H. McHaney, Kennesaw State College

This presentation reflects the changing conditions in the world of professional field experiences. We have witnessed a growing number of reports criticizing the effectiveness of
teachers and advocating a variety of reforms that would ostensibly improve the condition of education. The furor has produced, among other things, a more visible emphasis on accountability. As a result, a number of criteria have been developed through observation and research that can be described and observed.

The model described in this display represents a shift from primary focus on knowledge and skill mastery to a major focus on demonstrated competence, a shift from training function to research development and instruction and a shift from a college–based program to a field–centered program in which the program for preparing teachers is functionally integrated into the profession.

Since the roles and responsibilities of those engaged in the process of teacher education are constantly being redefined, this presentation offers a new perspective on supervision. This display examines ways to establish productive working relationships among colleges, public schools, state agencies, and professional agencies.

"A MODEL PROGRAM EVALUATION OF A PROFESSIONAL DEVELOPMENT SCHOOL"

Louise E. Davis, Jo Ann Bass, and Joe Blackbourn, University of Mississippi

The purpose of the program evaluation was to determine the perceptions of the participants on the effectiveness of the undergraduate teacher education program. The program’s strengths and weaknesses were identified.

The instrument was developed with a five-point, Likert-type scale with items ranging from strongly disagree to strongly agree. The four areas dealt with were: (1) Curriculum and Teaching, (2) Roles of the Participants, (3) University-Professional Development School (PDS), and (4) Perceptions. Questions were constructed to relate to the "Teachers as Facilitators" model adopted by the teacher education program. The language of the questions was personalized for each group of respondents. The reliability of the instrument was established at Cronbach’s alpha = .96.

The participants involved in the evaluation process consisted of the university students, university faculty, clinical instructors, and administrators. There were 240 participants over a two-year period. A multivariate analysis of variance (MANOVA) at a .05 level of significance was the statistical procedure chosen for the study.

The objective was to create a longitudinal database for the improvement of the teacher education program. The study’s findings and implementation of changes were established.

10:00 a.m.-10:50 a.m. EVALUATION (Discussion Session) Chandeleur Room

Presider: Shirley A. Becnel, Jefferson Parish (LA) Public Schools

Presenters: "ATTITUDES AND PERCEPTIONS OF PRESERVICE AND CERTIFIED TEACHERS TOWARDS ISSUES IN MEASUREMENT AND EVALUATION"

Linda W. Morse, Linda F. Cornelious, and David T. Morse, Mississippi State University

The purpose of this study was to examine the differences between teachers in preparation and those already certified regarding a number of important, contemporary issues in measurement and evaluation. A total of 89 educators completed a 22-item questionnaire using a Likert-type scale (i.e., strongly agree to strongly disagree) regarding their opinions about
WEDNESDAY, NOVEMBER 8, 1995

necessary skills in measurement, teachers' knowledge level of these skills, and misconceptions about testing.

Six of the 22 items from the questionnaire yielded significant differences (p < .05) between the preservice and certified teachers based on maximum likelihood ratios. These items included topics such as: (1) teachers' perceptions of the amount of testing in school and the time the testing process demands of teachers, (2) practicing teachers' knowledge regarding test development and how to use test statistics, (3) misconceptions about testing in elementary and special education settings, and (4) misconceptions regarding the differences between measurement and evaluation processes. These findings suggested that certified teachers' attitudes may differ from the preservice teachers, although not always in the desired direction. This information may be useful in the course of staff development for those who work with future and practicing teachers in developing good measurement and evaluation practices in the classroom.

"PREPARING TEACHERS TO MAKE GRADING DECISIONS: A LOOK AT ISSUES, CHALLENGES, AND CHOICES"

Jim R. Flaitz, The University of Southwestern Louisiana

Among the decisions classroom teachers routinely make are those regarding grade assignment. Considering the seemingly prosaic and straightforward nature of these decisions, it is perhaps no great surprise that little attention has been given either to how teachers arrive at grading decisions or how preservice teachers are prepared to discharge this particular duty. On the other hand, these may be some of the most significant decisions teachers will make, and the skills required to arrive at fair, objective, and impartial judgments are exceedingly subtle. Of late, some research has begun to emerge examining both how and why teachers make grading decisions, with some disturbing implications of the impact of teacher preparation efforts.

To help focus the discussion, data were collected from a class of undergraduate education majors using a series of hypothetical “scenarios” in which a grading decision must be rendered. These data revealed a strong inclination on the part of preservice teachers to base their grading decisions on factors other than achievement.

In this discussion paper, the context within which grading decisions are rendered is examined, with specific attention given to the implications for measurement courses in teacher preparation programs.

"THE EFFECT OF LENGTH OF GRADE REPORTING PERIOD ON STUDENT ACHIEVEMENT OF SEVENTH-GRADE STUDENTS"

E. C. O'Neal and Mark Montgomery, Mississippi State University

The problem in the study was to determine the effect of the length of the grade reporting period on academic achievement of seventh-grade students. The following null hypothesis was used: there was no significant difference in the mean GPA of students graded using six-week terms as compared to the mean GPA of students graded using nine-week terms.

The data used were obtained by taking the final grade from the permanent register in four core courses and determining the GPA. These courses were math, English, social studies, and science.

The sample was composed of 60 seventh-grade students from a year when a nine-week reporting period was used, and 60 seventh-grade students the following year when a six-week reporting period was used. The students were grouped by sex, and an equal number of males and females was drawn randomly.

Analysis of co-variance was used to test the hypothesis. Results of the study indicated that the six-week grade reporting period yielded higher GPA for females and the total
sample. There was no significant difference for the males. Educators should try to provide educational practices that are most likely to enhance student achievement. The results seemed to indicate that in some cases a shorter report period may be better for achievement.

"A MULTIVARIATE ANALYSIS OF TEACHERS' PERCEIVED ASSESSMENT COMPETENCY AS A FUNCTION OF MEASUREMENT TRAINING AND YEARS OF TEACHING"

Zhicheng Zhang, The University of Alabama

The study investigated inservice teachers' assessment competency as a function of measurement training and years of teaching. Data were collected from 311 teachers on a 67-item Assessment Practices Inventory. Nine composite scores were produced based on principal component analysis. A 3x2 MANOVA was conducted to examine the effects of measurement training and years of teaching on teachers' perceived competency in the nine assessment categories as reflected in the composite scores. Significant multivariate main effects were detected for measurement training (p<.05). Follow-up study was conducted to examine the effects of measurement training on teachers' perceived assessment competency in different assessment areas.

The investigations revealed evidence concerning effects of measurement training on teachers' assessment competencies. Future study should focus on depicting classroom assessment needs relative to subject areas and grade levels.

11:00 a.m.-11:50 a.m. INTERNATIONAL (Discussion Session) Atlantic Room

Presider: William A. Spencer, Auburn University

Presenters: "A COMPARATIVE STUDY OF TEACHER EDUCATION: CHINA AND THE U.S."

Lei Weiping Wang and Carol P. Etheridge, The University of Memphis

This study compared first-year American and Chinese teachers' perceptions of their education and of their satisfaction with their preparation to become teachers. Using survey techniques, teachers surveyed graduated from The University of Memphis and Hebei Normal University.

Data analyses consisted of descriptive statistics for the demographic variables and t-tests for dependent data between the mean ratings on "general education" and "program evaluation."

There were numerous similarities in teachers' perceptions of their training and preparation to teach in China and in the U.S. However, the respondents' ratings of their preparation were significantly different on 12 issues. The U.S. teachers reported greater satisfaction with their preparation in educational studies and teaching techniques, while the Chinese teachers reported greater satisfaction with their subject field preparation.

"EFFECTS OF AGE AND NATIONALITY ON OCCUPATIONAL STRESS AMONG TEACHERS IN INDIA AND AMERICA"

Carolyn Minder, Ronnie Santana, Sookham Dhaliwal, and Oscar Walley, Northeast Louisiana University

The study examined the effects of age and nationality on occupational stress
among Indian (n=34) and American (n=15) teachers. Twenty-five participants were young adults, 24 individuals were middle aged. Teachers responded to a demographic questionnaire and the Work Stress Profile (WSP), a 57-item instrument reflecting occupational stress in interpersonal/job satisfaction, physical, and work interest/involvement areas. Indian interviews were conducted individually in India. American teachers responded to materials in group settings.

The effects of age and nationality on the three WSP scores were analyzed using two-way multivariate analysis of variance (MANOVA). Although no interaction was revealed, a significant main effect for nationality was obtained, F (3, 43) = 3.13, p<.05. Univariate F tests revealed interpretable results for the WSP score that reflects interpersonal issues and degree of job satisfaction, F (1, 45 = 4.35, p<.05), with American teachers reporting higher levels of stress (m=52.29) than did Indian teachers (m = 42.34).

Results implying job dissatisfaction and consequent stress may be attributable to a perceived lack of regard among educators in Louisiana. It is likely that job satisfaction among valued Indian teachers is higher and, thus, is not as great a source of stress.

"DETERMINANTS FOR THE USE OF COMPUTER-ASSISTED INSTRUCTION (CAI) ADAPTATION IN SINGAPORE'S UNIVERSITIES"

Yukiko Inoue, The University of Memphis

The purpose of this study was to identify and to prioritize the factors influencing the university faculty's use of computer-assisted instruction (CAI). A survey questionnaire was constructed and administered to faculty members of a leading university in Singapore. The subjects were 62 respondents representing two groups: 26 from the faculty of education and 36 from the faculty of business (36 male and 26 female). The results indicated that the two most important facilitators for the faculty's use of CAI were: teachers' knowledge and skills in technology, and availability of hardware (and software). The two most important inhibitors were: the lack of teachers' time, and the lack of technical support. These results may be attributed to Singapore's climate for the instructional use of computers.

11:00 a.m.-11:50 a.m. SCHOOL IMPROVEMENT (Discussion Session)..........Pacific Room

Presider: Francis K. Kochan, Auburn University

Presenters: "CONSIDERATIONS IN SCHOOL IMPROVEMENT"

Jeanne Phillips, Letitia Banks, Jennifer Kerstiens, and Kay Thompson, Mississippi State University- Meridian Campus

Often, school improvement is unsuccessful because the changes to be made are not carefully planned and communicated to all concerned. Also, leadership is unaware of their role. A position paper describing how to make school improvement work addresses the questions: "How can schools implement changes?", "How can those responsible develop the whole school culture to support change?", and "How can school faculties become involved in the decision-making process?"

A proven process for school improvement, Onward to Excellence, developed at the Northwest Regional Educational Laboratory, is presented as a vehicle for change. Using a background of current research, the paper outlines a process for improvement and presents the role of the leadership team acting as a linchpin in explaining the vision, anticipating the different stages of change, evolving to the next stages, and pragmatically dealing with the details of implementing change.

13
"EFFECTS OF THE ONWARD TO EXCELLENCE SCHOOL IMPROVEMENT IN TWENTY SCHOOLS OF EAST MISSISSIPPI"

Jeanne Phillips, Mississippi State University-Meridian Campus

The study was to determine the perceived effects of the Onward to Excellence school improvement process in selected Mississippi schools. In the OTE approach, a school-level leadership team received training in the 10-step OTE process over a two-year period. Training involved seven workshops defined to inculcate understanding and build skills for leadership teams to apply to their home-school settings.

This study answers two questions: (1) How well did leadership teams utilize their training to design a school improvement? and (2) What impact did OTE have on roles, responsibilities, and relationships in schools? The School Improvement Process Assessment (SIPA) was used to measure question one. Perceptions of implementation of each of the 10 steps were rated using a five-point scale. Using a 40-point scale, areas of weakness below 16 and areas of strength above 32 were determined for individual schools. More than 50% of the schools were strong in the first five areas, with less strength seen in the last five areas. To answer the second question, a survey revealed that OTE implementation was generally positive. The average rating on a five-point scale was from 3.8 to 4.3 with five being the highest.

"ISSUES IN TENNESSEE EDUCATION POLICY: A SYNTHESIS OF RESEARCH"

E. Dean Butler and Blake Burr-McNeal, The University of Memphis

The purpose of the inquiry was to identify Tennessee educational policy and practice issues to be addressed by the year 2000. Issues identified reflect educational policy developments that occurred between 1984 and 1994, a decade that contained two major "waves" of reform.

Documentary-content analyses of primary source materials were used to construct the principal policy directives. The information search also identified the research and scholarly literature for Tennessee education, work plans and deliberations of educational task forces, and products of regional laboratories and national commissions. Interview data were obtained from state leaders and policy makers regarding the status of educational restructuring and issues. Analytical and interpretive strategies were used in framing the status of policy implementation and unresolved issues.

Major issues identified were associated with Goals 2000, high school restructuring, equity funding, educational technology, accountability and performance indicators, student diversity, educational partnerships, school capacity building, and linking of professional development with school improvement efforts.

An overview of completed and on-going research, suggestions for new studies, and an executive summary of the investigation and findings are provided.

"STUDENT IDENTIFICATION AND ENGAGEMENT IN TENNESSEE HIGH SCHOOLS"

Jeanine H. Rakow, E. Dean Butler, and John A. Nunnery, The University of Memphis

The research goal directing this study was to provide educators needed information regarding manipulable aspects of school and classrooms that might encourage increased student engagement and achievement. Many established school practices not only inhibit students' desire to learn but also contribute to reduced motivation and engagement in educational processes.
Baseline results of a recent long-term investigation suggest the need for school restructuring which enhances student membership and modifies school practices that are punitive or alienating.

To construct baseline profiles of student attitudes toward school, self attributions, and perceptions of their classroom social environments, *School, My Class, and Me* was administered to representative samples of students enrolled in five Tennessee public high schools in spring 1995. Student responses were analyzed via analysis of variance to determine whether differences were associated with five curriculum areas, grade levels, or school. Some consistent differences were observed across curricula—for example, students enrolled in science courses reported higher levels of classroom involvement than did students in other areas. Technology courses received lower student ratings than did math and English. Grade level and school interacted to produce complex patterns of differences, especially in attitudes toward school.

11:00 a.m.-11:50 a.m. PARENTS (Discussion Session)....................Caribbean Room

Presider: Linda T. Jones, Mississippi State University

Presenters:

"A CLUSTER ANALYSIS OF PARENTING BEHAVIOR IN YOUNG MOTHERS"

Leanne Whiteside, Sandra K. Pope, and Robert H. Bradley, University of Arkansas at Little Rock

Children of young mothers are thought to be at risk for developmental delay and behavioral problems because of the low quality of caregiving provided by young mothers. In this study, the parenting behaviors of 193 white and African-American, young (15-24 years of age) mothers were assessed when their children were 12 months old and again when they were 36 months old. Maternal parenting behavior was assessed using a combination of interview and observation. Cluster analysis of the three dimensions of parenting behaviors assessed at the two times was used to identify five types of parenting. Evidence supporting the five parenting types included interpretable average scores on the three dimensions of parenting, expected differences in their children's cognitive and social development, and differences in familial, maternal, and child factors. The strongest discriminating factor - maternal IQ - was associated with more positive parenting behavior patterns. Among the mothers with the lowest IQ scores, the most discriminating factor was the birth of additional children, with the birth of additional children associated with less positive parenting behaviors. The results of this study support the assumption that parenting is dynamic and multidimensional.

"PERCEPTIONS OF PREGNANT TEENS AND TEEN MOTHERS ENTERING A TRAINING PROGRAM ON PARENTING SKILLS AND KNOWLEDGE ABOUT INFANTS"

Beverly G. Boals, John M. Enger, and Mildred B. Vance, Arkansas State University, and Renella Clemons, South Mississippi County (AR) School District

The purpose of this training program was to provide pregnant teens and teen mothers with proper prenatal and early infant services including in life skills and parenting education. The program consisted of weekly home visits and regular group meetings. Project staff were assigned two teen mothers. The purpose of this study was to assess participant perceptions prior to program implementation.

There were 13 girls aged 15 to 19 in the program. Four were expecting their first child, nine had one child, and one of those was expecting her second child. None were married.
and all but one lived at home with their families; one lived with her boyfriend's family. Three
had graduated from high school and most hoped to continue their education pursuing a GED
diploma equivalency.

A set of 61 questions developed consistent with the program goals was asked of each
participant. Most responses were consistent with appropriate child-rearing practices. The young
mothers felt they were the most important person in their child's life and were quite concerned
about their child's well-being. However, some responses indicated these young mothers perceived
certain aspects of their child's training may be presented later than generally recommended.
Understanding proper diet was also diagnosed as a weakness.

"THE DEVELOPMENT OF PRESERVICE EARLY CHILDHOOD
EDUCATION TEACHERS' INSTRUCTIONAL PLANNING"
Dianne Lawler-Prince and Craig H. Jones, Arkansas State University

This study was conducted to investigate the development of preservice teachers' instructional planning skills in two courses. The participants were eight students who had completed ELED 3053, Observations, Participation, and Curriculum Development in Early Childhood Education, and ELED 4073, Field Experiences II for Elementary Grades.

A qualitative methodology was used to gain an indepth understanding of participants' development from their own point of view. Participants completed a questionnaire in which open-ended items asked them to reflect upon the process they used to prepare two lesson plans and a class project in ELED 3053, and to prepare three lesson plans and to engage in an informal teaching experience in ELED 4073. Additional open-ended items asked participants to reflect on what they had learned in these courses and to describe the similarities and differences in theoretical orientations participants used in planning, how well prepared they felt for assignments, and the effectiveness of their lesson plans. Copies of participants' lesson plans were available to facilitate recollection of the planning process. Results summarize participants' experience in learning to develop instructional plans. Recommendations for improving teacher training were made based on these findings.

11:00 a.m.-11:50 a.m. THE COMMUNITY COLLEGE NETWORK: A COLLABORATIVE
VENTURE IN INTERACTIVE INSTRUCTION AND INFORMATION
SHARING (Symposium)........................................Ship Isle Room
Organizer: James E. Davis, Mississippi State University
Presenters: "OVERVIEW"

The purpose of this symposium is to highlight advances made in the interactive instructional area by an exciting collaborative effort between the community/junior colleges and senior institutions and the Mississippi Cooperative Extension Service.

"COLLABORATION"
James E. Davis and James N. Butler, Mississippi State University

The purpose of this presentation is to define the parties involved in the joint venture to explore information and instruction imparted via electronic media. The discussion focuses on establishing and maintaining avenues of communication between all involved parties.

"TECHNOLOGICAL APPLICATIONS"
John Gieseman and Ronnie White, Mississippi State University
This presentation explores technological advances that have made communication between sites of instruction and work better and more efficient. Electronic mail and file transfer, as well as audio and video transmission, are discussed.

"COMMUNITY COLLEGE INSTRUCTION"
Alex Carter and Willis Lott, Mississippi Gulf Coast Community College

This presentation highlights some of the findings of actual interactive instruction of lower level courses between sites of a multi-campus community college system. Attitudes and impressions of instruction imparted to students are highlighted.

"UPPER-LEVEL/GRADUATE INSTRUCTION"
Michael Newman, Matt Raven, and Gary Jackson, Mississippi State University

Results of instruction of upper-level/graduate courses in various disciplines are discussed in this presentation. Interactive video/audio and data transfer as contrasted with traditional methods are highlighted.

11:00 a.m.-11:50 a.m. SCIENCE EDUCATION (Display Session).................Deer Isle Room

Presenters: "RESPONDING TO SCIENTIFIC ILLITERACY: LEARNING THAT GROWS WITH THE LEARNER --- AN INTRODUCTION AND INVESTIGATION OF INTEGRATED SCIENCE"

Terri R. McBride, University of Southern Mississippi

Responding to the widespread concern over the prevalence of scientific illiteracy, The University of Alabama's Center for Communication and Technology created a new middle school science curriculum. Integrated Science is a multi-year program based on the work and recommendations of the American Association for the Advancement of Science and the National Science Teacher's Association. In four years, the project has grown over 1,000% and currently involves more than 120,000 middle school students.

The program is designed such that students examine topics from the perspectives of biology, Earth/space science, chemistry, and physics. It is designed as a three-year continuum. In students' day to day activities, they are engaged three times a week with telecasts involving a lead instructor. Students do not use a textbook, but a "student handbook." To support teacher training, teachers are given all the resources needed through summer workshops and electronic mail.

An investigation will be conducted comparing those students involved in Integrated Science with other students not involved in the new program. Attitude, parental involvement, and achievement will be compared. It is hoped that a longitudinal study might be carried out determining if those students who are involved in Integrated Science enroll in more science courses.

"GUIDELINES FOR HANDS-ON SCIENCE ACTIVITIES APPROPRIATE FOR THE ELEMENTARY CLASSROOM: THE WAY IT WAS MEANT TO BE"

Jan E. Downing, University of Central Arkansas
The purpose of this display is to introduce the audience to the original concepts surrounding hands-on science that have made it the method of choice by educators and developmental psychologists. The phrase hands-on science is used in every elementary science methods course taught the university level and it is believed to be the most appropriate method for teaching science at any level. However, for many teachers this phrase simply represents the concept of teaching science through activities that require manipulations of objects in a science setting. Unfortunately, over the years the original concepts have been diluted, and many of these activities are being exercised in the classroom with very little forethought of how these could be designed to create meaningful learning for the student. This display includes samples of the latest developmentally appropriate techniques and a variety of features that no elementary hands-on activity should be without in an effort to refocus and redefine the true meanings of hands-on science.

11:00 a.m.-11:50 a.m. ADULT LEARNERS: PROTOCOLS FOR REFLECTIVE THINKING (Training Session)..........................Petit Bois Room

Trainers: Vincent R. McGrath and Lucinda H. Rose, Mississippi State University

SCOPE: For educators concerned with promoting reflective thinking in non-traditional and adult learners. Grounded in current cognitive research, a Reflective Thinking Model will be used for discussing knowledge and justification constructs--defensible judgments about ill-structured and vexing problems. The model can be a useful instrument to foster rational thinking and co-operative, reflective inquiry, authentic collaboration, and contributory thinking. OBJECTIVES: Participants will identify characteristic thinking patterns by analyzing seven stages of intellectual growth represented by the model. They will consider their own classroom practices: discourse, content, procedures, and assessment in light of the model and discuss possible uses of it as an instrument for promoting analysis of a learner's view of knowledge and how background, previous educational experience, and current life situation affect problem-solving across domains.

ACTIVITIES: Participants will discuss interview protocols as probes for recognizing how learners attempt to resolve ill-structured problems. They will develop and share basic instructional goals, sample assignments, and supplemental support activities. A presentation of typical, ill-structured, socioeconomic problems and aids to resolve them end the session.

11:00 a.m.-11:50 a.m. STATISTICS (Discussion Session).......................Chandeleur Room

Presider: T. Lee Napier, Jackson State University

Presenters: "A QUALITATIVE STUDY OF QUANTITATIVE DISCIPLINE - STATISTICS"

Anthony J. Onwuebuzie, University of Central Arkansas; Denise A. Da Ros, Youngstown State University; and Joseph M. Ryan, University of South Carolina

The purpose of this phenomenological study was to examine the nature, cause, and prevalence of statistics anxiety. The sample comprised 21 graduate students from non-statistical disciplines enrolled in a statistics course at a large university. Observation took place during every class session (prolonged engagement) throughout the semester-long course (persistent observation). Additional data sources included interviews, focus group discussions, self-report questionnaires, and students' reflexive journals, class notes, assignments, and examination forms.
The data were triangulated and unitized, resulting in 621 units relating to statistics anxiety being extracted. Using the method of constant comparison, which categorized units, statistics anxiety was found to have four debilitating components: (1) instrument anxiety, comprising computational self-concept and statistical computing anxiety, (2) context anxiety, comprising recall anxiety, fear of statistical language, fear of application of statistics knowledge, and perceived usefulness of statistics, (3) interpersonal anxiety, comprising fear of asking for help and fear of statistics teachers, and (4) failure anxiety, comprising study-related anxiety, test anxiety, and grade anxiety. Inter-rater reliabilities for all components ranged from .82 to 1.00.

Recommendations for instructors included using statistical language that is as simple and relevant as possible, and creating a classroom atmosphere that encourages learning and creativity by emphasizing process over end-product.

"THE RELATIONSHIP OF INSTRUCTIONAL METHODS WITH STUDENT RESPONSES TO THE SURVEY OF ATTITUDES TOWARD STATISTICS"

Faroozandeh Faghihi and Ernest A. Rakow, The University of Memphis

The purpose of this study was to compare the effects of self-paced method of instruction on attitudes of students enrolled in undergraduate statistics course with those of students taking statistics in a traditional lecture setting. Undergraduates received a self-paced method of instruction in the department of education while the remainder of students received traditional lecture method in the psychology and business departments. The graduate students were included for a secondary purpose that was to determine the degree of difference between undergraduate and graduate students' attitudes towards statistics. Students completed the four-scale Survey of Attitudes Toward Statistics (SATS) during class at the beginning and the end of the course. The four scales are Affect, Cognitive Competence, Value, and Difficulty.

The mixed-design ANOVA (one between, one within) is expected to show that on the Affect scale those who receive the self-paced method of instruction will have a more positive posttest attitude toward statistics, resulting from the individualization of the teaching and learning process. It is expected that business students will have a more positive posttest attitude about the Value of statistics. The self-paced method is expected to show significant changes from pre- to posttest on Affect and Difficulty.

"THE PREDICTION OF STATISTICS PERFORMANCE WITH SELF-EFFICACY AND MATHEMATICS ABILITY"

Linda W. Dunn and Jwa K. Kim, Middle Tennessee State University

The purpose of this study was to attempt to measure a college student's self-efficacy and mathematics ability, and use this information to predict statistics performance. The subjects consisted of 43 undergraduate college students enrolled in a beginning statistics class. Two instruments were created for this research by the authors: the Self-Efficacy Questionnaire for Students (SEQS) and the Mathematics Estimation Test for Students (METS). BILOG was utilized to estimate item parameters and mathematics ability. Mathematics ability (estimated by Classical Test Theory and Item Response Theory) and self-efficacy were then used to predict statistical performance or earned statistical grade at the end of the semester.

Stepwise multiple regression was conducted to select significant variables and determine the semi-partial r for each variable. The prediction line was shown to explain 30% of the variance in final statistics examination scores (R = .3038). This study confirmed previous research and demonstrated self-efficacy to be a significant predictor of statistics performance.
Placement into the public domain of the Elementary Reading Attitude Survey (ERAS) in 1990 by McKenna and Kear provided teachers and researchers with a tool that could be used with relative confidence to estimate the academic and recreational attitude levels of their students.

This longitudinal study investigated differences between males' and females' attitudes toward recreational and academic reading in grades one through six at one school that utilized a whole-language, literature-based instructional approach to teach reading. The subjects were given the 20-item ERAS at the beginning of their first year at this school and again at the end of each grade, one through six. Data from 250 subjects were analyzed for this study.

Results indicated that the subjects began the study with generally positive attitudes toward reading in both the recreational and academic settings. Results also indicated that the grade level had a significant impact on changes in reading attitude in both domains. The findings further indicated that teaching methods and instructional materials should be scrutinized by teachers at all grade levels to determine their possible effect on student attitude. Differences between grade levels were statistically significant, while differences between males' and females' attitudes were not.

"UNDERSTANDING ATTITUDES OF EDUCATORS TOWARD CONTENT AREA READING IN THE EARLY ELEMENTARY GRADES"

Sirpa T. Grierson and Larry G. Daniel, University of Southern Mississippi

The present study was designed to examine the attitudes of educators toward content area reading in the early elementary grades. A self-report survey called the Attitudes Toward Content Area Reading (ATCAR) was developed to measure educators' attitudes and to ascertain if there were different theoretical orientations of educators relative to content area reading theory. The study was conducted using Q-technique factor analyses of unstructured Q-Sort data to investigate whether respondents (n=55) could be clustered into groups or prototypes from the data collected from the ATCAR. Separate Q-technique factor analyses were performed for three groups of respondents, including content area experts (n=15), inservice teachers (n=15), and preservice teachers (n=25). Identifiable clusters of prototypical individuals were apparent from those who appeared to view content area reading ranging from a theoretical orientation closely allied with a skills approach for learning to read to those who indicated a tendency toward viewing content area reading as part of a whole-language approach emphasizing reading to learn.

"A COMPARISON OF TEACHERS' KNOWLEDGE AND USE OF CONTENT READING STRATEGIES IN THE PRIMARY GRADES"

Mary E. Howe, Sirpa T. Grierson, and Mark G. Richmond, University of Southern Mississippi
This study examined the extent to which knowledge, attitudes, and recommendations for use of content area strategies are related to teaching reading in the primary grades. Measures of knowledge, attitudes, and recommendations were obtained based upon the responses of first- through third-grade teachers in two school districts. A total of 68 teachers, representing six elementary schools, responded to a Content Area Questionnaire.

A series of one-way analyses of variance found significant differences (p < .05) among the variables of Years of Teaching, Content Area Workshops, and Content Area Courses as related to teacher knowledge, use, and recommendations of content reading strategies.

The results of this study were that teachers in the primary grades implement specific content reading strategies and recommend their use although little research exists to support this position. The match between strategies reported by elementary teachers in this study and the strategies found in the research is open to debate. Further study is warranted to ascertain which content area strategies are employed most effectively by young children while learning to read.

"THE EFFECTS OF SELF-EXPLANATION PROMPTING ON READING COMPREHENSION"

Dakin McKay and Linda W. Morse, Mississippi State University

The purpose of this study was to determine whether prompting students to self-explain would enhance their performance on a subsequent measure of reading comprehension. Seventy-four subjects from a large southeastern university participated. Subjects were divided into three groups; all subjects were asked to read two passages and answer eight multiple-choice comprehension questions corresponding to each passage. Each group was given different directions, control subjects received no self-explanation prompt, directions-only subjects were told to explain each sentence of the passages to themselves, and prompt subjects were asked to answer self-explanation questions inserted into the passages.

No significant differences were found between groups' scores on the comprehension questions. There was a significant positive correlation between the number of self-explanations given by prompt subjects and the number of comprehension questions they answered correctly. There was also a significant positive correlation between the length of prompt subjects' self-explanations and the number of comprehension questions they answered correctly. Although no significant differences were found between groups' performance on the measure of reading comprehension, it was determined due to the differences found within the prompt group that self-explanation may enhance reading comprehension when certain conditions are met.

12:00 noon-12:50 p.m. ATTITUDES (Discussion Session) .........................Atlantic Room

Presider: Sam Hinton, Eastern Kentucky University

Presenters: "NEW PERSPECTIVES REGARDING REASONS FOR BECOMING A TEACHER: A STUDY OF TEACHERS AND UNDERGRADUATES IN EDUCATION"

Jerry Brooksher Gee, Nicholls State University

As we near the twenty-first century, concerns are apparent with reference to teachers leaving the profession and what the future holds for students enrolled in colleges of education. Several national surveys have found a variety of reasons why teachers remain in the profession. To the contrary, a study in one state of the mid-south region revealed that after two years, fewer than two-thirds of the new teachers were teaching in any public school.
The purposes of this study were to survey undergraduates currently majoring in education and teachers in the field regarding reasons for becoming a teacher and to determine levels of variance in response between these two groups from their two perspectives.

Results of this study indicated that teachers in the field rate "the value or significance an educator can make to society" as the utmost reason for becoming a teacher. To the contrary, undergraduates feel that "a preference to work with children or young adults" ranks first. Through questionnaires and interviews, wide variances in response were found between these two groups of respondents. Correlation was not significant at either .01 or .05 levels. In essence, this study found new perspectives regarding reasons for becoming a teacher.

"EDUCATION STUDENTS' SUSCEPTIBILITY TO COMMONLY HELD EDUCATIONAL BELIEFS"
Charles W. Davidson and William F. Ferguson, University of Southern Mississippi

Many educators unquestioningly accept opinion statements or the conclusions of the research of others. Many of these statements and conclusions are not supported by research but, nevertheless, have led to programs and practices that have expended substantial monies and have yielded little or no positive results.

The purpose of this study was to determine the extent of acceptance by undergraduate teacher education majors and graduate students in education of selected commonly-held beliefs and to determine through multivariate analyses the interrelatedness between subject demographic variables and believing or not believing the statements.

Subjects for the study were more than 250 junior and senior teacher-education students and graduate students enrolled at a southern university. The subjects were requested to respond to items on a questionnaire as to their beliefs or disbeliefs. In addition to responses to the items on the questionnaire, data obtained from the subjects' records were ACT composite scores and/or GRE verbal and quantitative scores, intended teaching level and area, age in years, high school grade point average, college grade point average, race, and gender. The data analyses were completed.

"A COMPARISON OF INTERNATIONAL GRADUATE STUDENTS' AND AMERICAN UNDERGRADUATE STUDENTS' PERCEPTIONS OF AMERICAN PEDAGOGY AND STUDENTS"
Marion Couvillion and Sue J. Minchew, Mississippi State University

The purpose of this study was to compare prospective international teaching assistants' (ITA) and American undergraduate students' perceptions of American university pedagogy and of American undergraduate students. Responses to a researcher-constructed questionnaire were obtained from 70 international participants in a teaching assistants' workshop and from 45 students in undergraduate public speaking classes. Pedagogical items included class size and format, assignment, method of examination, and text utilization. Items relating to perceptions of American undergraduate students included academic preparation, interpersonal attributes, areas of interest, affluence, and independence.

A multivariate analysis of the mean levels of the undergraduate and graduate responses revealed a significant difference (p < .05) in the two areas of concern. The information obtained from this study should be very helpful when planning orientation of international teaching assistants. Information obtained will help ITA teachers determine the following: which perceptions of the American experience need modification, which perceptions might limit teaching effectiveness in an American institution, which might lead to conflict with students, and which might facilitate effective interactions and improve rapport.
The Multiple Abilities Program (MAP), an innovative teacher preparation program that merges special and general education teacher preparation, incorporates the themes of authenticity, diversity, and empowerment to model constructivist teaching principles. A primary component of MAP is students' weekly reflective journals addressing these themes along with the mentor faculty's responses. Although the literature addresses teacher reflection, little, if any, research has addressed the use of preservice teachers' emerging theme construction as a tool for ongoing program development in an extensive university/field-based partnership setting. This symposium examines the development, implementation, and evaluation of themes in reflective journal entries of a cohort of students during the initial year of a two-year program and includes a discussion of the evaluation component of the program.

One segment of the symposium focuses on the development of the theme of authenticity. As part of their weekly journals, MAP preservice teachers were asked to think of a metaphor each week to discuss how they viewed themselves as "an authentic teacher" during that week. This presentation discusses the results.

The next portion of the symposium addresses the theme of diversity. Preservice teachers' reflective journals included entries that raised their awareness of diversity among students. Findings from these journal entries are discussed along with the value of reflectivity in developing preservice teachers' sensitivity toward the diverse needs of their students.

The symposium also examines the development of empowerment as a central theme in the Multiple Abilities Program (MAP). Weekly reflective journal entries of MAP preservice teachers were analyzed for evidence of their conceptions and misconceptions about teacher and student empowerment. In addition, mentor faculty responses were analyzed for observations of preservice teachers' theme development. Results are presented along with a discussion of implications for using reflective journals as a viable tool to facilitate preservice teachers' reflections concerning empowerment.

MAP includes a comprehensive evaluation component that responds to the unique character of the program. A number of process and product components are part of the evaluation
plan, which was designed to satisfy requirements of various funding sources and the institution, as well as the needs of the core faculty as they make decisions about program success and modifications in program design. This portion of the symposium contains a presentation of the evaluation design and results of analyses completed and a discussion of the role of reflective journals in the overall evaluation plan.

12:00 noon-12:50 p.m. CULTURE (Display Session).............................Deer Isle Room

Presenters: "TEACHING IN TAIWAN: A DICHOTOMY OF EXPERIENCES"

Rita G. Bryan, Mississippi State University

The purpose of this study was to identify the commonalities and differences between teacher education institutions in the U.S. and Taiwan. Measures of these were obtained through qualitative research procedures. A researcher's journal documented cultural perceptions. Several personal, cultural, and professional conceptions identified language, reverence, environment, living standards, electronic communication, arts, and student attitudes.

The researcher conducted an ethnographic study in Hsinchu, Taiwan at National Hsinchu Teachers College in spring 1994. During this study the researcher developed close friendships with both native-speaking colleagues and native-speaking students, which strengthened the context of the study. This cultural immersion broadened the global perspective of the researcher.

Significant research findings that emerged from this study would positively impact teacher education research in the following areas: student/teacher relationships, challenges in international communication, and the psycho-social dimension. The synthesis of this data has been used to inform and enhance existing courses in Planning/Managing Learning, Teaching of Social Studies, and preservice education. Ongoing interaction between MSU education students and the researcher will promote greater understanding of the two cultures. This positive assimilation of experience will enhance the recruitment of foreign students for the university.

"HERMENEUTICS VERSUS PHENOMENOLOGY: TOWARDS A UNIFIED THEORY OF CULTURAL LEADERSHIP"

Susan McCabe, East Tennessee State University

Culture has long been recognized as an important issue in education. Traditional application of culture to education has focused on an ethno-racial use of the word, and often reflect the hermeneutic process occurring in this definition of culture. The outgrowth has been increased awareness of the importance of cultural diversity and an emphasis on multicultural education. With increasing frequency, culture is being defined more phenomenologically than hermeneutic as a means of understanding the nature and complexity of organizations. This has led to increased emphasis on school culture and educational leadership embracing organizational cultural theory for administrative practice.

While theories have been espoused that assist with understanding culture on both an ethno-racial and organizational level, little to no work can be found addressing the hermeneutic nature of ethno-racial culture as it interfaces with the phenomenologic nature of organizational culture. This presentation is designed to explore the two common phenotypes of culture as issues for educators. It will briefly examine current theories regarding both ethno-racial culture and organizational culture, and proposes a model of Unified Cultural Leadership that focuses on the interface of these cultural borders as a tool to assist leadership and decision making in educational systems.
"CULTURAL SENSITIVITY AWARENESS TOWARD CHILDREN AND FAMILIES"

Louise E. Davis, University of Mississippi, and Vicki Whitener-Lepanto, Educational Consultant/University of Mississippi

The purpose of the study was to determine the awareness of cultural sensitivity in an elementary preservice teacher. The population consisted of 65 elementary preservice teachers in their senior year.

A pretest was given before the preservice teachers went into the field in the fall with a posttest following student teaching in the spring. The survey instrument, Cultural Diversity Awareness Inventory, was utilized. The survey consisted of 28 items on a Likert-type scale ranging from strongly disagree to strongly agree. Observations and interviews were also conducted over a period of time with the participants.

Differences in the cultural sensitivity awareness levels between the beginning and end of field work were found. Findings included research-based classroom strategies that focus on how the university can be the supportive change agent in the cultural sensitivity levels of elementary preservice teachers.

12:00 noon-12:50 p.m. AVOIDING THREE CARDINAL METHODOLOGY SINS IN QUANTITATIVE RESEARCH: A TRAINING SESSION FOR DOCTORAL STUDENTS AND FACULTY (Training Session) .............................................. Petit Bois Room

Trainer: Bruce Thompson, Texas A&M University and Baylor College of Medicine

Many researchers who conduct quantitative studies are primarily trained in substantive as against methodological areas. Consequently, the methodologies such individuals use may not always be the most current or may involve common methodological pitfalls. The purpose of this one-hour training session is to briefly explain three commonly-committed cardinal methodology sins, why they are so sinful, and what methods can be used in their stead. The three sins are only briefly noted here, given space limitations.

First, stepwise methods do not assist in identifying the best set of predictors and do not yield replicable results, and computer packages incorrectly test the statistical significance of stepwise results. Thus, these methods should be avoided in favor of "all-possible-subsets" analyses.

Second, statistical significance tests do not evaluate either the importance or the replicability of results. Instead, such tests primarily evaluate the sample size, which the researcher already knows. Thus, effect size and replicability analyses should be the focus of result interpretation.

Third, tests are not reliable. Instead, reliability inures to scores or to data. Thus, the data in hand in each research study must generally itself be evaluated for measurement integrity.

12:00 noon-12:50 p.m. EXCEPTIONAL EDUCATION (Discussion Session) .................................................. Chandeleur Room

Presider: Cliff Ouder, Assumption Parish (LA) Schools

Presenters: "INCLUSION OF EXCEPTIONAL CHILDREN INTO GENERAL EDUCATION CLASSES: WHAT DOES THE RESEARCH SAY?"
Including exceptional children into the least restrictive environment is stated clearly in PL 94-142 (The Handicapped Children Act). Historically, the interpretation of this law often encouraged segregation not integration of exceptional children as originally intended by the law. The continuing of PL 101-476 (IDEA) has forced schools to reevaluate their programs. The current trend in schools is to place more exceptional children in general education classes, including severely and profoundly challenged children.

This review of the literature covered the efficacy of the historic way of serving exceptional children in segregated and in integrated settings. The findings suggest that the segregated approach for special populations has not been effective. The exceptional children have not demonstrated better educational performance. The research on the efficacy of the integrated setting is more limited, producing inconclusive results.

The reality of public school teaching is that exceptional children will be included into the general education classrooms. Segregated settings are not effective, and there is a strong belief that educating regular and exceptional children together is beneficial to both populations. More research needs to be conducted to prove this theory.

"EMPOWERING TEACHERS THROUGH INCLUSIVE EDUCATION"

Nancy T. Morris and Barbara A. Duchardt, Northwestern State University

As the result of federal policies and reform movements, public schools are moving in the direction of inclusive education. Although schools are quickly moving in this direction, higher education has not moved swiftly enough to address change.

This presentation reports the results of a two-year project to develop a Collaborative Full Inclusion Teacher Training Model. General education teachers, special education teachers, administrators, parents, faculty members in regular and special education, and representatives of professional organizations formed focus groups to determine the needs of preservice and inservice teachers. An inclusive education preservice methods class and an inservice methods class were developed, and students completed student teaching in inclusive education classrooms. Significant increases in knowledge and ability to select appropriate accommodations and modifications within general education were found from pre-methods to the end of methods and student teaching.

"LEARNING DISABILITY FACTORS AND INCLUSIVE-EDUCATIONAL EXPERIENCES AND TEACHERS' PERCEPTIONS OF FULL INCLUSION"

Jimmy D. Lindsey and Chhanda Ghose, Southern University-Baton Rouge; Rangasmy Ramasamy, Florida Atlantic University; and L. Quinn Head, Jacksonville State University

The primary purpose of this study was to determine the effects of learning disability (LD) factors and inclusive-educational experiences on teachers' perceptions of full inclusion. One hundred (100) teachers attending a statewide special education conference were randomly selected to serve as subjects. Simple factorial designs were used to conduct the study, and the independent variables included LD factors (e.g., LD graduate coursework, LD certification, and number of students with LD recently taught) and inclusive-educational experiences (e.g., worked in inclusive setting, coursework on inclusion, inservice on inclusion, and independent study of inclusion). Dependent variables were the subjects' general and specific full inclusive-perceptual
scores on a 30-item questionnaire (e.g., General, Cognitive-Academic Development, Social-Emotional Development, and Professional Responsibilities). SPSS/PC+ 4.01 descriptive and inferential statistical procedures were used to analyze the data. Null hypotheses were assumed for all analyses, and an .05 level was the criterion for significance. Results indicated that LD factors and inclusive-educational experiences affected the subjects' general and specific full inclusive-educational perceptions. Specific findings, conclusions, limitations, and recommendations for future research were established.

"INCLUSION PRACTICES IN THE REGULAR ELEMENTARY CLASSROOM: AN ELEMENTARY PRINCIPALSHIP PERSPECTIVE"

Jerry R. Herman, The Dollywood Foundation, and Russell West, East Tennessee State University

The purpose of the study was to examine the perceptions of elementary school principals in Tennessee regarding the desirability and feasibility of adapting regular elementary classrooms and programs for the inclusion of children with moderate and severe disabilities.

Data collection for the study was accomplished by use of a 40-item survey instrument with a seven-point Likert-type scale for each construct (i.e., desirability and feasibility). Four ten-item subscales addressed the areas of Staff Organization, Curriculum, Materials, and Instructional Methodology. The demographic factors of gender, age, teaching, and administrative experience, training, and system size were examined for effect.

Responding elementary principals in this study identified 95% of the presented adaptations as significantly more desirable than feasible with demographic factors having little or no effect. Moderate to high scores on the feasibility scale, however, indicated that principals do not view implementation of the adaptations as impractical. Conclusions of the study emphasize that the differing views of desirability and feasibility may be attributed to either a perceived lack of available resources or administrative autonomy or both. Findings suggested that principals may have had concerns about involving parents in programming decisions for their children.

12:00 noon-1:00 p.m. MSER FOUNDATION BOARD LUNCHEON......Suite A (Second Floor)

1:00 p.m.-1:50 p.m. SCHOOL RESTRUCTURING (Discussion Session).......Pacific Room

Presider: E. Dean Butler, The University of Memphis

Presenters: "TOWARDS A RICHER UNDERSTANDING OF A RESTRUCTURING MODEL: VIEWS FROM INSIDE A GRADUATE-LEVEL CLASSROOM"

Betty M. Davidson and Geralyn L. Dell, University of New Orleans

The purpose of this study was to determine if students participating in a graduate-level class dealing with a school restructuring model were able to internalize the philosophy at an in-use level rather than at an espoused level. The focus of the course was school change. A survey was distributed to measure 10 dimensions, including insight, knowledge of school change, unity, strengths, empowerment, reflective thinking, dialogue, and inquiry.

The findings indicated that there was an understanding of the philosophy. As a result, the understanding led to an attitudinal change in the personal lives of the students. Dimensions of unity of purpose, empowerment, and building on strengths showed the greatest
positive impact.

Even though understanding and internalizing the philosophy at a personal level was evident, the results indicated that participants were not secure in creating situations for change at their school site.

Implications of this study indicate that it is possible to expose change within oneself. However, in order for change to occur at an in-use level, opportunities for alterations in roles and responsibilities must be provided for all members of the school community.

"RECULTURING: HOW TEACHERS AND ADMINISTRATORS MAKE SENSE OF RESTRUCTURING"

Angel Wonycott and Ira Bogotch, University of New Orleans

School improvement is an integrated rather than a fragmented activity. Failures can often be traced to individual school efforts that become ensnared in scattered and unconnected projects. For restructuring to succeed, it must be connected, becoming part of the "reculturing" of a school or district. Thus, restructuring is but one component of a larger construct called "reculturing." The purpose of this study was to identify the practitioner assumptions and practices of "reculturing." Qualitative interview data were collected from administrators and teachers in two districts currently engaged in restructuring. The questions asked elicited whether the meaning of restructuring incorporated new ways of seeing, teaching, and learning, both for participants and for students.

In one district, we found a knowledge and respect for the socio-cultural history of the district prior to restructuring; nevertheless, restructuring assisted teachers and administrators in creating new collaborative roles and relationships and in developing new instructional practices. Participants pinpointed specific ideas and practices which made them more effective educators.

In the other district, societal problems were so overwhelming that restructuring was still viewed in terms of the need to develop more programs to solve specific social or educational problems of students. Little progress was noted in academics.

"A STUDY OF THE IMPACT OF PARTICIPATION IN RESTRUCTURING UPON SCHOOL PERSONNEL"

Frances K. Kochan, Auburn University

The purpose of the project was to determine the impact of participation in school restructuring on those participating in it. The restructuring process involved decentralization of decision making, creation of supportive environment, and empowerment of personnel. The metaphor used for this change was "School as Family."

The method of inquiry involved six case studies using ethnographic techniques. There were 206 documents examined. Forty-two individual and small group interviews, including 78 individuals, were conducted. The analysis was cyclical and interactive. Standard procedures of rigor including drawing data from a variety of sources, viewing perceptions over a sustained period of time, verification of data, use of thick descriptions, and triangulation were applied.

The findings revealed that the program impacted feelings, attitudes, and relationships. It appeared to raise self-esteem and improve internal and external relationships, and created a working environment that made the school a more positive, supportive place. It appeared that individual change caused organizational change, and organizational change caused individual change. Implications are that the human element must be considered and examined when engaging in school improvement and restructuring efforts.
"REDEFINING SCHOOL LEADERSHIP ROLES FOR SITE-BASED MANAGEMENT SYSTEMS"

Oneida L. Martin, Tennessee Technological University, and John F. Hefflin, Kent State University

Traditionally, school leaders are trained and expected to function within bureaucratic structures. Past reforms defined leadership roles with regulatory mechanisms that centralized authority. As current reforms accentuate site-based management systems, school leaders are ambivalent about leadership roles. Despite school restructuring, principals have regulatory control with teacher performance/evaluations.

Growing evidence from the restructuring literature suggests that school leadership roles and behaviors and restructuring are incongruent. Collaborative relationships are difficult when teachers' duties are hierarchically decided. Further evidence from a leadership study conducted by the authors showed principals to be uncertain about leadership roles with site-based management. Of 30 principals surveyed, 32% understood their leadership roles. Conversely, 64% felt leadership roles were ill-defined. A related study also revealed no leadership role differences.

Leadership behavior is a function of roles and expectations. Organizational change cannot occur without leadership change. The authors posit that site-based management systems cannot be successfully implemented until leaders are prepared to assume democratic styles of leadership. Dimensions of reorganized structures are analyzed in relationship to elements of leadership roles that accomplish organizational goals. School leaders' roles and behaviors are conceptualized to complement conventional restructuring ideas.

1:00 p.m-1:50 p.m. SCHOOL ENVIRONMENT (Discussion Session)......Caribbean Room

Presider: Bobby J. Franklin, Louisiana Department of Education

Presenters: "PREPARING FOR THE NEXT CENTURY: ENROLLMENT AND FACILITIES STUDIES IN PUBLIC SCHOOLS"

Robert N. Hutchison, Jack Blendinger, Billy Stewart, Randell Foxworth, and Ned B. Lovell, Mississippi State University

Public school board members and administrators face several complex questions when conducting educational planning: How fast will student enrollment grow? How will population growth impact the availability of school facilities? What is the condition and optimal use of existing facilities? What type of schools, if any, should be built to accommodate enrollment growth? Where should new construction be located? What organizational structures should be utilized to best accommodate enrollment growth and instructional trends?

This study examines the methods developed and used by the Educational Leadership Department of Mississippi State University to assist public schools in long-range planning. The facilities team conducts studies outlined in six steps. The team begins with Familiarization and Orientation through meetings and interviews to understand the qualities and priorities of the district. Next, the team develops Ten-Year Enrollment Projections examining future enrollment patterns.

Assessment of Present Instructional and Support Services Space involves an in-depth examination of existing physical plants. Future facility needs for the school district are then considered. At this point, financial considerations are examined involving projections and debt schedules. Finally, the team provides the school district with a facility plan presenting alternatives to consider in their long-range planning.
"A STUDY OF THE RELATIONSHIP OF THE PHYSICAL ENVIRONMENT TO TEACHER PROFESSIONALISM"

Charles E. Saul, Jackson State University, and Cardell Williams, Claiborne County (MS) Public Schools

The purpose of this study was to ascertain teacher's perceptions of how school facilities affected their ability to function as professionals. Perceptions were obtained from the 55 nominees for the State Teacher of the Year Award (1994). The teachers represented all areas of the state, differed in years of experience, and were from various discipline areas.

The teachers were surveyed using an instrument that was designed to identify the aspects of the physical environment in a school facility that had any impact on the ability of the teachers to function professionally. The teachers were also asked to respond to which of the 21 aspects surveyed were the most important and the degree to which the aspects were viewed negatively or positively.

The study revealed that the respondents were satisfied with most of the environmental aspects that were surveyed. However, significant differences were found by gender, number of buildings taught in, and number of hours taught. The respondents ranked classroom equipment, furnishings, and ambient features as the most important environmental aspects. The respondents also provided input on features that they would and/or would not include in designing an educational facility.

Current research suggests that it is becoming increasingly important to allow teachers to function as professionals, and that the physical environment affects teachers in their performance. As school districts build new facilities or remodel existing facilities, they should allow teachers to function to their utmost professional abilities.

"MEASURING PLACE ATTACHMENT TO THE OUTDOOR RECREATION SETTING"

Ann Halcomb and Kenneth Clawson, Eastern Kentucky University

This study examined place attachment (how much an individual identifies with or relies on a given environmental setting) as it related to outdoor recreation site selection in the Red River Gorge Geological Area located in central-eastern Kentucky. Place attachment had two dimensions: place identity and place dependence.

A survey instrument, modified from one used by Moore and Graefe, was used to survey 200 visitors to RRGGA over two weekend periods in May 1995. Responses to the questionnaire were analyzed using chi-square for four hypotheses with the following results: (1) those who visited the site most often were significantly higher (p .05) on place dependency and place identity, (2) those living nearest the site visited more frequently and were higher (p .05) on place attachment, (3) those who had been visiting the site longest were higher (p .05) on place identity and place dependence, and (4) those who felt their activity is important to them rated higher (p .05) on place identity and place dependence.

These data will help those involved in planning, designing, and maintaining recreation sites to understand why people choose a site, what keeps them coming back, and how to plan for future enjoyment.

1:00 p.m.-1:50 p.m. SIGNIFICANT CORRELATES WITH STANFORD TEST SCORE CHANGES: BELIEVE IT OR NOT (Symposium)...........Ship Isle Room
Descriptive data from Mississippi school districts were correlated with Stanford Achievement Test score changes over a three-year period for grades 4, 6, and 8. The variables often demonstrated a paradoxical significant relationship with the test score changes.

"MATHEMATICS"
Jerry L. Young, Delta State University

What was the relationship between mathematics achievement and school districts within communities having higher socioeconomic levels and better educated parents, and having higher teacher-pupil ratios? Did districts with higher percentages of students living below poverty level or on free lunch show greater gains in mathematics?

"LANGUAGE"
Janie Allen-Bradley, Delta State University

School districts with a higher percentage of teachers holding advanced degrees, or with higher ACT means, had smaller gains in language scores. Those districts having a higher percentage of children in Chapter I had greater gains in language scores.

"READING"
Camille Branton, Delta State University

Changes in Stanford reading achievement scores showed a significant negative correlation when school districts had higher percentages of adults with high school diplomas. Greater reading score gains were made in districts having higher percentages of families below poverty level or higher percentages of students receiving free lunch.

"DISCUSSION"

Results presented in this symposium illustrate the need to interpret relationships such as these with caution; that is, these variables have traditionally shown a positive relationship with test scores. School districts with a history of high achievement scores may improve, but school districts with historically poor test performance have few options but to improve.

1:00 p.m.-1:50 p.m. TECHNOLOGY (Discussion Session).................Chandeleur Room
Presider: William Deaton, Auburn University at Montgomery
Presenters: "THE TERROR OF TECHNOLOGY: YOUR COMPUTER"
Robert L. Kennedy, University of Arkansas, Little Rock

"Green" computers evoke images of environmentally friendly machines, powering down during idle moments and saving precious energy resources. Unfortunately, they may distract the user's attention from another more important concern: the user's health. This review of computer journals and electronic sources indicates that computers have been associated
with several cumulative trauma disorders, as defined by the Occupational Safety and Health Administration. Among these are electromagnetic radiation from video display terminal emissions; tintinnabulation (ringing in the ears due to ultrasonic noise in monitor power supplies, drive motors, fans, and loud fly-back transformers); eyestrain from monitor glare and inadequate overall light levels; strength-sapping vibrations from the head-slamming of hard drives, CD ROM drives, and removable drives; carpal tunnel syndrome (wrist nerve damage from lack of wrist support); and lower-back strain from poor posture while sitting in front of the computer. Although these concerns cannot be eliminated, there are remedies that can make computing safer. The presentation outlines a number of these.

"THE STRUCTURE AND CORRELATES OF TECHNOLOGICAL EFFICACY"

Michael A. Hayden, Mississippi State University

The purpose of this research was to: (1) perform a meta-analysis of recent studies investigating individual's technological efficacy, and (2) to describe the taxonomy of technological efficacy that includes the subparts of technological literacy, technological attitude, and technological operancy. Individual studies included, among others: (1) defining technological efficacy and its subparts, (2) measuring, predicting, and explaining technological efficacy, and (3) investigating the correlates of technological efficacy. The methods employed in the individual studies included: (1) Delphi-like techniques, (2) surveys/questionnaires, and (3) achievement-type test instruments. The meta-analysis method included a cross tabulation of individual results.

Analyses indicated that technological efficacy and its subparts can be measured with a high degree of reliability and can be predicted by easily obtained demographic variables. It was found that technological literacy, attitude, and operancy are interrelated and correlated with many demographic variables. Another finding was that individuals generally had little understanding of their own technological efficacy, but felt that themselves and others should possess higher levels of technological attributes.

Conclusions drawn included the need for more technological literacy and operancy for all individuals - even those with specific technical expertise and experience.

"ONLINE TEACHER DEVELOPMENT TO SUPPORT INTERNET TELECOMMUNICATIONS IN EDUCATION VIA THE VIRTUAL CLASSROOM, AUTHENTIC ASSESSMENT, AND LEARNING PROCESS CONTROL"

Marion T. Wesley, Jr. and Melvin E. Franks, Mississippi State University

Internet telecommunications is one of the most powerful of emerging educational technologies. Many school districts are exploring access to Internet resources for their instructional personnel. However, the challenges of developing the capacities of large numbers of teachers for using telecommunications and integrating it into instruction are great. Without effective means of developing teachers to use these technologies comfortably and effectively, successful adoption in the classroom is problematic.

This project seeks to examine the potentialities, prospects, and problems for Internet-based, online development of teachers in their home district at widely distributed sites via a telecommunications-mediated Virtual Classroom scenario. The proposed model of training in telecommunications capabilities for teaching and classroom research via the Internet emphasizes experiential learning, supportive collegial interaction, and meaningful and useful learning assessment. Methods are discussed for authentic learning assessment using information.
gathered online and for using assessment information for adjusting the individual learning process as it proceeds. Learning Process Control (LPC), an adaptation for education of TQM's Statistical Process Control (SPC), is introduced as a visual-analytic method for evaluating the learning progress of large numbers of distant students and for using online information to continually improve the ongoing learning process.

"EMPOWERING TEACHERS THROUGH TECHNOLOGY: AN INNOVATIVE APPROACH TO TEACHER EDUCATION"

Glenda A. Gunter, Troy State University at Dothan

Teachers in the nation's schools are charged with teaching students who will spend most, if not all, of their adult lives in the twenty-first century. The computer, as a leading technological device, is expected to be a major force in the restructuring of school systems. Yet, many of these teachers report little knowledge of or the ability to use computer technology.

The purpose of this study was to examine the change in teacher acceptance of technology after completing three courses in a unique graduate program designed to educate and empower teachers with the use of technology.

By providing teachers with the opportunity to construct knowledge and refine practice through various experiences, the results of the study revealed that teachers were empowered as informative, reflective decision makers. Teachers were found to have developed skills necessary to design curriculum with computer infusion for use in all teaching environments. Teachers felt more confident using technology for instruction in their classrooms after completion of the three courses. Furthermore, teachers felt qualified to evaluate software and hardware after completion of the three courses. As the teachers progressed through the courses, their anxiety levels decreased and confidence increased.

1:00 p.m.-1:50 p.m. FIELD EXPERIENCE (Discussion)............................Caprice Room

Presider: Lynne Patrick, Auburn City Schools

Presenters:

"FIELD EXPERIENCE AS A COMPONENT OF THE TEACHER PREPARATION PROGRAM: STUDENT REACTIONS"

Joe E. Walthall and Debbie Barnes, University of Central Arkansas.

A descriptive study was conducted to determine the reactions and perceptions of students to required field-based experiences as a component of teacher training. Data from 150 undergraduate students gathered at the end of their directed teaching semester were used to measure five components of field experience: Placement, Supervising Teacher Attributes, University Feedback/Course Content, Amount/Variety of Placements, and Professional Value. Students were asked to react on a Likert-type scale to a series of statements relating to total field experiences during their professional teacher preparation coursework.

"THE INFLUENCE OF PRESERVICE FIELD EXPERIENCES ON THE ATTITUDES OF ELEMENTARY TEACHERS"

Marie C. Roos, Jackson State University

This study was designed to ascertain the effects of early field experience on the attitudes of elementary preservice teachers toward teaching and the teaching environment of the elementary school. Participants in the study were 36 elementary teacher education students.
enrolled in an interdisciplinary movement and the arts class at Jackson State University during the spring semester of 1995. Students, supervised by their university professors, were assigned to early field experiences in elementary school classrooms two mornings a week for 12 weeks.

Pretest and posttest data were collected by means of an instrument employing a semantic differential scale measuring attitudes toward teaching. Included on the questionnaire were items about students' aspirations in pursuing a teaching career, their ability to teach, their awareness of present-day schools, and their preference to teaching in either lower elementary or higher elementary levels. A t-test for matched pairs was used. In addition, an open-ended questionnaire about the place of the arts in elementary education was administered. Qualitative as well as quantitative analyses of data were done. Findings and conclusions are presented.

"PRESERVICE EDUCATION MAJORS' ESTIMATIONS OF FIELD-BASED EXPERIENCES"

Linda K. Walker and George M. Thomas, Mississippi State University-Meridian Campus

This qualitative study sought to determine the perceptions of 36 undergraduate teacher education majors enrolled in a reading practicum during the summer of 1995. All members of the class had previously been enrolled in at least two courses where fieldwork comprised a majority of the course emphasis. In semi-structured interviews, each preservice teacher was asked to respond to the following questions: "What are the strengths and weaknesses of field-based classes?", "How can field-based classes better prepare you as a future teacher?", and "Why would you choose field-based classes over lecture-based classes?" Results of this study can be utilized in planning the most effective teacher education program for future students.

"ARE STUDENT TEACHERS ACQUIRING THE ULTIMATE OF FIELD EXPERIENCES?"

Dorothy L. Singleton and Nancy Masztal, University of Southern Mississippi

The purpose of this study was to determine if preservice teachers, during their student teaching experiences, were utilizing the strategies that they had learned in their university methods courses, and were these strategies being modeled by their supervising teachers. Responses were obtained from 31 preservice elementary teachers. Students responded to a survey based on the following constructs: classroom management, types of assessment, experiential learning, integrative curriculum, and multicultural education.

A comparison of the means of the two sets of responses, derived from the student teachers' perceptions of their performance during their field experiences, in comparison to that of their supervising teachers', was made through the use of t-tests. There was a significant difference found between the two sets of responses in all areas surveyed, ranging from p<.000 to p<.031, with one exception, which was in the area of assessment.

The results of this study indicated that, in general, supervising teachers were not utilizing the instructional strategies that the university students have been taught. These findings indicated a need for closer collaboration between the university and the supervising teachers.
Discussion centers around opportunities and problems associated with writing and publishing articles and manuscripts. Topics to be included are sources of ideas for research and writing, guides for effective writing, proofing and editing a manuscript, publication sources, preparing a manuscript, methods of submitting manuscripts, criteria for evaluating manuscripts, and ethics in authorship and publishing. Other topics addressed include elements of style: elementary roles of usage, principles of composition and form, an approach to style, and faults in scholarly writing.

Objectives of the session are to increase the awareness of attendees of opportunities to publish, raise standards for writing quality manuscripts, and establish minimum guidelines for professional growth.

Activities include a diagnosis of the basic writing skills of attendees, analysis of articles ready for submission to publications, and administration of a predictive measure for publication success. A number of sources for publishing are presented and discussed. Publication sources are identified that give the manuscript submitters a higher chance of achieving success for acceptance. Participants' manuscripts are evaluated for their content, style, impact on the reader, value to the scholarly community, and importance as a contribution to literature.

2:00 p.m.-2:50 p.m. MULTICULTURAL EDUCATION (Discussion Session) Atlantic Room

Presider: Linda Cornelious, Mississippi State University

Presenters: "ELEMENTARY TEACHERS' ATTITUDES TOWARD MULTICULTURAL EDUCATION"

Lynne Patrick, Auburn (AL) City Schools

The purpose of this study was to investigate elementary public school teachers' attitudes toward multicultural education. Specifically, the study examined whether years of teaching experience and how teachers perceive their total school environment affect their attitudes toward multicultural education. In addition, the study investigated whether elementary teachers' attitudes toward multicultural education were affected if their own schooling experience allowed for interaction with students from a racial/ethnic or socioeconomic background different from their own.

Data were collected from the General Information Form, Self-Assessment of Multicultural Education, Total School Environment instrument, and open-ended statements. A multivariate analysis of variance and subsequent univariate analyses of variance were used. Two of the results were as follows: teachers who perceived their school as one that promotes multicultural education were found to have a significantly more positive attitude toward multicultural education than those teachers who perceived their school as one that does not promote multicultural education, and teachers' attitudes toward multicultural education whose own schooling experience almost always or frequently included interaction with students from different racial/ethnic backgrounds differed significantly from teachers whose own schooling experience almost never or occasionally included interaction with students from different racial/ethnic backgrounds.

"EFFECTS OF CHILDREN'S LITERATURE ON PRESERVICE TEACHERS' OPINIONS ABOUT MULTICULTURAL EDUCATION ISSUES"

Rebecca McMahon and Carolyn Reeves-Kazelskis, University of Southern Mississippi
The study examined the effects of different instructional approaches on preservice teachers' opinions about multicultural education issues. Both the treatment group (n = 19) and the comparison group (n = 32) heard lectures about the goals of multicultural education and the instructional needs of linguistically and culturally different children, but the supplementary activities for the two groups differed. The treatment group listened to the professor read children's books depicting linguistic, physical, racial, and religious diversity and participated in interactive activities derived from the stories, while members of the comparison group read three children's books related to self-selected cultural groups and wrote summaries of the books. Both groups responded to the Inventory of Multicultural Opinions (IMO).

Data were analyzed using the t-test. Posttest total IMO scores for the treatment and comparison groups did not differ significantly, but the means of the two groups differed significantly (p<.05) on five items. These items addressed opinions about cultural values, comfort within culturally diverse settings, linguistic issues, and appropriate motivational techniques for use in culturally diverse classrooms. For the treatment group, significant differences were obtained between pre- and posttest total IMO scores (p<.002) and between five item means (p<.03). The items addressed opinions about topics that had been included in the supplementary activities for the treatment group.

"AN INVESTIGATION OF THE MULTICULTURAL KNOWLEDGE AND ATTITUDES OF SELECTED SECONDARY AND ELEMENTARY PRESERVICE TEACHERS"

Evelyn B. Homan and William A. Person, Mississippi State University

With the changing of the public school demographics, i.e., more students from culturally diverse backgrounds and fewer teachers who share similar backgrounds with their students, teachers need to become more aware of and sensitive to the academic development of all of their students.

The purpose of this study was to determine if there were any significant differences among preservice education majors at Mississippi State University over the course of a semester concerning cultural sensitivity when considering the variables of level of teacher and the student teaching experience.

The Multicultural Perceptions Inventory, a 43-item questionnaire developed by Fran Nahlen-Many, was used to ascertain the multicultural knowledge and attitudes of preservice teachers. It was given as a pretest and posttest to 106 students completing student teaching in the spring of 1995.

The dependent t-test was used to determine the differences between the pretest and posttest of the elementary students and the secondary students. ANCOVA was used to determine any differences between elementary and secondary students. The .05 level of significance was used. Preliminary results indicated that teacher education programs should include a focus on teaching students from culturally diverse backgrounds. As a consequence, the initial effectiveness of new teachers can be enhanced.

2:00 p.m.-2:50 p.m. EXCEPTONAL EDUCATION (Discussion Session) Pacific Room

Presider: Jimmie C. Fortune, Virginia Polytechnic Institute and State University

Presenters: "CASE STUDIES OF SELECTED MISSISSIPPI GOVERNOR'S SCHOOL STUDENTS"

Sue Jolly, Delta State University
The purpose of this qualitative research was to provide case studies of seven students from a three-week summer session of the Mississippi Governor's School. The emphasis of the research was on depicting the unique perspectives and personalities of the subjects as they exemplify giftedness. The report of the study described: (1) selection of Governor's School students, (2) individually how each met criteria for giftedness, (3) the perceptions the students voiced and how these were determined, (4) significance of students' comments, (5) and future implications.

The theoretical framework for the study included historical perspectives of education of the gifted, including the role of the Governor's School, and comparison of the findings to theory about giftedness. The methods used in data collection for this qualitative study included observations, group interviews, individual interviews, and document analysis. A case description of each student was developed, with analysis emphasizing the individual ways the participants expressed giftedness. Conclusions about their commonalities were discussed.

The strength of this research was in reported individual responses of the participants, matched with holistic descriptions of participants. The views of these gifted adolescents differed from those of their peers. Their individual voices powerfully presented their stories exemplifying their giftedness.

"EFFECTS OF LEVELS OF GIFTEDNESS ON SELF CONCEPT, SOCIAL STATUS, AND ACHIEVEMENT MOTIVATION"

Anthony D. Norman, Shula Ramsay, Carl Martray, and Julia Roberts, Western Kentucky University

The purpose of this study, funded through a faculty research grant and through the College of Education and Behavioral Sciences, was to gather information about gifted students attending two summer programs at a Kentucky university. One program, the summer camp, attracts middle to high school students who are brighter than average, but probably do not fit the category highly gifted." The other, the summer program, is limited to middle to high school students who have been identified for scoring significantly higher than their peers on either the ACT or SAT and, consequently, are considered highly gifted.

The focus of the study was to determine differences between the summer camp students (N=175) and the summer program students (N=175). Data were collected about demographics, academic ability, self-concept (general, academic and social), social status, and achievement motivation.

Several questions drove the research. Among these were: How are self-concept, social status, and achievement motivation affected by levels of giftedness, and how are these concepts interrelated? and How does the level of giftedness affect how these constructs are related to each other?

"GENDER DIFFERENCES IN INTELLECTUAL PROFILES OF GIFTED MALE AND ELEMENTARY STUDENTS"

S. John Obringer and Marsha S. Obringer, Mississippi State University

The purpose of the study was to determine if gender differences exist on the three intellectual measures of the Wechsler Intelligence Scale (WISC III) when identifying gifted students in Mississippi Public Schools. Students generally qualify for gifted programs if either the verbal, performance, or full scale IQ scores are found to be 120 or higher. Verbal, performance, and full scale IQ scores were obtained on 50 male elementary students and 50 female elementary students meeting the eligibility requirements for gifted programs in a Mississippi school district of 4000 students.

An independent t-test was utilized to measure differences in the intellectual
profiles (verbal, performance, and full scale IQ scores) of male and female gifted students qualifying for gifted programs.

Significant differences were found at the .05 level in the qualification criteria for entry into programs for the gifted. Male students tended to qualify based on their performance IQ score, while female students tended to qualify based on their verbal IQ score. Implications of the gender differences are examined and discussed.

"PERFORMANCE ON THE TORRANCE TEST OF CREATIVE THINKING AND STRUCTURE OF THE INTELLECT-LEARNING ABILITIES TEST: IS THERE A RELATIONSHIP?"

Margaret Guillory and Neelam Kher-Durlabhji, Northwestern State University

The purpose of this study was to determine the relationship between fluency and originality scores on the Torrance Test of Creative Thinking (TTCT) and the fluency and originality score of the creativity (divergent production) subtests of Structure of Intellect Learning Abilities Test (SOI-LA).

Data were collected from 263 junior high school students participating in a summer residential program for creative, gifted, and talented youth. All students completed the TTCT in school prior to their participation in the program. The SOI-LA was administered by graduate assistants trained by a certified SOI-Institute trainer. Pearson's product moment-correlation was used to determine the nature of the relationship.

The DFU fluency correlated with TTCT fluency at .33 (p<.01); the DMU and DSR fluency and the TTCT fluency had nonsignificant correlations. The DFU originality correlated with TTCT originality at .29 (p<.01); the DMU originality scores were not correlated with the TTCT originality scores.

The results of this study provided convergent and discriminant validation for the creativity subtests of SOI-LA. These tests may be used as an alternative to TTCT in the measurement of creativity. Further studies with more representative groups are needed to strengthen the findings of this study.

2:00 p.m.-2:50 p.m. COUNSELING (Discussion Session)..................Caribbean Room

Presider: Mildred E. Kersh, University of Southern Mississippi

Presenters: "AN EVALUATION OF A NEW SUPERVISION COURSE FORMAT"

Michele E. Caruso, Kathy Dooley, and Jean S. Dabit, Mississippi State University

The competence of supervisors is critical to producing competent counselors. A new format for a doctoral-level supervision course was developed and implemented at MSU. The purpose of the study was to assess the student's perceptions of effectiveness of the required tasks. A descriptive instrument was developed including Likert-type items and open-ended questions. This instrument was sent to 45 subjects who had completed the course. Results indicated that the majority of respondents agreed or strongly agreed that all training tasks were effective in facilitating supervision skills. This study provided the initial step in the evaluation of the new format.
"SUPERVISORY BEHAVIORS THAT REHABILITATION TRAINEES FIND HELPFUL"

Cara Kim Fireison, Mississippi State University

The purpose of this study was to determine which supervisory behaviors, within university-based training, rehabilitation counseling supervisees find most helpful in developing their counseling skills. All directors of Council on Rehabilitation Education (CORE) accredited counseling programs listed in the National Council on Rehabilitation Education Membership Directory (1993-94) were mailed research packets containing several copies of the questionnaires, which was a collaboration of the Supervisory Styles Inventory and the Effectiveness of Supervision. The directors were asked to give the questionnaires to all graduate-level rehabilitation counseling students that were receiving supervision in a practicum setting. Each respondent completed a six-page questionnaire that addressed perceptions of actual supervision behavior as well as supervisory behaviors that were considered important to the supervisee.

A multivariate comparison revealed a significant difference (p<.05) between mean level of perceptions of actual supervisory behaviors as compared to mean levels of supervisory behaviors that are perceived to be effective in facilitating growth as a rehabilitation counselor in training. The study indicates a need for a more consistent correlation between current supervisory behaviors and supervisee priorities.

"THE MISSISSIPPI ADULT BASIC EDUCATION PROJECT: RESEARCH, DEMONSTRATION, AND REPLICATION"

Melanie D. Hutto, Mississippi State University

The Mississippi ABE Model Project originated from a collaborative effort to develop and implement a research-based model process for adult basic education services. A needs assessment targeted areas for research: recruitment, retention, curriculum, methodology, public awareness, staff professionalization, and the impact of counseling. The project activities intentionally coordinated with work force goals cited by NOICC and SCANS.

The design employed qualitative methodology and descriptive statistics to assess program effectiveness. Thirty adult participants enrolled in class during the data collection period. Data collection consisted of observation notes from independent evaluators, interviews with staff and participants, individual documentation folders, videotaping, and database information. Data analysis utilized frequent reviews of observation notes to inform data collection, participant and staff debriefings within a TQM context, examination of student artifacts, case analysis, and review of learner academic progress.

Themes that emerged from the data included: (1) a relationship between extensive intake interviews and retention, (2) counseling issues in four main categories, (3) effective publicity efforts, (4) content needs for professional development, and (5) computer-assisted and traditional instruction as tools for work preparation.

The researcher presents results from the first years and makes recommendations for further research during replication in other sites.

2:00 p.m.-2:50 p.m. RESEARCH ON TEACHERS AND TEACHING IN OTHER COUNTRIES (Symposium) ..................................Ship Isle Room

Organizer: Jeffrey Gorrell, Auburn University

Discussant: Qaisar Sultana
This session contains a variety of papers related to teachers and teaching in countries outside the USA. There has been a growth in awareness of the commonalities of teachers' experience in many countries throughout the world. While cultural and economic situations may vary considerably, the essential issues associated with encouraging learners, increasing achievement, and developing professionally confront all teachers in one form or another. These papers, based upon studies conducted in Sri Lanka, South Korea, and Brazil, add to our understanding of teachers' experiences internationally.

"Korean Preservice Teachers' Concerns about Teaching and Teachers' Roles," by Young Suk Hwang and Jeffrey Gorrell, reflects a study of early childhood and elementary preservice teachers in Korea who responded to questions about characteristics of influential teachers in their lives, concerns about their roles as teachers, and the nature of teaching. Themes in their responses centered upon the importance of teacher warmth and care for children, the knowledge transmission roles of teachers, and issues associated with facilitating satisfactory development of children.

"Sri Lankan Teachers' Preferred Modes for Helping Students," by K.H. Dharmadasa and Jeffrey Gorrell, reports on a study of 237 Sri Lankan teachers who indicated how they would try to help failing students depicted in six scenarios that represented differing reasons for failure. Of the four primary modes of helping students, Sri Lankan teachers preferred verbal persuasion (39.4%), followed by reduction of anxiety (27.8%), inactive attainment (18.4%), and modeling (14.4%). Teachers also adjusted their preferences depending upon the reasons for a child's failure. Results parallel those found among American teachers in a prior study, and suggest that teachers cross-culturally respond in similar fashions to perceived student needs.

"Class Size and Achievement in Sri Lankan Schools," by Indranie Dharmadasa, investigates whether class size is an important factor concerning student achievement in a developing country. Statistical analysis of achievement data in mathematics and mother tongue (Singhalese) for 18 fourth-grade classes ranging from 15 to 50 students revealed no significant differences in achievement levels across variously-sized classes. Findings suggested that variability in performance may have more to do with teacher competence, classroom facilities, and learning resources than with class size.

"Brazilian Elementary School Teachers Evaluation of Their Training and Their Classroom Performance," by Francis Boakari and Rita de Cassia Lima Pereira, describes an interview study of elementary school teachers who evaluated their teacher training as it relates to their own consequent classroom effectiveness. Results indicated that teachers identified several incompatibilities between their formal preparation and their daily classroom tasks. Many, in fact, did not appear to understand the real nature and function of teacher education. These findings point up the need for implementing teacher education curricula and policies adapted to local conditions and needs of new teachers.

The discussant, Qaisar Sultana, will comment on the papers and link them to important issues in teacher education and teaching in other countries. There will be time allotted for comments and questions from the audience.
After an extensive review of the literature, a 78-item survey was developed that measured the use of quantitative displays and was administered to 452 K-12 teachers in a large Alabama school system. Some results of the survey indicated the following: charts were used by over half of the respondents, but significantly more often by elementary school teachers. Instructors reported that common student errors in interpreting charts included recognizing that chart intervals are scaled, standardized units and recognizing patterns or trends in charts. Bar charts were reported to be the easiest form of charts for students to understand, and most were frequently employed in curricula and textbooks. The use of student learning strategies (e.g., visualization) to aid in graphical display use declined as students progressed through their years in public school. Less than half of the respondents had formal instruction in teaching students to use charts. Instructors with a master's degree or greater, however, were significantly more likely to have had formal training in interpreting or constructing graphs. Contrary to some of the current literature, more instructors felt that it was important for students to understand charts or use charts than it was for students to construct charts.

After an extensive review of the literature, a 78-item survey was developed that measured the use of quantitative displays and was administered to 452 K-12 teachers in a large Alabama school system. Some results of the survey indicated the following: charts were used by over half of the respondents, but significantly more often by elementary school teachers. Instructors reported that common student errors in interpreting charts included recognizing that chart intervals are scaled, standardized units and recognizing patterns or trends in charts. Bar charts were reported to be the easiest form of charts for students to understand, and most were frequently employed in curricula and textbooks. The use of student learning strategies (e.g., visualization) to aid in graphical display use declined as students progressed through their years in public school. Less than half of the respondents had formal instruction in teaching students to use charts. Instructors with a master's degree or greater, however, were significantly more likely to have had formal training in interpreting or constructing graphs. Contrary to some of the current literature, more instructors felt that it was important for students to understand charts or use charts than it was for students to construct charts.

The purpose of this study was to investigate the attitudes of doctoral students toward required statistics courses. The focus was on the identification of problems and concerns associated with learning statistics, particularly by graduate students who had not remained current with higher level mathematics. The researchers identified learning difficulties encountered by the students and made instructional recommendations to improve the statistics learning process for students.

Quantitative and qualitative analyses were used to analyze the data. Significant differences across gender, stage of completing the statistics requirements, and the declared major in the College of Education were found. Specific strategies have been suggested to assist both the instructor and learner to create a fear-free statistics classroom, and, therefore, reduce the level of fear associated with the learning of statistics.

Research in gender-related differences in mathematics has produced conflicting data. Original studies indicated that males had higher achievement scores -- the difference being more pronounced in high school, girls were better at calculations, while boys excelled at problem-solving, and more boys enrolled in higher level courses. Recent data indicated that the gap might be non-existent or closing. The reason might relate to students' attitudes in certain areas. This project investigated gender differences in attitudinal areas: confidence, usefulness, and mathematics as a male domain.

The sample consisted of 200 students enrolled in both college-preparatory and technical tracks from a predominantly white, rural high school. Students responded to three
subcales of the Fennema-Sherman Mathematics Attitude Scales. T-tests revealed no significant
differences in Confidence Scale scores between males and females (p .967). Usefulness Scale
scores indicated borderline significance (p .076) favoring females. The males regarded
mathematics as a male domain more than did the females (p .000). There was no significant
difference in gender composition in any of the classes; however, the females outnumbered the
males in the higher level classes. This analysis suggested that traditional assumptions
regarding gender differences in mathematics were not reflected in this sample of students.

2:00 p.m.-2:50 p.m.  TEACHERS: NOVICE/EXPERT
(Discussion Session).................................Chandeleur Room

Presider:  Dawn M. Ossont, Auburn University

Presenters:
"SINGLE VERSUS MULTIPLE OBSERVATION: A COMPARATIVE
ANALYSIS OF THE INSTRUCTIONAL STRATEGIES OF
EXEMPLARY AND NOVICE ELEMENTARY SCIENCE TEACHERS"

Clifford A. Hofwolt and James D. Johnston, Vanderbilt University, and
David D. Kumar, Florida Atlantic University

To help identify effective teaching practices for elementary science teachers, the
differences in instructional strategies between exemplary and novice elementary science
teachers were examined. Of interest were the differences revealed between a single observation
versus multiple observations of novice teachers.

A single comparative observation analysis was performed on videotapes of
classroom episodes of five exemplary and 12 novice student teachers in the Nashville Metropolitan
School District. A multiple comparative observation analysis was performed on five novice
student teachers in the same school district.

The single observation analysis revealed significant differences between
exemplary and novice elementary science teachers in the developing of conceptual understanding
of science, the communication of objectives and the use of variety of activities to promote positive
attitudes toward science in favor of the exemplary teachers. Whereas the multiple observation
revealed significant differences in the use of a variety of materials to enhance understanding,
the use of questioning strategies to clarify understanding and evoke explanations, use of activities
and content appropriate to the learning and the promotion of career awareness and student
interest in science in favor of the novices.

This study indicates that a multiple system of observations reveals a truer, richer
description of novice teacher's competency level.

"THE TRANSITIONAL STAGE IN THE CONTINUUM FROM NOVICE
TO EXPERT TEACHER"

Ruth M. Allen and Renee M. Casbergue, University of New Orleans

This study was part of a larger study that examined the evolution of the
accuracy/thoroughness of novice through expert teachers' recall of their own and their students'
specific classroom behaviors. Previous research has not included an intermediate group. Three
groups of elementary school teachers participated: four novices, five intermediate teachers, and
four experts. Qualitative methods were utilized.

Audiotaped observations of the teachers' teaching were conducted in a natural
setting for one class period. Detailed notes of the teachers' and students' specific classroom
behaviors were recorded. A one-hour audiotaped structured interview followed the observation
during which teachers recalled their own and their students' classroom behaviors.
Each teacher's accuracy/thoroughness of recall was determined, and comparisons were made within groups and across groups. Intermediate teachers shared more characteristics with experts than with novices. They differed from both groups by being extremely thorough in their recall and in their focus during interactive teaching. They grew toward expertise at different rates.

Data demonstrating the cognitive development of teachers can serve as a guide to teacher educators, school systems, and administrators when they plan inservice courses or training programs to enable them to provide the most appropriate activities to promote attainment of expertise.

"SIMILARITIES AND DIFFERENCES IN DISCIPLINE AND TEACHING METHODS USED BY STUDENT TEACHERS AND SUPERVISING TEACHERS"

Rebecca G. Williams and Linda T. Jones, Mississippi State University

The purpose of this study was to quantitatively and qualitatively analyze student teachers' perceptions of the teaching and discipline methods used by their supervising classroom teachers. A Likert scale for dependent variables and open-ended questions were used to obtain student teachers' perceptions.

Student teachers were divided into three groups by certification areas. A Kruskal-Wallis one-way ANOVA was used to determine if any significant differences existed between groups for each of the variables. The four variables addressed were: Similarities/Differences in Teaching Methods, Problems Caused by Differences in Teaching Methods, Similarities/Differences in Discipline/Classroom Management, and Problems Caused by Differences in Discipline/Classroom Management. Spearman's correlation coefficient was used to determine the possible correlations among these four variables. A philosophical inquiry approach was taken in analyzing the terms the student teachers used in their explanations of their similarities and differences and problems due to those differences.

The only statistically significant difference among the groups for the four variables of interest was Problems Caused by Differences in Teaching Methods. Correlations were found among teaching methods, discipline, and perceived problems caused by similarities and differences. Common themes were noted and reported for each of the four variables.

"EFFECTS OF THREE LEVELS OF CLINICAL EXPERIENCES ON SKILLS MASTERY OF TEACHER EDUCATION STUDENTS"

Teresa M. Nichols, Lynetta A. Owens, Dennis C. Zuelke, and J. Gordon Nelson, Jacksonville State University

The purpose of the research was to determine the effects of three levels of clinical experiences on teacher education students' perceptions of importance and performance of various teacher attributes. Measures of importance and performance were obtained from a sample of 216 teacher education students immediately prior to and at the end of the three levels. Gender and ACT scores were also considered.

There was a significant difference (t-test, p<.05, one-tailed) between the pre-importance scores and the post-importance scores, and the pre-performance scores and post-performance scores, at each level (i.e., 2, 3, and 4). These results confirmed the directional hypothesis that post-scores would be higher than prescores due to exposure to training.

The pre/post-importance scores indicated that students become more sensitive to the importance of various teacher attributes, and the pre/post-performance scores indicated that they begin to perceive their performance in these attributes as improving as they participated in the educational training.
Across the three levels in the educational sequence, the performance scores (both pre- and post-) were lower than the importance scores (both pre- and post-), except in the final student teaching stage where the post-performance score slightly exceeds the pre-importance score suggesting the students' final perception of their performance was better than their first perception of what was important in teaching. Since their final post-importance score was higher than their post-performance score, the students indicated that they were realistic in their perceptions in that they still had "room to improve."

Two interesting trends were: (1) the higher the ACT scores, the lower the students' perception of their teaching performance (one-way ANOVA results with Scheffe multiple comparisons), and (2) female students perceived their teaching performance as higher than male students (t-test results).

2:00 p.m.-2:50 p.m.  PRESCHOOL EDUCATION (Discussion Session)...........Caprice Room

Presider:  Mary Ayers, Tennessee Tech University

Presenters:  "ADMINISTRATORS', TEACHERS', AND TEACHING ASSISTANTS' SELF-EVALUATION OF PRESCHOOL PROGRAMS"

Dianne Lawler-Prince and John R. Slate, Arkansas State University

A training institute, intended to enhance professionals' skills in working with young children, was examined to ascertain participants' perceptions of program strengths and weaknesses in accordance with child development and theory, classroom management/discipline, curriculum development and planning, assessment, and parental involvement. Programs from which participants were involved included Arkansas Better Chance, Head Start, church-based, and private for-profit. Data from surveys were gathered from each participant prior to and following the two-day training institute.

Participants were 22 administrators, 72 teachers, and 25 teacher aides at six different training sites in a southern state. Strengths cited by all three included staff, developmentally appropriate practices, parents, and facility. Teachers and teacher aides also mentioned curriculum. Interestingly, 54% of administrators initially identified staff as a weakness; however, following the workshop, only 14% of administrators did so. Similarly, 24% of teachers initially perceived program administration as a weakness, but following the workshop, only 8% did. Use of developmentally appropriate practices, cited initially as a strength, was cited more frequently as a weakness following the training workshop. Chi-square revealed differences in strengths and weaknesses mentioned as a function of the professional role. Implications for programs and professionals working with young children are discussed.

"A PILOT STUDY OF THE EFFECTIVENESS OF AN INTENSIVE KINDERGARTEN READINESS PROGRAM FOR AT-RISK STUDENTS"

John M. Butler, Starkville (MS) Separate School District, and Linda W. Morse, Mississippi State University

The purpose of this pilot study was to investigate the effectiveness of an intensive summer program for enhancing readiness skills of at-risk students prior to beginning kindergarten. The program, which met each morning for six weeks, concentrated on a variety of skills that emphasized various needs, learning styles, and differences of the children through the use of thematic units, quality literature, and a variety of learning centers. The overall goal of this program was to provide a "jump start" for these at-risk students through a one-time, intensive program.
All students (n=20) were five-year-olds beginning kindergarten in the fall of the year. They completed pretest and posttest measures using the Early Prevention of School Failure inventory consisting of the following subtests: (a) receptive language, (b) expressive language, (c) auditory, (d) visual memory, (e) visual discrimination, (f) fine motor, and (g) gross motor. Using dependent t-tests, significant differences between pretest and posttest scores were found for the subtests of expressive language, auditory, and fine and gross motor skills. All variables except receptive language showed increases. These results indicated that for some at-risk children an intensive program prior to entering kindergarten may be an effective way to facilitate growth of readiness skills.

"EFFECTS OF KINDERGARTEN TEACHING ON SCHOOL SUCCESS OF CHILDREN ATTENDING GRADE ONE"

Margaret C. Seagraves and Judith A. Burry-Stock, The University of Alabama

The purpose of this study was to investigate the skills children learn in kindergarten that contribute to their success in first grade as viewed by kindergarten and first-grade teachers. The research methods included data collection, instrumentation, analysis, and subjects specifically related to the problem. A psychometric instrument, the Primary Childhood School Success Scale (PCSSS) was developed by two kindergarten teachers, two first-grade teachers, two school psychologists, one counseling psychologist, one professor in educational research, and one teacher of children with learning disabilities. In this pilot study, item measures for selection were obtained from a sample of 52 kindergarten and first-grade teachers from Alabama, Georgia, and North Carolina. The academic and conduct skills were identified by domains, including verbal, nonverbal, social, adaptive behavior, and school readiness.

The Cronbach Coefficient Alpha was selected to calculate the reliability of .95 for this instrument. The validity was established from the test domains in the relevant literature. Content validity was erected by relating the items to the total test score. The item to total correlation provided evidence of construct validity.

Teachers rated important items included in the instrument. The teachers identified writing the alphabet in lower and upper case letters, arranging pictures in order to tell a story, remaining in designated space, listening, and attending to a task as the most important behaviors. The least important behaviors indicated by these teachers were placing a telephone call for help, knowing the dime coin and value amount, no sleep problems, knowing birth date, and tying shoes. The conclusions of this research study may indicate implications for important skills to be included in kindergarten instruction.

"SELF-CONCEPT DIFFERENCES OF KINDERGARTEN STUDENTS AS A FUNCTION OF RACE AND FAMILY STRUCTURE"

Dianne Lawler-Prince, Joanna M. Grimes, John R. Slate, and David A. Saarnio, Arkansas State University

Self-concept, defined as the attitudes, feelings, and perceptions that individuals have about themselves, is an important variable that influences children's behaviors and interactions with others. Difficulties in self-concept early in life may have significant implications for child development. In this study, we examine the self-concepts and related variables of kindergarten children.

Participants were 437 children (222 males, 215 females) who were enrolled in a kindergarten in the mid-south (M age = 6 years, 1 month) across a three-year time period. Data were collected each spring on children's perceived self, ideal self, self-concept, peer popularity, and peer status. ANOVAs revealed a significant difference in self-concept between Caucasians.
and African-Americans, F (1, 426) = 8.62, p<.01, with African Americans reporting a lower self-concept. Students' perceived self was significantly related, r (437) = +.57, with their ideal self. Differences in the peer status measures were present as a function of race, with African-Americans having lower scores on each measure than Caucasians, and as a function of family structure, with children from divorced families having lower scores than children from intact families. Implications of our findings for professionals working with young children are provided.

3:00 p.m.-3:50 p.m. GENDER ISSUES (Discussion Session).................Atlantic Room

Presider: Edith Miller, Auburn University

Presenters: "THE STATUS OF GENDER EQUITY IN HIGH SCHOOL ATHLETICS IN A SELECTED STATE"

Pamela Kirk, Nanci Gray, and E. C. O'Neal, Mississippi State University

The purpose of this study was to survey coaches of female athletes to determine the status of gender equity in high schools in a selected state. The specific concomitant equity variables investigated were practice schedules/times, facilities, equipment, supplies, funding, and sports participation.

The sample included 33 coaches of female athletes who were members of the State Association of Coaches. A questionnaire was designed to assess the "fairness of program/funding" specifics between male and female athletic programs. The information was summarized by charts and graphs that represented the data gathered from the study.

The results of this study supported the contention that women's athletics in the selected state are experiencing progress in achieving equity in the areas of practice time, facilities, equipment and supplies, and sports participation. Consequently, Title IX legislation has positively affected high school women's sports.

Educators, coaches, and athletic administrators should be cognizant of the areas of redress cited by the respondents in the anecdotal comment's section of the questionnaire. These areas were increased opportunities for career advancement to supervisory positions/athletic directors of female coaches, equal pay, comparable facilities, and weight training equipment.

"SEX ROLES AND CAREER DECISION MAKING AMONG ADOLESCENT GIRLS"

Mary Beth Wulff and Jean A. Steitz, The University of Memphis

The purpose of this study was to determine the effects of sex roles, self-esteem, and career self-efficacy on the career decision making of high school girls in a traditional vocational program (cosmetology) versus a nontraditional college preparatory program (upper-level mathematics). A sample of 91 girls from upper-level mathematics classes (n=52) and cosmetology classes (n=39) from two large urban high schools was administered measures of sex role orientation, career decision making, self-esteem, and career self-efficacy. Using t-tests, the results indicated, counter to expectation, that the girls in cosmetology were more androgynous than the girls in mathematics. As expected, the girls in cosmetology had significantly higher femininity scores than the girls in mathematics, but not lower masculinity scores. The girls in cosmetology also scored higher in career indecision than the girls in mathematics.

Multiple regression indicated that the greatest predictor of career indecision for both groups was the lack of career self-efficacy, not sex role orientation. The results are discussed in terms of further clarifying the career decision-making process among adolescent girls.
"PERSONAL NARRATIVES AND GRADUATE-LEVEL EDUCATION: HOW DOES GENDER INFLUENCE THINKING AND WRITING ABOUT CURRICULUM?"

Dave S. Knowlton, The University of Memphis

Currently, there is a strong trend toward treating personal narratives as a valuable tool for enhancing professional endeavors. Also, there is a growing body of literature devoted to differences between the personal narratives of males and the personal narratives of females. The purpose of this exploratory study was to determine to what extent these gender differences permeate the personal narratives of female graduate students in education.

Analysis included a comparison between the personal narratives of six graduate students and predictable female communication styles discussed in the literature. Analysis also included follow-up interviews with the subjects as a means of triangulation. It was determined that strong similarities between the writings of these graduate students and the characteristics of female communication discussed in the literature existed. In fact, two clear categories emerged that highlighted these similarities.

This study was significant because it offers a rationale for further research in the areas of teachers' writings and gender. More specifically, the implications of the gender differences in writing should be explored as well as the extent to which these gender differences can be found in other areas of education.

"THE LOST VOICE OF THE ADOLESCENT MALE"

Kimberly P. Anderson, Louisiana State University in Baton Rouge, and Cay Evans, Louisiana State University in Shreveport

The purpose of the study was to investigate the perspective of the adolescent at-risk male through a single-group case study methodology. The researchers began with observing sixth-, seventh-, and eighth-grade adolescent at-risk males in a support group environment. The adolescents were identified by the school counselor, teachers, and vice-principal of academics as at-risk for school failure because of behavior problems. From the observations, a pattern was recognized. The researcher employed a questionnaire to obtain a better perspective. Finally, the researchers reviewed literature as it pertained to the topic. Research was done through an ERIC search of the terms Adolescent and At-Risk. The research was analyzed for data that correlated to the problems of at-risk adolescent males.

The observations, questionnaires, and data were analyzed using triangulation. The investigation identified 10 common themes of at-risk adolescent male behavior school, students, family friends, discipline, attitudes, behaviors, self-esteem, sex, and race. The findings of the research have implications for people involved with at-risk adolescent males. The negative consequences of the identified themes that befall the at-risk adolescent male may be avoided through intervention in the school.

3:00 p.m.-3:50 p.m. TECHNOLOGY (Discussion Session) Pacific Room

Presider: Regina Halpin, Mississippi State University

Presenters: "ETHNIC AND GENDER EQUITY IN MATHEMATICS VIA COMPUTER TECHNOLOGY"

Neil G. Amos and Pamela T. Barber-Freeman, Mississippi State University
Research discloses that our educational system is not meeting the needs of various ethnic groups and females. For instance, females and males enter the educational arena roughly equal in measured academic ability. However, twelve years later, females have fallen behind their male counterparts in key areas such as higher-level mathematics and self-esteem in mathematics application (American Association of University Women Report, 1992). Further research shows that the proficiency gap for ethnically diverse groups, specifically African-Americans, widens at the upper grade levels (NSF, 1990). Therefore, if our nation is to remain economically viable during the next decade and beyond, it is imperative that we begin to examine those key concepts, specifically ethnic and gender equity, that have traditionally endured educational, political, and economical neglect. A crucial step toward correcting the educational inequities is to identify and examine them publicly and to develop reform agendas that promote educational equity in order to close the gender achievement gap (Sadker, Sadker and Steindam, 1989). Therefore, this research is examining ethnic and gender differences with preservice teachers toward the integration of computer technology in their respective school sites and use with their course work.

"CONTRIBUTIONS OF CD-ROM LEARNING ENVIRONMENTS TO PRESERVICE TEACHERS' PLANNING AND TEACHING OF MATHEMATICS LESSONS"

Martha V. Martin and Linda Barron, Vanderbilt University

CD-ROM environments incorporating classroom video and accompanying software were used in an elementary mathematics methods course to provide a means for preservice teachers to observe and to analyze instruction that was consistent with reform recommendations. The purpose of this study was to investigate how these materials contributed to six preservice teachers’ planning and teaching of mathematics lessons in their practicum.

Participants’ written plans and transcripts of the mathematics lessons were analyzed in order to provide a description of how the students used ideas from the CD-Rom materials in planning for instruction. Interviews shortly after these lessons provided information about participants’ reasoning regarding decisions made during concerning instruction.

Although participants varied in the extent to which they relied on building on children's mathematical thinking, all six of the preservice teachers in this study made strides toward implementing a problem-solving approach to teaching. Participants developed lessons around realistic problems, encouraged children to work together, and asked children to explain their solutions to each other. Most participants reported that they plan for their own classrooms to provide similar problem-solving setting in which students will learn mathematics.

"EFFECT OF COMPUTER SIMULATION-BASED INSTRUCTION ON LEARNER'S AGE AND GPA"

Mahmoud A. Nejad, Mississippi State University

This paper reports the results of an experimental study (N=28) designed to measure the effectiveness of computer simulations in a Solid State Electronics Circuitry Course in Industrial Education and Technology curriculum. The study treated age and GPA as independent variables and learning outcome as the dependent variable. The findings suggest that learning outcomes are maximized when computer simulations are combined with traditional teaching methods. The paper concludes that computers and computer software should be treated as supplementary materials in instructional delivery rather than a substitute for an instructor. This paper also presents approaches to computer simulations in teaching.
The purpose of this symposium is to share the development, implementation, and evaluation of an economic development model that maximizes the cooperation of industry and local schools to meet the personnel needs of industry. The Linking Education to Economic Development Project (Project LEED) links the manufacturing and technical jobs available in a community with high school and community college programs by providing job analyses to school curriculum developers for restructuring the education program. The model was developed by the Auburn University Economic Development Institute in cooperation with four school systems and two community colleges in the Appalachian region of north Alabama. The program was piloted and modified over a three-year period. The core of the design was using job analyses and curriculum analyses to develop Knowledge, Skill, and Abilities analyses (KSAs) that matched the needed skills for employment with the skills currently taught in our schools. Results were correlated with categories of skills that were reported in national studies of job readiness. The results of the current study were used by educators to make the courses more relevant for students whose goals were to work in industry. The resulting curricular modifications were supported financially by Project LEED. For example, the project purchased manipulatives for mathematics courses to make them more relevant. The program was guided by Technology Preparation Teams (TPTs) for each school that included teachers, school administrators, industry representatives, community representatives, and parents who advised Project LEED staff and consultants on the Program.

"EVALUATION AND OUTCOMES"
James E. McLean, University of Alabama at Birmingham

The evaluation of Project LEED was an integral component from the beginning. A formative evaluation model was used during development and product components were implemented to judge overall effectiveness. Data were collected and analyzed on all aspects of the program. One fundamental analysis was the determination of gaps in the curricula for each participating school for the jobs reviewed. Consultation sessions were held with each participating school system sharing these results. Students' involvement with the program was assessed including their comfort with technically-oriented courses such as mathematics. Feedback from teachers, administrators, and industry representatives was used to implement project improvements. All objectives of the project were met with the final product being a model for economic development linking local industry and education.

"THE REVISED LEED MODEL"
Joseph P. Sutton, Alabama Commission on Higher Education

The revised LEED Model includes modified job analyses, standardized KSAs, and the linking of entry level job skills to courses students take in high school and community college. The revised model has the advantage of emphasizing more generic job skills that meet entry level requirements of many technical, manufacturing, and health related positions. Analyses indicated the broad competencies that were needed are computational skills, decision-making
skills, communication skills, and analytical skills. Teachers and curriculum developers have the advantage of knowing the specific needs of graduates to enter the job market for technical and manufacturing positions.

3:00 p.m.-3:50 p.m. INSTRUCTION (Display Session)......................Deer Isle Room

Presenters:  
"UTILIZING PHILOSOPHY DEVELOPMENT AS A CRITICAL THINKING ACTIVITY IN A HOSPITALITY COURSE"

Susan S. Hubbard and Paulette P. Hill, Auburn University

The purpose of this study was to evaluate the effectiveness of an integrative teaching strategy to promote higher order learning by upper-level undergraduate and graduate students. Students enrolled in Human Resource Management in the Hospitality Industry were required to integrate course concepts with their value systems to develop their personal philosophy regarding human resource management.

Teaching strategies utilized in the course targeted higher order thinking necessary for philosophical development. Students were asked to compose their philosophy at the beginning of the course and again as a final exam. Over the quarter, students participated in several critical thinking activities.

As a means of course evaluation, questionnaires were sent to students two months after the course in order to assess the impact of the course. Students were asked to evaluate the course assignments and in-class activities as related to the development and clarification of their personal philosophy statements. A breakdown of response data was constructed.

Preliminary findings suggested this to have been an effective teaching strategy. Assessment provided information relevant to course development highlighting critical thinking and philosophy development. Examples of course strategy, activities, and evaluation were formulated.

"NEEDED: A TAXONOMY FOR KNOWLEDGE, PERFORMANCE, AND METACOGNITIVE OBJECTIVES FOR THE TRAINEE, THE PRACTITIONER, AND THE EXPERT"


Career training differs from other types of training in that it is a process that takes place over periods of time and experience. It involves many types of instruction and learning environments. Some career training is more effective using a formal classroom environment, and some training can only take place on-the-job, using mentors or models. Whether one is referring to a secretarial career, a medical career, or a military career, individuals pass through stages that are not as easily identified as grades or academic levels.

While developing various military courses, an instructional design firm found that none of the usual taxonomies for developing knowledge and performance objectives were comprehensive enough to describe the type of instruction and learning that was to take place. A new taxonomy has now been designed and will be used to develop the new career courses. It includes three levels for knowledge objectives: background, important, and essential. Performance objectives are measured at the trained or novice level, the effective or practitioner level, and at the expert level. A new category of metacognitive objectives was added. Evaluation components and learned capability verbs have been added to the taxonomy.

This display shows how the taxonomy is being used in the development of the current military courses and how individual assessments can be made at all three levels: knowledge, performance, and metacognitive.
"A COMPARISON OF THE WISC-R AND WISC-III INTELLIGENCE QUOTIENTS OF STUDENTS WHO ARE MILDLY RETARDED"

Robert G. Simpson and Gerald Halpin, Auburn University

The WISC-R was administered to 68 elementary school students who were mildly retarded. Three years later these students were reevaluated. The WISC-R was readministered to 39 students, and the WISC-III was administered to 29 students. Results from a factorial analysis of variance indicated that the two groups did not differ on full scale IQ from the WISC-R initially administered. When initial WISC-R full scale IQ was used as a covariate, the adjusted mean full scale IQ for the group evaluated with the WISC-III was significantly lower than the adjusted mean full scale IQ for the group reevaluated with the WISC-R.

The results indicated that a child would likely have a significantly lower full scale IQ if tested with the WISC-III than if tested with the WISC-R. Thus, a borderline student who was determined to be ineligible to receive services based on her/his WISC-R full scale IQ might become eligible for services if he/she were administered the WISC-III.

"WISC-III AND WISC-R IQ DIFFERENCES: PRELIMINARY DATA"

John R. Slate and David A. Saarnio, Arkansas State University

Research regarding WISC-III and WISC-R IQ differences has focused on mean differences and correlations. Although informative, that approach ignores the nature and importance of individual differences. For example, children may vary widely in the IQ change from the WISC-R to WISC-III. That is, some children increase in IQs whereas other children decrease. In this study, the focus was on the extent of and basis for individual differences in IQ change.

Differences between WISC-III and WISC-R IQs of 257 children (118 with learning disabilities, 79 with mental retardation, and 60 not classified) were examined. WISC-III and WISC-R IQs were highly correlated (.84 to .80). WISC-III Full Scale, Verbal, and Performance IQs were 7.2, 5.8, and 7.5 points lower than their WISC-R values. Differences in the IQ drop were, in part, a function of disability group membership (i.e., students with learning disabilities vs. students with mental retardation).

Subtest scores were more important than group membership in predicting the IQ drop. Specifically, high Object Assembly and Coding scores were primarily involved in predicting IQ increases, whereas higher Vocabulary scores predicted IQ decreases. Implications are discussed.

"VALIDATING THE CRYSTALLIZED AND FLUID COMPONENTS OF THE KAUFMAN BRIEF INTELLIGENCE TEST (K-BIT)"

Ramaswamy Balgopal, The University of Alabama; Alan S. Kaufman, Psychological Assessment Resources, Inc. (PAR); and James E. McLean, University of Alabama at Birmingham

The Kaufman Brief Intelligence Test (K-BIT) includes two subtests (Vocabulary and Matrices) that were intended as measures of Crystallized and Fluid Intelligence, respectively. The purpose of this study was to determine if construct valid Crystallized and Fluid...
IQs on the Kaufman Adolescent and Adult Intelligence Test (KAIT) could be predicted using the K-BIT subtests as validation of the theorized relationships. A secondary purpose was to see if the K-BIT subtests were related to age, sex, race, and educational attainment.

The KAIT Crystallized and Fluid IQs were regressed on the K-BIT Vocabulary and Matrices Scaled Scores with 307 subjects aged 11 to 88. Furthermore, a MANCOVA was conducted using age, sex, race, and educational attainment as independent variables, and the continuous scores on the two K-BIT subtests as dependent variables.

The results indicated that Crystallized and Fluid IQs can be predicted using the K-BIT with the appropriate subtest being dominant in each case. Further, race, educational attainment, and intelligence were found to be related to the K-BIT scales. The paper also presents the equations for predicting Crystallized and Fluid IQs from the K-BIT as well as the standard errors of prediction.

"ESTIMATING CRYSTALLIZED AND FLUID IQS WITH THE KAUFMAN ASSESSMENT BATTERY FOR CHILDREN (K-ABC) AND SEQUENTIAL AND SIMULTANEOUS PROCESSING AND ACHIEVEMENT WITH THE KAUFMAN ADOLESCENT AND ADULT INTELLIGENCE TEST (KAIT)"

Ramaswamy Balgopal, The University of Alabama; James E. McLean, University of Alabama at Birmingham; and Alan S. Kaufman, Psychological Assessment Resources, Inc. (PAR)

The Kaufman Assessment Battery for Children (K-ABC) has three primary scales: Sequential Processing, Simultaneous Processing, and Achievement. The K-ABC Interpretive Manual indicates that Achievement resembles Crystallized Intelligence, and the two mental processing scales combined resemble Fluid Intelligence. The purpose of this study was to determine if Crystallized and Fluid IQs could be predicted using the K-ABC, thus validating this relationship. The study also sought to determine if Sequential and Simultaneous Processing and Achievement could be predicted using the Kaufman Adult and Adolescent Intelligence Test (KAIT) subscales.

The KAIT Crystallized and Fluid IQs were regressed on the eight K-ABC subtests with 122 subjects aged 11 and 12 and the K-ABC Sequential and Simultaneous Processing scores and Achievement scores were regressed individually on the 11 KAIT subtests.

The results supported the validity of the hypothesized relationship in that the KAIT Crystallized and Fluid IQs could be estimated using the appropriate K-ABC subtests. Further, the K-ABC Sequential, Simultaneous, and Achievement scores could be estimated using the KAIT subtests. The paper presents the equations for making the predictions along with the standard errors of prediction.

3.00 p.m.-4:50 p.m. SERVICE LEARNING AND QUALITATIVE RESEARCH: HOW TO UTILIZE THE RESULTS ONCE THE PAPER IS FINISHED (Training Session)..........................Petit Bois Room

Trainers: Jacquelyn P. Robinson, Auburn University, and Herbert R. Horne, Jr., Alabama Department of Education

Service learning, a form of experiential education, is staged in the context of community service. Projects coupling effective learning with meaningful community service offer a fruitful area for educational research. The reflective component, a continuous part of the service learning model, in many ways mirrors qualitative research methodology.

Often, the fruition of many research endeavors is the writing of the research paper,
and rarely does this practice afford educational benefits to the school community that it purports to serve. This two-hour training session examines additional, innovative ways of utilizing data results. This session provides an overview of the service learning model and the utilization of the reflective component of the service learning cycle as a vehicle for conducting meaningful qualitative studies.

The objectives of this training session are to: (1) review the service learning model, including the reflective component; (2) integrate qualitative research methodology and the reflective component of service learning; and (3) examine creative, innovative ways to utilize qualitative data results.

The workshops format includes a short lecture supported by extensive use of audiovisual aids; a brief question and answer period follows. Additionally, participants are involved in hands-on group and individual learning activities.

4:00 p.m.-4:50 p.m. AT-RISK STUDENTS (Discussion Session) Atlantic Room
Presider: Sarah D. Carrigan, Auburn University
Presenters: "REDUCTION IN ACADEMIC DISPARITY AT A MAGNET SCHOOL: A THREE-YEAR FOLLOW UP"
Jane L. Weare and Frederick E. Woodall, Delta State University

Beginning in the fall of 1991, the Cleveland School District opened a magnet school for grades K-6 with special emphasis on math and science and technology. A primary goal of the magnet school was to demonstrate reduction in disparity of academic achievement of the minority students. The school expanded to grades 7 and 8 in the fall of 1993 and added a second section for each grade K-8.

The study was a three-year follow-up of the actual reduction in academic disparity as measured by district-wide achievement test results. Data were gathered in the spring of each year beginning in 1992 until the fall of 1994 when the district changed achievement tests and dates of administration to the fall semester. Analysis proceeded based on the percentage of reduction indicated by the test results and length of tenure at the magnet school, disregarding time of year or type of measure.

The research finding focused on the disparity in the magnet school and comparisons with the district schools at the same grade levels without regard to sex. Discussion included a content analysis of the purposes of the two achievement measures to explain the variability of performance indicated by the data.

"PREDICTION OF MINIMUM COMPETENCY USING THREE METHODS"
E. Lea Witt, The University of Southern Mississippi

The Commonwealth of Virginia requires a minimum level of competency in reading, writing, and arithmetic prior to graduation from high school. This minimum level is first tested in the sixth grade. Many school systems, however, use predictor tests to detect which students risk failure in each area and provide appropriate intervention for those selected.

The purpose of this study was to evaluate the effectiveness of the fourth-grade predictor tests currently in use by a south-west Virginia rural school system and to determine if another procedure would be more effective. Effectiveness for this study was the proportion of students correctly predicted.

Records were obtained for over 480 students having both the fourth-grade predictor test and the sixth-grade literacy test in each category. These records were randomly divided into
two groups. Group one was used to construct multiple regression and discriminant analysis equations. The proportion of students in group two correctly predicted by the school prediction method, multiple regression, and discriminant analysis was then compared.

All methods were more effective than chance (50%) prediction. Multiple regression was more effective than the other methods. Reasons for this are discussed.

"EFFECTS OF WHOLE-LANGUAGE IMMERSION (WLI) ON AT-RISK SECONDARY STUDENTS"

John B. Cross, June Westbrook, and Patricia Dueitt, University of West Alabama

The purpose of the study was to determine the effects of Whole-Language Immersion, a pedagogy rooted in Whole Language and English as a Second Language on two sections of eleventh-grade students, defined as at-risk by the Alabama Exit Examination. For 10 weeks, the control group was taught grammar while the experimental group underwent language immersion by daily reading, writing, and speaking.

Four quantitative measures were used in pre/post forms to evaluate growth in students' lingual abilities: the Alabama High School Basic Skills Exit Exam, a writing sample, a cloze test, and an attitude inventory. Three dimensions were evaluated in the writing samples: synthetic fluency (T-Units), coherence (NAEP scale), and analytic (Diederich scale). Rich qualitative data in the form of daily classroom observations were also recorded.

Preliminary analysis indicated increases of frequency in reading and writing in the experimental group. Although no student had previously completed a novel, by the end of the experiment, all students had finished between one and five books. Observed discipline problems diminished as students learned to work cooperatively. Students began to revise for diction, syntax, and audience, and internalized rules of Standard English grammar without direct instruction.

"THE RELATIONSHIP BETWEEN FAMILY FACTORS AND RESILIENCE IN PRESCHOOL CHILDREN WHO LIVE IN POVERTY"

Elizabeth E. LaVergne-Pinkett, University of Southwestern Louisiana

The purpose of the study was to examine the relationship between family stability and cohesion and resilience in preschoolers who live in poverty. Subjects consisted of 61 three-, four-, and five-year-old preschool children from three child development centers. Family factors were defined and measured as stability and cohesion. Resilient and nonresilient classifications were based on social and cognitive dimensions of child functioning.

A multivariate analysis of variance yielded significant differences on stability and cohesion between resilient and nonresilient children. A series of chi-square analyses indicated that families of children classified as resilient were significantly stronger on the specific dimensions of stability and cohesion.

The present findings suggest that resilient children are more likely than nonresilient children to come from stable and cohesive families. Furthermore, the identification of family stability and cohesion as characteristics common among resilient children has implications for helping children from families exhibiting patterns of instability and noncohesion acquire coping skills and develop resilience.

4:00 p.m.-4:50 p.m. PRINCIPALS' PERCEPTIONS (Discussion Session) Caribbean Room
The purpose of this study was to investigate urban elementary school principals' perceptions of their role in planning and implementing parent involvement programs. The study also sought to identify parent involvement activities practiced and examine the relationship between parent involvement activities and school effectiveness. Data were collected from 33 principals using a questionnaire constructed specifically for the study.

Findings indicated that 76% of the principals took a leadership role in planning, implementing, monitoring, and evaluating their school's parent involvement program. The principals indicated that the most important parent involvement activities was parent-teacher conferences and that participation in the Parent-Teacher Association (PTA) was the most successful parent involvement activity. Correlational statistics revealed that a significant relationship (p < .05) existed between three parent involvement activities and school effectiveness. These activities were good news calls by teachers to parents, student recognition messages (e.g., happy grams) sent by teachers to parents, and parents volunteering to assist in classroom and school libraries.

The purpose of the study was to determine the perceptions of middle school principals toward the functions and characteristics of the middle school concepts in Mississippi's middle schools. Sixty-three middle school principals, constituting a 70% return rate, responded to the survey entitled "Mississippi Middle School Survey." The survey included demographic questions and 57 Likert-type items. A chi-square test of independence was used to analyze the data.

The results of the study indicated no significant differences in middle school principals' perceptions of the functions and characteristics of middle schools based on gender, age, race, degree held, and years of experience. Significant differences were indicated between perceptions and student enrollment (p < .05). Research questions were posed and yielded the following result: most middle school principals had not received training in early adolescent development, the middle school philosophy, and concepts.

The findings of this study indicated that there is a need to provide formal staff development training and extensive inservice activities in middle school practices for all middle school personnel. State educational agencies should set statewide standards for disseminating the middle school concepts throughout the state and for establishing and operating middle schools.

School administrators are restructuring schools and can no longer function in a vacuum, isolated from their communities. Henderson (1990) stated that involving parents in their...
children's formal education improves student achievement. Parents must be involved at all levels of school, but why are they not?

The purpose of the study was to determine principals' perceptions and practices regarding unannounced parental visits. Elementary, middle, and high school principals from public and private schools (n=108) in urban and suburban schools responded to a questionnaire that employed quantitative and qualitative methods or inquiry. A Likert scale was used to determine the degree of receptivity and support of principals regarding unannounced parental visits. Policies were examined. Open-ended responses provided additional insights into the strategies for addressing perceived and real problems of parents visiting school unannounced.

Teacher acceptance of unannounced parental visits during the instructional day was not perceived as a problem by the majority of principals. A significant difference was found with elementary, middle/junior high, and high schools, private and public schools, and low and middle/high social economic status schools. A correlation between the frequency of drop-in visits and the belief that parental visits enhance the relations between the school and community was found.

4:00 p.m.-4:50 p.m. PERFORMANCE ASSESSMENT (Discussion Session) Chandelier Room

Presider: Sheila Chauvin, Southeastern Louisiana University

Presenters:

"ESTABLISHING A PERFORMANCE INDEX IN A PERFORMANCE-BASED ACCREDITATION SYSTEM"

Michele G. Janell and Stephen W. Hebbler, The University of Alabama, and Valerie Troiani and Yvonne Dyson, Mississippi State Department of Education

Mississippi uses a performance-based accreditation system to award accreditation levels to school districts. The attainment of each of the five accreditation levels is based on meeting a certain percentage of performance variables. State department personnel developed a simple measure to indicate where each district falls in the distribution of accreditation levels. The performance index allows comparisons within accreditation levels. The accreditation levels, ranging from "1" to "5," consist of only whole numbers. A district receiving an accreditation level of "1" does not know whether it was at the bottom of the distribution or close to being a "2." Using the percentage of variables met by each district, the performance index was established ranging from 1.0 to 5.0. For example, the school districts with an accreditation level of "1" do not all exhibit the same performance on the variables. Using the distribution of percentage of variables met, a performance index from 1.0 to 1.9 is awarded to each of the Level 1 districts; an index from 2.0 to 2.9 is awarded to each of the Level 2 districts. The same method is used for each succeeding level. The districts can use the performance index to assess improvement toward higher accreditation levels.

"PER PUPIL EXPENDITURE AND SCHOOL DISTRICT ACCREDITATION: WHAT DOES THE TOTAL PER PUPIL EXPENDITURE INDICATOR IN THE MISSISSIPPI REPORT CARD REALLY INDICATE?"

Jerry G. Mathews, Idaho State University, and Gary P. Johnson, Mississippi State University

Mississippi newspapers have reported that school districts assigned to
Accreditation Level 1 (Probationary) and Level 2 (less than 100% in compliance with accreditation standards) spent more money per pupil than school districts assigned to Accreditation Level 3 (Accredited) and Level 5 (Model school district). The purpose of this study was to disaggregate the Total Per Pupil Expenditure indicator reported in the 1993 Mississippi Report Card and determine if any relationships existed between disaggregated per pupil expenditure indicators and school district accreditation ratings. All 149 public school districts in Mississippi were included in the study.

Discriminant analysis was employed to determine the difference between computed school district accreditation levels based upon disaggregated per pupil expenditure indicator variables and the accreditation levels assigned to school districts by the Mississippi State Department of Education (SDE).

The findings indicated that the school districts in the lower accreditation levels spent fewer locally generated dollars on instruction than school districts in the higher accreditation levels. Also, the discriminant analysis of disaggregated expenditure indicators classified school districts differently across accreditation levels than the Mississippi SDE method. These findings suggest the need for reform of the Mississippi Report Card.

"A PILOT STUDY: TEACHER PERCEPTIONS TOWARD THE INTERPRETATION OF RESULTS FROM THE NEW NORM-REFERENCED PORTION OF THE MISSISSIPPI ASSESSMENT SYSTEM"

Mary E. Howe and Dana G. Thames, University of Southern Mississippi
and Cynthia A. Ward, Mississippi State Department of Education

The study examined teachers' perceptions of the new Mississippi Assessment System (MAS) and its extent and impact on modifications to classroom instruction. A two-part questionnaire (Mississippi Assessment System Questionnaire) and teacher interviews were developed to collect demographic data and teachers' perceptions. Participants were 220 K-12 teachers located in two small southern school districts.

Data were analyzed using canonical analysis procedures. The results of the study indicated that teachers' perceptions support the current changes in the Mississippi Assessment System (MAS). Participants expressed a need for change in their classroom instruction, so that instruction focuses on the skills tested in the MAS. Further study is warranted to ascertain the extent of staff development upon classroom instructional changes and the impact of instructional modifications on student performance in the MAS.

"PARTICIPANT ATTITUDES FOLLOWING MISSISSIPPI'S FALL, 1994 PERFORMANCE-BASED ASSESSMENT OF STUDENT LEARNING"

Felicia H. Robinson, Marie Keyes, and Linda Walters, William Carey College

The purpose of this study was to examine the attitudes of students, teachers, and administrators following the performance-based assessment initiated in Mississippi during the fall of 1994. Participants (N=665) were randomly selected to respond to the investigators' survey instrument, which was distributed within 14 south Mississippi schools in the interval between the statewide pilot assessment and the schools' receipt of results. Attitudes, perceptions, and expectations surrounding respondents (students, teachers, and administrators) in an alternative, assessment experience were measured along four dimensions: (1) perception of the instrument, (2) materials and teacher support during test, (3) physical environment at test site, and (4) persistence by individuals.
Participants' attitudes were found to be generally positive. Respondents related that students understood the test questions; however, significant differences surfaced between grade levels. Significant differences were found for some middle grades (grades 6 and 8) as compared to lower elementary and high school grades on variables related to the performance test. Concern surfaced over grades targeted for 1995 state evaluations of districts. The differences were troublesome enough for concerned educators to question the impact of accountability when considering perception and test data for middle grades.

4:00 p.m.-4:50 p.m. STUDENT VIOLENCE (Discussion Session).............Caprice Room

Presider: Linda J. Crone, Mississippi State University

Presenters: "PREDICTORS OF JUVENILE DELINQUENCY AND VIOLENCE"

Christine E. Daley and Anthony J. Onweugbuzie, University of Central Arkansas

Violence among youth has reached epidemic proportions. However, despite a plethora of research, it is not understood why adolescents become involved in violent acts. Consequently, the purpose of this study was to examine the characteristics of male juvenile offenders and to ascertain which factors predict sensitivity to violence. Participants were 202 randomly selected offenders aged 12-18 incarcerated at the South Carolina and Arkansas juvenile justice systems.

The major finding was that characteristics of juvenile offenders tended to include the following: came from single-parent households headed by the mother; had siblings or parents who had been involved with the legal system; initiated the use of cigarettes, alcohol, and marijuana at an early age; earned on average $1,000 per week selling crack (although they did not use it); did not read; had high rates of suspension and expulsion; did not aspire to higher education; initiated sexual activity early; had had numerous sex partners; reported infrequent condom use; did not appear to fear AIDS; and owned weapons. Juvenile offenders with these characteristics tended to make attributional errors when evaluating the behavior of others by ascribing external explanations to individuals' violent actions.

Effective interventions that educate both at-risk youth and their family members were recommended.

"PERCEPTIONS OF HIGH SCHOOL STUDENTS AND SCHOOL PERSONNEL TOWARD GANG ACTIVITY, VIOLENCE, AND SAFETY"

Louise Jackson Jones and Janice Elaine Lewis Duncan, Jackson State University

The purpose of the study was to determine the perceptions of students and school personnel concerning gang activity, violence, and safety in the high school of Hinds County Public School District in Mississippi. Five hundred sixty-three students and 38 school personnel responded to the survey entitled "Gang Activity in the High Schools of Hinds County Public School District." There was a 68% return rate for students and a 93% return rate for school personnel. A chi-square was used to analyze the data.

The results of the study indicated that there were no significant differences in perceptions of gang activity, violence, and safety among most high school students based on grade level, age, gender, and race, and no significant differences in school personnel perceptions of gang activity, violence, and safety based on years of experience, gender, certification and race.
The result of the present study indicated that there is a continuous need to develop strategies to end violence in schools. Policies, staff development workshops, seminars, and other innovative interventions are needed to curtail any level of violence that is school related.

"TESTING ADOLESCENTS' KNOWLEDGE OF A VIOLENCE PREVENTION CURRICULUM: CONTRASTS OF MULTIPLE CHOICE AND COMPLETION TEST ITEM FORMATS"

John M. Enger and D. Lynn Howerton, Arkansas State University

Since students enter a violence prevention curriculum with various levels of prior knowledge, the scale of a 40-item test on violence prevention appeared to restrict the assessment of knowledge gained. Limited by time to a 40-item test format, a completion test item format was substituted. The purpose of this investigation was to contrast the results of the two test item formats on a violence prevention curriculum.

The violence prevention curriculum was divided into eight units, each covering five objectives. Multiple choice and completion test items were written to cover the 40 course objectives, with both tests producing similar alpha reliability (r=.798, n=120 and r=.796, n=125 respectively).

The multiple choice pretest produced significantly higher scores overall. These differences were consistent in six of the eight subtests. After violence prevention instruction, no significant differences were noted in overall posttest results. However, significantly higher scores were noted on four of the eight subtests. Thus, while maintaining comparable reliability, item difficulty and item discrimination indices, the completion item format of the violence prevention test did broaden the range of scores produced by the multiple choice test.

"THE HISTORY OF CONFLICT RESOLUTION IN EDUCATION AND CONFLICT RESOLUTION PROGRAMS TARGETING ADOLESCENTS"

Gahan Bailey, University of Southern Mississippi

The purpose of this paper was to review the literature related to conflict resolution in education and to examine the impact programs of conflict resolution have had on helping adolescents live a socially responsible and healthy life. This paper discusses and summarizes the literature in three areas: (1) characteristics of adolescents, (2) violence among adolescents, and (3) conflict resolution and adolescents.

Nearly three million crimes occur on or near school campuses every year. Homicide rates increase 15 times between the ages of 10 and 20. Over 50% of all those arrested for any offense in America are teenagers; thus, teachers are already working with the primary crime-age population.

Adolescence is a way of life between childhood and adulthood and a time when adolescents are burdened with coming to terms with their own identity. The concerns, personalities, and actions of adolescents have led to an establishment known as the "adolescent subculture."

In the last dozen years, over 5,000 schools nationally have implemented conflict resolution programs as a means of preventing violence among youths. What programs are targeting today's adolescents, why, and are they working? Answers to these questions are provided in this paper.
THURSDAY, NOVEMBER 9, 1995

7:30 a.m.- 8:45 a.m. GRADUATE STUDENT AND NEW MEMBER BREAKFAST ........................................ Caprice Room
8:00 a.m.-4:00 p.m. REGISTRATION ........................................ South Promenade (2nd Floor)
8:00 a.m.-8:50 a.m. EXCEPTIONAL EDUCATION (Discussion Session)..... Pacific Room

Presider: Georgia Napier, Jackson State University

Presenters: "NEED FOR STAFF DEVELOPMENT TRAINING IN IDENTIFICATION OF LEARNING DISABLED STUDENTS"
Herbert R. Horne, Jr., Alabama State Department of Education, and Jacquelyn P. Robinson and Russell C. Wilson, Auburn University

Public laws require accommodations be made for learning disabilities, necessitating identification of learning disabled students. This study examined local staff development training in the identification of learning disabled students. Measures of subject understanding of basic learning disabilities concepts and the extent, frequency, duration, and content of staff development training were obtained from a sample of 28 adult education supervisors.

Descriptive statistics were used to analyze the extent, frequency, and duration of local staff development activities. Qualitative methodology was used to analyze the understanding of basic concepts. Correlation scores were obtained between understanding of basic learning disabilities concepts and frequency, duration, and content of staff development activities.

A descriptive picture of the state of learning disabilities training was obtained. Significant correlations were found between level of understanding of basic learning disabilities concepts and the other variables. The results indicated a lack of uniformity of staff development training in terms of extent, frequency, duration, and content. Significant correlations existed between these variables and understanding of basic learning disabilities concepts, which suggests the need for additions’ training.
This study investigated how teaching experience and teacher area (such as learning disabilities, interrelated, etc. currently assigned to teachers) might affect post-secondary transition planning. A researcher-made survey was utilized in interviews with 43 special education teachers. Information was solicited for a number of vocational objectives and participating service providers for 393 transition plans within seven metropolitan school systems. Two expectations were: teachers in vocationally-oriented specialty areas would generate more vocational objectives in planning, and experienced teachers would more often utilize outside agencies in transition planning.

Results included a Pearson product moment correlation that yielded a significant ($p<.01$) inverse relationship between amount of teaching experience and agencies/outside services recorded on transition plans, contrary to the hypothesized result. A multivariate comparison of the mean number of vocational objectives for three discrete categories (vocational evaluation, job placement and postsecondary training) reflected a significant difference for job placement objectives. Interrelated teachers (e.g., generic/mildly disabled) had the highest number of job placement goals, even above related vocational instructors and career services staff, which was also an unexpected finding. Implications of these results for practice are discussed.

The purpose of this study was to extend the knowledge and construct an understanding of selected families' (consumers') perceptions of the service coordination component of Part H within the Individuals with Disabilities Education Act. The primary mission of early intervention through the service coordinator is to provide the family support to enable and empower them toward independence. The participants in the study were 16 families who had children enrolled in Part H programs for a year or more and included four fathers, one grandmother, and 13 mothers. The families' perceptions of family service coordination were contrasted across the diversity dimensions of gender, ethnicity, socioeconomic status, and locale.

Individual interviews, a focus group, and document analysis were used to gather data, which were then analyzed using Spradley's developmental research sequence and yielded domain, taxonomic, componential, and theme analysis. Study implications included the need for evaluating and possibly restructuring the family service coordination system as it currently exists. The study also suggested that the existing training program of family service coordinators needed to reflect skills in sensitivity and communication toward issues of diversity.
This symposium outlines the essential parts of innovative and progressive undergraduate and graduate courses in assessing classroom learning. In the spring of 1990 the Standards for Teacher Competence in Educational Assessment of Students was published by the committee chaired by James R. Sanders representing the American Federation of Teachers (AFT), National Council on Measurement in Education (NCME), and the National Education Association (NEA). Standards were based on the actual needs of the classroom teachers. The association ascribes to the view that student assessment is an essential part of teaching and that good teaching cannot exist without good student assessment. "Assessment is defined as the process of obtaining information that is used to make educational decisions about students to give feedback to the student about his or her progress, strengths, and weaknesses, to judge instructional effectiveness and curricular adequacy, and to inform policy."

The Standards, along with the contemporary reform movement on performance assessment, have molded our undergraduate and graduate assessment courses at The University of Alabama over the past five years. Much of what has been taught in the past has not been relevant to today's classrooms. However, a recent study conducted by NCMEW (Plake, 1993) revealed that in general teachers do not understand the necessity of the type of information that was formerly taught in traditional tests and measurement courses. It is important that teachers know why this information is important, and how it can be used, as well as how to conduct meaningful assessments for today's classrooms. In other words, to meet classroom needs teachers must be informed of both traditional and contemporary methods for assessing classroom learning.

These courses have been designed to integrate five target areas of achievement: knowledge, thinking, behavior, product, and affect for the three basic types of assessment. Class projects are designed as "hands-on" activities structured to bring the relevance of the classroom into the course. Also included are the results of a recent NCME pilot study, in which all of our classes participated, that reveals which tasks are most difficult for undergraduate and graduate teachers.

8:00 a.m.-9:50 a.m. UNDERSTANDING OUR PROFESSIONAL SELVES: INNOVATIVE METHODOLOGIES FOR SELF-INQUIRY AND REFLECTION (Training Session) Deer Isle Room

Trainees: Janet C. Richards, University of Southern Mississippi, and Joan P. Gipe and Ramona C. Moore, University of New Orleans

Teacher educators have become increasingly interested in self-inquiry as a means of exploring professional practice and development. The objectives of this session are to: (1) illustrate innovative methodologies that helped to provide insights into teaching practices and development, (2) share self-discoveries, and (3) guide session participants in discovering and reflecting on their own practices and professional growth.

The session will promote significant participant interaction. First, offered will be a brief overview of the historical and contemporary dimensions of self-inquiry followed by a short discussion concerning the benefits of studying "the professional self" (e.g., facilitating self-improvement and empowerment, promoting understanding of the education professorate, implementing social and ethical changes in teacher education, and creating and testing
educational theory). Innovative methodologies that helped to provide personal insights into our own practices and development will be shared (e.g., metaphors, teaching cases, semantic maps, mazes, illustrated vignettes, and transcriptions of roundtable conversations). In the major portion of the session, we will guide participants in discovering and reflecting on their own professional practices and development. Participants will be encouraged to share their methodologies and self-discoveries. If applicable, a network of educators interested in self-study will be formed.

9:00 a.m.-9:50 a.m.  EARLY CHILDHOOD EDUCATION
(Discussion Session).......................... Atlantic Room

Presider: E. Raymond Hackett, Auburn University

Presenters: "GETTING TO KNOW THIRD-GRADERS"

Sharon L. Newbill, West Georgia College, and Andrea Clements, East Tennessee State University

Who are these young people in our classrooms? How do they perceive themselves? What are their dreams? What are their goals? What makes them feel good about themselves? The purpose of the research was to answer these questions through the use of structured autobiographies. Eight (of 45) elementary schools from an urban school district in a large midwestern city participated in the study. Seven were magnet schools (three communications and writing, four visual and performing arts) and one was a traditional school. A stratified (by gender and ethnicity) random sample of completed autobiographies from each school was selected for a total of 195 predominantly African-American students.

Categories (themes) were derived from their responses through qualitative data analytic procedures. The categories were given numerical representation to facilitate quantitative analyses (n=122 female and n=73 male; chi-square tests of independence by gender). Many categories clearly differentiated between the sexes, and several categories attained statistical significance. The differences were discussed with respect to normal psychological development and compared to the available literature on sample-aged, predominantly white, school children.

"LOCUS OF CONTROL IN EARLY CHILDHOOD EDUCATION"

Brent B. Hawkes, Jacksonville State University

The purpose of the study was to review literature describing the Locus of Control construct in general, and as specifically related to Early Childhood Education. Early antecedents of the Locus of Control construct were identified, and early efforts in the development of effective assessment instruments were reviewed.

Early efforts in development of assessment in young children were reviewed. Common barriers to effective assessment of young children were identified and described. Increased understanding of development and learning in early childhood provided new opportunities to develop ways to assess young children. Further efforts to assess Locus of Control in young children were identified and described.

Continued research in early childhood development has provided new insights into children's abilities to assimilate information and to the methods that are most effective in assessing young children. Recommendations for future research in the Locus of Control construct are included. Suggestions for assessment instruments include design of the instrument, method of presentation, and determination of validity and reliability.

Implications for future implementation include recommendations that the Locus of
THURSDAY, NOVEMBER 9, 1995

Control construct be considered early in the child's educational experience and repeatedly during the educational career.

"USING DEVELOPMENTAL CONTINUUMS TO ASSESS STUDENT PERFORMANCE IN LITERACY"

Marion E. Dana, The University of Southern Mississippi

Instructional reform over the past decade has served as an impetus to reforming assessment. While various forms of authentic assessment have been introduced, one such medium offering much promise for the appropriate assessment of children is the use of developmental continua. This presentation examines developmental continua through a review of literature as well as case-study data from personal observation of programs in Victoria and Western Australia. Studies examined include the development and implementation of the Victorian Literacy Profiles Scale as well as the American version, The American Literacy Profiles Scales. Others programs and materials relying extensively on developmental continua include the "First Steps" program developed by the Education Department of Western Australia, as well as D.A.R.T., a set of developmental resources for classroom use created by the Australian Council for Educational Research. While developmental assessment may be more pervasive in Australia, pockets of educators in the United States have utilized this type of assessment quietly successfully. One example is presented in Campbell-Hill and Ruptic's Authentic Assessment: Putting the Pieces Together. The presenter also shares visual examples of children interacting in classroom situations where teachers can observe behavior reflected on developmental continua.

9:00 a.m.-9:50 a.m. TECHNOLOGY (Discussion Session).......................Pacific Room

Presider: Edward L. Shaw, Jr., University of South Alabama

Presenters: "RESEARCH BY ELECTRONIC MAIL: A VIABLE ALTERNATIVE?"

Robert L. Kennedy, University of Arkansas, Little Rock

A combination traditional/electronic research course was first offered for UALR graduate students in the spring of 1995. Of 25 students enrolled in the class that term, nine elected to take the electronic (e-mail) option. The other 16 students chose the traditional format, taught by the same instructor.

The course requirements included writing a grant proposal, critiquing proposals and articles, writing a bibliographic annotation, and multiple-choice tests. The tests were taken in a computer lab to maintain security. Students were given five attempts on the test with 20 questions randomly drawn from a large pool. The highest score obtained was counted as the student's final exam grade. Students could send their questions, homework files, and messages to their instructor electronically.

To determine whether the students were performing at least comparably with students taking the course in the traditional fashion, pretests and posttests were given. Initially, the students had comparable performances. On the posttest, a Mann-Whitney test indicated no statistically significant difference at the 0.05 level. Overall, then, the electronic course offering seemed to provide a flexible alternative for learning. The comparable posttest performances suggest that the e-mail approach is viable.

"DISTANCE EDUCATION AND TWO-YEAR COLLEGES"

Norman E. Easterday, Auburn University
This study reviews the relationships between distance education and community colleges; the design, support, and administration of courses taught via distance education; staffing and teacher training practices; contemporary course offerings; and existing assessment and evaluation studies. Distance education was found to have evolved from nineteenth century extension and self-study programs for learners not unlike contemporary community college students. Inadequate financial information was found to provide a basis for judging cost effectiveness, and the philosophical and psychological basis proposed in the literature as a basis for distance education was less than convincing. Legal questions pertaining to distance education exist; however, the literature did not indicate legal problems in practice. Faculty are able to learn and adapt to distance education. Evidence exists to suggest that students respond favorably to distance educational courses; however, questions of internal validity exist in assessment and evaluation studies.

"TEACHING A CLASS BY INTERNET: A CASE STUDY"

Lorna J. Lacina-Gifford and Neelam Kher-Durlabhji, Northwestern State University

The purpose of this case study was to describe the activities associated with teaching a class by Internet. This case study was based on a pilot test of a graduate course in education. The course syllabus and notes were presented on a bulletin board. Students were required to respond to readings and questions via the bulletin board and to post comments about other student's responses on the bulletin board. Students were also required to contact each other via e-mail to prepare for a debate on an educational issue. Weekly journals and assignments were submitted via e-mail.

Students could participate in class activities based on their own schedules. It was difficult to have lively discussions because of the time lag in responding to other student's remarks. It also required considerable effort on the part of the instructor in reading and responding to individual students. Based on this experience, the authors concluded that only certain types of courses would be amenable to this type of format. It also indicated the need for guidelines regarding course load, special skills training, and released time to maximally use the potential of this electronic medium.

9:00 a.m.-9:50 a.m. SCIENCE (Discussion Session).......................... Caribbean Room

Presider: Mary Bradley, The University of Arkansas

Presenters:

"AN EXAMINATION OF THE IMPACT OF AN INNOVATIVE SCIENCE CURRICULUM ON THE SCIENCE SKILLS AND ATTITUDES OF HIGH SCHOOL STUDENTS IN SOUTHWEST LOUISIANA"

Jim R. Flaitz, The University of Southwestern Louisiana, and Roland F. Pautz, Vermillion Parish (LA) School System

Science education reform in Louisiana has featured the use of "hands-on/minds-on" approaches and the integration of technology. This year, implementation of a parish-wide model was undertaken and evaluated.

Student achievement and attitude measures were collected at the beginning and end of the school year to monitor program impact. A three-way analysis of variance with replications design was applied with science achievement and attitudes toward science as dependent measures (race and gender were the other two factors). The pre/post gain for achievement was statistically significant ($F=67.91$, $df=1,414$, $p<.001$), as was the main effect for race ($F=4.40$, $df=2,414$, $p=.0129$). There were no significant interaction effects between or among the factors.
the three factors. With the attitude measure, only the interaction between race and the repeated measure was significant (F=3.89, df=2,407, p=.0211). The pre/post shift in attitude main effect approached, but did not achieve statistical significance (F=2.84, df=1,407, p=.0928). The direction of attitude change among the participating students was toward a more negative attitude toward science. These findings are discussed in the context of current effects to reform science education.

"FACTORS CONTRIBUTING TO SUCCESS IN INTERNATIONAL SCIENCE FAIR COMPETITION"

Lawrence John Bellipanni, University of Southern Mississippi, and Vernon D. Gifford, Mississippi State University

The purpose of this investigation was to determine if a significant relationship existed between the criterion variable of receiving or not receiving awards at the 1993 International Science and Engineering Fair (ISEF) and the predictor variables of resources and facilities, resource personnel, personal costs, time, and personal characteristics. The subjects of the study were students in grades 9-12, who attended the 1993 ISEF and completed the Gifford and Wiygul Science Fair Survey. Three hundred sixty of the 829 (43.4%) students completed the survey and made up the population for this study.

The data analysis for this study was based on multiple linear regression techniques using a backward election procedure. This procedure controls all variables not being tested in a particular model. The predictor variables of use of outside research facilities significantly differentiated between winners and nonwinners. Collectively, the use of all outside facilities significantly differentiated between winners and nonwinners.

"COLLEGE STUDENTS' PERCEPTIONS OF THE GREENHOUSE EFFECT BY GENDER AND COLLEGE MAJOR"

Fred H. Groves and Ava F. Pugh, Northeast Louisiana University

The purpose of this study was to determine college students' perceptions of the Greenhouse Effect as analyzed by gender and college major. Data were obtained from 274 undergraduate and graduate students from three academic domains: science, education, and liberal arts. The Environmental Issues Questionnaire contained 36 questions with an additional ten questions for demographics.

Analysis of data using the two-tail t-test indicated in overall scores that males were higher than females. When analyzed within each college, the males in the College of Education, the College of Sciences, and the College of Liberal Arts scored higher, and significant differences (p≤.05 level) were determined for the College of Education and the College of Sciences for within differences.

Using ANOVA comparing the colleges, a significant difference (p≤.05) was determined between the College of Education and the College of Liberal Arts. For overall raw scores, the students in Liberal Arts scored higher. Implications from the study revealed a greater understanding of the Greenhouse Effect among males and with the students in the College of Liberal Arts.

9:00 a.m.-9:50 a.m.       RESTRUCTURING TENNESSEE HIGH SCHOOLS: START-UP R AND D (Symposium).................. Ship Isle Room

Organizer:  E. Dean Butler, The University of Memphis
Papers summarize research and development efforts initiated during the 1994-95 school year by a Tennessee school district implementing high school restructuring mandated by the Tennessee General Assembly and State Board of Education. A key feature of the restructuring plan is a school-university collaboration that exists as a model for use by others engaged in educational reform.

"HIGH SCHOOL REFORM ISSUES AND CHALLENGES IN TENNESSEE"
E. Dean Butler, The University of Memphis

An overview of issues and challenges associated with implementation of recent legislation and policy directives for restructuring high schools in Tennessee is provided. Major challenges and issues include school improvement planning, student academic proficiency and exit assessments, delivery of staff development appropriate to practitioners, integration of curricula within and across subject areas, implementation of active learning strategies, community involvement, and modification of school calendars using block scheduling.

"BUILDING SCHOOL CAPACITY TO INITIATE AND SUSTAIN REFORM"
Noel Long, Jackson-Madison County (TN) Schools

School district plans and activities designed to enhance the capacities of individual high school leadership teams to undertake high school restructuring are addressed along with assessments of initial results. Strategies include professional development and technical assistance relevant to needs of individual schools; partnership linkages of schools, universities, and community resources; short- and long-range planning; adoption of models for altering school schedules to accommodate curricula redesign; determination of resource needs; and establishment of communications between the school board, schools, and communities undergoing change. Persistent issues being addressed in 1995-96 are identified.

"TEACHER LEADERSHIP AND HIGH SCHOOL REFORM: SUCCESSES AND NEEDS"
Debra Simpson and Brendi Tedford, Jackson-Madison County (TN) Schools

An assessment of initial successes and needs of teacher leaders in three secondary schools undergoing restructuring is provided. Reported from the perspective of teachers, topics include faculty-staff relations, encouragement and support for teacher leaders, teacher professional growth, curricula redesign, planning and implementing active learning strategies, and integrating technology and curricula.

"SCHOOL IMPROVEMENT PLANNING: PLANS AND STRATEGIES"
Marilyn Kemp, Jackson-Madison County (TN) Schools

The development of processes for developing and implementing school improvement plans as a component of school restructuring is presented with comparisons made between three participating sites. Topics include profiling of school learning environments, including assessment of teacher and student perceptions; use of student achievement indicators;
accounting for school-community contexts; structures for developing and implementing school improvement efforts; and student, faculty, staff, and parent reactions to school reform.

"DISCUSSION"

Participants are provided opportunities to pose questions, offer recommendations regarding high school restructuring, and share perspectives relative to topics and issues explored.

9:00 a.m.-9:50 a.m.  FOCUS 2000: DIVERSITY TRAINING FOR TEACHER EFFICACY (Training Session)..........................Petit Bois Room

Trainers:  W.C. Johnson and Linda F. Cornelious, Mississippi State University

The fact that the nation's workforce is changing in gender and color is well documented. The Hudson Institute in its report "Workforce 2000" suggests that women, immigrants, and minorities currently make up, and will continue to make up, a growing proportion of new entries to the workforce.

Workforce training, and the preparation of personnel with teaching and work-skill competence, have traditionally been the domain of vocational-technical teacher educators. Given current realities, the challenges to public education institutions are to integrate diversity into their core mission and vision, and to weave pluralism into the very fabric of their organizations. Vocational-technical educators must pay more than cursory attention to today's demographics and prepare strategies for effective delivery of services.

This training session describes teacher education strategies for bringing a balanced perspective to workforce training, outlines curricular implications related to diversity, provides examples of recruitment and retention strategies for cultural diversity, and outlines assessment implications and strategies associated with providing education and training to diverse groups.

10:00 a.m.-10:50 a.m.  MATHEMATICS (Discussion Session)..................Atlantic Room

Presider:  Catana Turner, Carson-Newman University

Presenters:  "SELF-REGULATION AS A FACTOR IN LEARNING MATH: A CASE STUDY"

K. H. Dharmadasa, Jeffrey Gorrell, and Stephen W. Sanders, Auburn University

This case study was done with a sixth-grade student who had a special aptitude for math and who was above average in class achievement level in a city school of Alabama.

The purpose of the study was to examine what self-regulatory strategies the subject used for problem solving in math, how she used these strategies, sources of her knowledge of self-regulatory strategy use, and the views she held about self-regulatory strategy use.

The interview method was used to collect data. The interview was audiotaped, and the data were examined by trained observers who applied theme analysis procedures. This qualitative analysis revealed a number of patterns: (1) restructuring of prelearned methodology, consideration of multiple strategies, and self-regulation of contextual factors; (2) use of already identified self-regulated learning strategies; (3) self-regulation of learning regularly in class assignments, homework assignments, and class tests; and (4) development of competence in self-
regulatory strategy use from orientations obtained from teachers, parents and peers.

Findings of this study have implications for teachers' classroom teaching, parents' home assistance activities, peers' academic assistance, and students' use of self-regulation as a factor in learning math.

"A COMPARISON OF THREE MUSIC PROGRAMS' EFFECT ON READING AND MATHEMATICS"

James S. Turner, Aubrey W. Shelton, and Jerry G. Mathews, Mississippi State University; Nancy M. Draper, University of North Alabama; Victoria Benjamin, Jackson State University; and Betty Holcombe, Houston (MS) Public Schools

The purpose of the study was to determine the effect of three different music programs on reading and mathematics achievement scores. Subjects were fourth-grade students enrolled in four school districts in Mississippi. Two of the districts that had no formal music programs were combined, one district had a traditional music program, and one used piano keyboard. Each group's SAT achievement test scores for reading and math were averaged for the immediate four-year period preceding the study, 1990-1993. This established a mean scale score for each group that allowed comparisons to be made using adjusted means.

The experimental keyboard group's reading and math achievement test results were compared with each of the other groups' 1994 average test scores using adjusted means. In addition, the experimental group's 1994 mean scores for math and reading were compared to their 1990-1993 means scores for math and reading.

Significant results (both in reading and math) sometimes favored the students who did not have a formal music program and sometimes significant results favored the experimental keyboard programs.

"CREATIVITY AND MATHEMATICS ACHIEVEMENT"

Mary Susan Smith and Neelam Kher-Durlabhji, Northwestern State University of Louisiana

The purpose of this paper was to determine the relationship between creative thinking and mathematical performance in junior high school students. Data were collected from 254 students who participated in a summer residential program for creative, gifted, and talented youth. High and low creativity groups were identified on the basis of scores on the Torrance Test of Creative Thinking. The researchers also examined the math scores of high and low creativity groups on the Structure of the Intellect Learning Abilities Test (SOI-LA).

Significant differences (p < .05) were observed in the two groups' performance on five of seven subtests of SOI-LA. The high creativity group scored significantly higher in discovering abstract relations, recalling groups of numbers/letters, and estimation and problem-solving with symbolic systems.

The findings of this study indicated that creativity does impact academic performance in mathematics. Thus, creativity enhancement strategies may be useful in fostering an understanding of mathematical concept.

"AN EXAMINATION OF THE CONSISTENCY OF THE MATHEMATICAL CONSTRUCTS ASSESSED BY CLASSROOM GRADES, PORTFOLIOS, AND STANDARDIZED TESTS FOR ELEMENTARY GRADE STUDENTS"
THURSDAY, NOVEMBER 9, 1995

Thomas A. DeVaney and Melvin E. Franks, Mississippi State University, and Ann Kiick, Laurel (MS) District Schools

The purpose of this study was to examine the consistency of the mathematical constructs assessed by three prominent forms of mathematics assessment. The subjects of this study were approximately 50 third- through sixth-grade students enrolled in a magnet school program in southeast Mississippi. The data for this study were collected during the academic years of 1993-1994 and 1994-1995. During these two years, quarterly, semester, and yearly teacher-reported classroom grades were collected for each student in the magnet program. The remaining two assessments included the McGraw-Hill Mathematics Portfolio and mathematics portion of the Stanford Achievement Test.

In order to determine the consistency among the constructs measured by each form of assessment, the data were analyzed using trend analysis. The consistency of the constructs was determined by the extent to which the trends lines were parallel.

The results of this study have implications in several areas, including reform in mathematics assessment. They also add to the literature concerning the relationship of classroom grades and standardized testing as well as raise questions concerning local and national curricula. Finally, this study may help to establish validity for the use of portfolio assessment.

10:00 a.m.-10:50 a.m. HEALTH ISSUES (Discussion Session) Pacific Room

Presider: Jane Luster, Louisiana Department of Education

Presenters: "A COMPARATIVE ANALYSIS OF THE ATTITUDES OF SUPERINTENDENTS TOWARD PERSONS WITH AIDS IN MISSISSIPPI'S PUBLIC SCHOOL DISTRICTS"

Louise Jackson Jones and Mark Anthony Colomb, Jackson State University

The purpose of the study was to analyze and compare attitudes of superintendents toward persons with AIDS in Mississippi's public school districts. One hundred seven superintendents responded to a survey that brought a return rate of 70%. The survey included demographic questions as well as a Likert-type component entitled the SPATA (School Personnel Attitudes Toward AIDS). Analysis of variance was used to analyze the data.

The results of the study indicated no significant differences between attitudes toward persons with AIDS as measured by the SPATA relative to gender, age, ethnicity, educational level, location of school district, and years of experience. Research questions were posed and yielded the following: most superintendents did not have AIDS education programs or policies in their districts and have not participated in workshops on AIDS or encountered a person with AIDS in their respective school district.

The changing demography of students and school personnel indicate a need to enact school policies and educational programs on AIDS. The results of the present study can have significant implications for school administrators because AIDS is now an issue being presented in schools.

"EFFECTS OF DEPRESSION ON COLLEGE STUDENTS' COLOR CHOICE"

Rebecca F. Nolan, Yong Dai, and Patricia D. Stanley, Louisiana State University in Shreveport

The purpose of the study was to investigate the relationship between self-reported
depression and color selection. Subjects were 276 undergraduate students. They were provided with a packet requesting demographic information, answers to 10 questions and the Beck Depression Inventory. A separate sheet contained seven colors in two-inch squares. The color sheet was used to answer the 10 questions on page two of the packet.

An analysis utilizing an ANOVA indicated that order of color presentation and level of depression was not significant. Three of the ten questions were found to be significantly correlated with depression. Colors most associated with depression were black or brown.

When only gender or race were considered, it was found that females preferred red, while males chose blue as favorite colors. African-Americans chose black as best representing their current mood, while green was chosen most often by white subjects. As blue and red were the least objectionable colors when all investigated variables were considered, it is suggested that these colors in classrooms as accents could activate positive schema.

10:00 a.m.-10:50 a.m. RESEARCH METHODS (Discussion Session)........Caribbean Room

Presider: Susanne MacGuire, Auburn University

Presenters: "FACTORS INFLUENCING MAIL SURVEY RESPONSE RATES: WHAT DO WE REALLY KNOW?"

Judith A. Boser, The University of Tennessee, Knoxville, and Sheldon B. Clark, Oak Ridge Institute for Science and Education

For decades, there has been an interest in finding the most effective procedures to use when conducting mail surveys. Results of research studies in this area have frequently been inconsistent. Some authors have reviewed large numbers of studies trying to find similar results. This study reviews nine published review articles that were comprehensive in nature and focus on identifying the procedures or survey design variables that yield high response rates in mail surveys.

In light of Cooper's methods for integrative reviews of research, this presentation examines the following aspects of the review articles: procedures that were used, source of publication, criteria for selection of studies, analytic procedures, and findings. Because of the small number of review articles, quantitative analyses are not being used.

Preliminary findings include the following: authors of these reviews were not always thorough in their descriptions of methods, education journals have failed to provide an outlet for research on mail survey methods, results cannot necessarily be compared across articles because of differences in variable definitions and procedures, and few variables have been documented as producing consistent results. Possible mitigating factors are also discussed.

"NONATTENDING RESPONSES IN THREE SELF-ADMINISTERED EDUCATIONAL SURVEYS"

J. Jackson Barnette, University of Alabama

A great many surveys are conducted each year in educational research and evaluation. Several of these collect survey data from intact groups such as classes or teacher meetings where respondents sit together and complete the survey. In such situations there is high potential for nonattending responses or responses not directly related to the survey items or questions. Nonattending behavior may be manifested in various ways such as failure to respond to items, providing random or systematic responses to the items, or failure to recognize items that have been reverse worded. Nonattending behaviors will affect validity, reliability, and errors of measurement.

Three data bases, each with more than 1000 respondents, were examined to
determine how frequently potential nonattending respondent behaviors occurred. One of these data bases included students in grades kindergarten through six, one included students in grades six through twelve, and the third was a teacher respondent data base. Results indicated that nonattending behaviors existed in relatively high proportions in all three data bases, but occurred at higher levels with lower grade-level respondents.

"USING FOCUS GROUPS TO EXPLORE STUDENT OPINION"

Kathy Kramer Franklin and W. Hal Knight, East Tennessee State University

Historically, student opinions about their education experience have been assessed using standardized surveys. At a time when there is both an increased emphasis on accountability and the “student as consumer” philosophy, higher education administrators and researchers are exploring data collection methods that provide in-depth exploration of student opinion. Because of the richness of the data gathered, qualitative methods are of increasing utility. One such method is the focus group.

Focus groups were used to investigate criteria used by college students to determine their satisfaction with higher education. Although there are mixed opinions in the literature, we used a panel of experts to critique the focus group script and a pilot study to help ensure validity. We also used auditors and scribes to ensure objectivity. Content analysis was used to analyze data. During the research process, many challenges were encountered, from ensuring student participation to planning the logistics of the focus groups.

In the discussion, we will share our experiences utilizing focus groups to explore student opinion. Recommendations will be made to researchers considering the use of focus groups to collect data from a student population. Finally, we will present findings from our pilot study on student satisfaction with higher education.

"INVESTIGATIVE FOCUS GROUPS: RESEARCH AS CREATIVE CONFLICT RESOLUTION FOR A SENSITIVE TOPIC"

Abbot L. Packard and Jimmie C. Fortune, Virginia Tech, and Mary Ruth Reynolds, Wytheville Community College

Focus groups are recommended as a versatile, systematic approach to data collection that can be used for "focusing" information within a group context and an interactive format (Krueger, 1988, Morgan, 1988). This methodology is uniquely suited for addressing issues of potential conflict about a sensitive topic.

For example, this presentation describes focus group research applied to a practical educational purpose: investigating varied perceptions about gifted programs in a Virginia school district. Researchers report diverse themes expressed by both adult and child participants in 14 focus groups representing seven elementary schools, two middle schools, and one high school. They discuss how content analysis located common and conflicting themes that were incorporated into recommendations to address concerns of parents, staff, and students about the potentially sensitive topic of gifted education.

Two other forms of analysis were considered: coding of key terms and thematic analysis. Neither of these forms was used because of issues found with conflict analysis. These two forms are employed, and the three sets of results are contrasted.

10:00 a.m.-10:50 a.m. FACTORS INFLUENCING TCAP SCORES AND VALUE ADDED ASSESSMENT IN TENNESSEE (Symposium).............Ship Isle Room
THURSDAY, NOVEMBER 9, 1995

Organizer: Russell L. French, The University of Tennessee, Knoxville

Presenters:

"OVERVIEW"

As most educators and assessment specialists in the south are aware, Tennessee now rewards and sanctions schools based on value-added assessment gains from year-to-year. These gain scores are, in turn, based on Tennessee Comprehensive Assessment Program (TCAP) results. In addition to the TCAP battery, writing assessment was implemented in 1994-95. Schools and policy makers are now demanding information that can be used to improve TCAP scores and value-added gain scores. This symposium reports the results of a study undertaken in the spring of 1995 to identify factors influencing writing assessment results and year-to-year, grade-to-grade variability in value-added gain scores. The study included a statewide survey, intensive case studies in 13 schools, and multiple analyses of TCAP and value-added assessment data.

"WHAT WE DO AND HOW WE DO IT: VOICES FROM THE FIELD"
Judith A. Boser, The University of Tennessee, Knoxville

This paper reports the design and results of a survey mailed to 1,000+ teachers and administrators in 84 schools representing 46 school systems across the state. Respondents identified curriculum, instruction and assessment preparation practices as well as school and classroom organizations. Response patterns were compared with student performance.

"TALKING IN THE TRENCHES: ASSESSMENT-RELATED CASE STUDIES IN TENNESSEE SCHOOLS"
R. Lewis Hodge, The University of Tennessee, Knoxville

Thirteen (13) schools were the focus of case studies that included site visits and structured interviews with teachers and administrators. This paper reports the design and results of these case studies. Again, results were compared with student performance.

"STUDENT PERFORMANCE AND ITS CONTEXT: A LOOK AT WHAT STUDENTS DID AND WHAT THEY SAID"
Fretta Bunch and Paul Changas, The University of Tennessee, Knoxville

In this paper, student TCAP scores, value-added gain scores, and contextual data supplied by students are reported and analyzed.

"MAKING VALUE-ADDED ASSESSMENT VALUABLE TO SCHOOLS AND EDUCATORS"
Russell L. French, The University of Tennessee, Knoxville

This paper presents the key findings, conclusions, and recommendations of the study and discusses the form and format of future steps in the investigations.

While this symposium provides participants with four papers, the presenters simply highlight the design and key findings of the segment of the study being reported. Then, the symposium participants are asked to engage the presenters and each other in dialogue about the study and its implications.
THURSDAY, NOVEMBER 9, 1994

10:00 a.m.-10:50 a.m. PERCEPTIONS (Display Session)..........................Deer Isle Room

Presenters: "THE MAKINGS OF A GOOD STORY: CHILDREN'S PERCEPTIONS UNFOLD THROUGH THEIR ART WORK"

Judy A. Hale, Jacksonville State University

The primary purpose of this study was to investigate children's perceptions of a good story. By better understanding children's perceptions of a good story, ways to develop literacy may be found.

Qualitative data were collected from a purposefully selected group of kindergartners. Since children of this age group may not be able to reason and analyze, verbal articulation is a problem for them. The chosen method of articulation consisted of drawings by the children.

Each child was asked to draw a picture of what he/she thought would make a good story. The child then dictated the story to the researcher while looking at the drawing. Conclusions were drawn from cross-case analysis.

The implications for this study are far reaching. By better understanding what children perceive as a good story, teachers, librarians, and children's authors can provide children with books containing the characteristics they enjoy reading. In so doing, the likelihood that children will be more interested in reading is increasing. This early zeal for reading can lead to lifelong reading. With the emphasis in schools today on the integrated curriculum, it is vital that books selected for classroom use be books that students will use.

"ASSESSMENT STRATEGIES USING THE NELSON HOUSE PLANS TEST"

J. Gordon Nelson, Jacksonville State University

The Nelson House Plans Test has been investigated as a diagnostic instrument to assess interests of children and adolescents. Subjects were asked to draw house plans of their "dream house" in "blue print" form, labeling the rooms, furniture, and objects they considered most important. It was to be the house they would want to live in if they had unlimited money.

This instrument is useful for research on creativity, personality attributes, developmental issues, abusive environments, and possible psychopathologies. It can also be used to study ethnic groups, SES levels, or gender differences. It has been found, for example, that adolescent girls draw more details and include more necessities (bathrooms and furniture), while boys include more fun items (sports and video games).

Rapport building is another valued part of this test due to the high motivation in completing the task. This activity quickly engaged even the most reluctant or highly resistant subjects in classrooms and counseling situations. Insights into subject's interests, fantasies, hopes, and dreams were quickly gained, especially among the participants who were low in self disclosure and low in verbal skills.

10:00 a.m.-10:50 a.m. EXCEPTIONAL EDUCATION
(Discussion Session)..........................Chandeleur Room

Presider: Cliff Ouder, Assumption Parish (LA) Schools

Presenters: "APPROPRIATE EDUCATION OF STUDENTS WITH DISABILITIES IN COLLABORATIVE AND INCLUSIONARY PROGRAMS"

Qaisar Sultana, Eastern Kentucky University
This study was designed to investigate the appropriateness of education, a federal and state mandate, to students with disabilities in collaborative and/or full inclusionary programs in Kentucky. Directors of special education in 43 randomly-selected counties in the eastern half of the Commonwealth responded to six questions concerning their perceived attitudes of teachers towards these programs. Questions regarding teacher preparation were also asked. Frequencies of "yes/no" responses were counted, and percentages were computed. Results showed that 53% favored collaboration compared to 16% in favor of full inclusion. According to respondents, teachers in favor of collaboration and full inclusion were respectively 49% and 7%. Compared to 50% and 12% of the special education teachers, no percentage of the general education teachers were considered to be prepared respectively for collaboration and inclusion. Results showed comparatively more favorable attitudes toward collaboration than full inclusion. According to the respondents, more special education teachers were prepared to teach in collaboration programs than in full inclusion. Delivery of appropriate education is dependent both on positive attitudes and sound teacher preparation. Given the results of this investigation, the appropriateness of education provided to these students appears to be questionable.

"A COMPARISON STUDY OF THE EFFECTS OF MAINSTREAMED AND SELF-CONTAINED PLACEMENT ON THE SELF-CONCEPT OF MILDLY HANDICAPPED STUDENTS"

Nancy K. Sanford, George M. Thomas, and Linda K. Walker, Mississippi State University--Meridian Campus

This study sought to determine the effects of different special education instructional arrangements on the self-concept of mildly handicapped students. The Piers-Harris Children's Self-concept Scale (PHCSCS) was administered to 36 students (ages 8-15) in a southern school district. A comparison was made between the scores of the students who were in self-contained placements (ages 12-15 years, n=5; ages 8-11, n=6) and those who were in mainstreamed placement (ages 12-15 years, n=8; ages 8-11, n=17). The sample was limited to those students who a current eligibility ruling of Specific Learning Disability (SLD) or Educational Disability (EMR) by the Mississippi State Department of Education Regional Screening Team. The findings indicated that there was no significant difference in the PHCSCS scores for the self-contained and mainstreamed students at the .05 level of significance.

"A STUDY OF DIFFERENCES IN THE SOCIAL STATUS OF LEARNING DISABLED CHILDREN AS COMPARED TO THEIR NON-LEARNING DISABLED PEERS"

Doreen H. Hill, George M. Thomas, and Linda K. Walker, Mississippi State University - Meridian

This study was conducted to examine the social status of learning disabled students by comparing the outcome differences of sociometric ratio scale, How I Feel Towards Others (Agard, Veldmen, Kaufman, and Semmel, 1978), with a positive peer nomination measure. Learning disabled students consisted of those integrated into regular classrooms for at least part of the day. The study consisted of a total of 205 students, with 46 of the total number being learning disabled students. Eight classrooms were utilized across the Jones County school district. These classrooms consisted of two third grades, two fourth grades, two fifth grades, and two sixth grades.

Findings based on the results of the nomination scale combined with the rejection scores from the rating scale suggested both lower acceptance and lower rejection scores for the learning disabled students when compared to the scores of the non-learning disabled students. Data from the rating scale revealed lower acceptance, lower rejection, and lower toleration. The acquaintance category of the rating scale suggested that the learning disabled students are less
well known to their peers than their non-learning disabled students.

"HOW DO WE TEACH? HOW WILL WE TEACH?: ASSESSING TEACHERS' PERSPECTIVES OF TRADITIONAL AND POTENTIALLY EMERGING INSTRUCTIONAL PARADIGMS FOR STUDENTS WHO ARE LEARNING DISABLED"

Martha J. Larkin, The University of Alabama

Innovative practices for instructing children who are learning disabled are finding their way into the schools. Paradigms organize the complexity of the educational world by providing a framework for explaining and understanding teachers' perspectives or the way they view instructional practices. In addition, paradigms guide educator instructional decisions and actions without requiring prolonged consideration.

Awareness of teachers' perspectives on traditional and potentially emerging paradigms concerning the education of students who are learning disabled can provide an empirical base for current and future policy decisions affecting teacher preparation programs and staff development. This session highlights the assessment of educators' perspectives through a series of quantitative and qualitative studies.

A survey instrument, General Paradigmatic Perspectives Survey, was developed based on a literature review and feedback from educators and journal field editors. After validation, the instrument was administered nationwide to educators who responded across four dimensions to scenarios representing traditional and potentially emerging paradigms. Data were analyzed, and the results were used to determine one of the most pressing issues for indepth exploration. Qualitative measures were used to glean information about the instructional issue from teachers to construct a new nationwide survey.

10:00 a.m.-10:50 a.m. LEARNING STRATEGIES (Discussion Session) ........... Caprice Room

Presider: Warren A. Land, Mississippi State University

Presenters: "THE EFFECTS OF COOPERATIVE LEARNING ON HIGH SCHOOL SOCIAL STUDIES STUDENTS' SELF-ESTEEM"

Dwight C. Holliday and Larry G. Daniel, University of Southern Mississippi

The purpose of the present study was to investigate the effects of cooperative learning on the self-esteem of ninth-grade geography students at a Gulf Coast high school in the state of Mississippi. A six-week study was conducted introducing Jigsaw II and cooperative learning techniques to teachers, which they then used to instruct their students (n=72) in geography. The treatment group's self-esteem was compared with the self-esteem of traditionally taught students. The Self-Esteem Index (SEI) was utilized as a measure of self-esteem. The SEI measures self-esteem across four dimensions: peer popularity, academic competence, familial acceptance, and personal security. A pretest/posttest design was used. Discriminant analyses were used to analyze the data.

Residual self-esteem gain scores were used as discriminating variables. Results indicated no statistically significant difference between the groups (lambda=.9336). A post-survey only format was used to increase the number of subjects to 91. The lambda for the post-survey design was .8751 and a significance (p=.05) level of .0425. The discriminant variables, security and family, were the best predictors of group membership, while peer and academics were the weakest predictors.
"HELPING SECONDARY EDUCATION STUDENT TEACHERS IMPLEMENT ACTIVE LEARNING STRATEGIES IN THE CLASSROOM"

Joan K. West and Linda T. Jones, Mississippi State University

Journal entries and discussion during the secondary education professional seminar revealed that student teachers in secondary classrooms experience difficulties implementing active learning strategies. To address this problem, a pilot project was designed to help student teachers implement high student-involvement learning strategies. The student teachers used the handbook, Inspiring Active Learning, that contains practices that have been found to be successful at all grade levels. During each two-week period, student teachers were required to select and use two to five strategies. They kept a log of the strategies that they used, rated the effectiveness of each strategy, and described how well the strategy worked or did not work and how they would modify the strategy for future use. During the seminar the students presented the strategies they used so that the whole class could discuss what was successful in various classrooms and how various teaching methods could be used in other disciplines. Student teachers gained confidence and competence in the use of many active teaching strategies through experimentation and reflection. Skill in using high involvement strategies was not left to chance; the required use of selected strategies served as a base for building a repertoire of active learning strategies.

"EVIDENCE FOR USE OF THE VISUOSPATIAL SKETCHPAD IN PROCESSING GRAPHIC ORGANIZERS"

Andrew D. Katayama, Ai-Chun Fan, and Daniel H. Robinson, Mississippi State University

The assumption was tested that comprehension of text accompanied by graphic organizers involves using the visuospatial sketchpad component of working memory (Baddeley, 1992). In a previous study, Kruley, Sciama, and Glenberg (1994) found that comprehending text with pictures interfered with a spatial short-term memory task more than did comprehending text with no pictures. Undergraduates were randomly assigned to one of two between-subjects conditions: verbal or spatial concurrent task. The verbal group began the experiment by viewing a display of numbers, whereas the spatial group began by viewing a display consisting of a configuration of dots. All students then viewed either a text or a graphic organizer (a within-subjects condition) while listening to someone read the text. They were then tested on their recognition of the display and comprehension of the text. This procedure was repeated ten times. Independent t-tests were conducted on the recognition scores, whereas a mixed model ANOVA was conducted on the comprehension scores. Results indicated that viewing graphic organizers interfered with performance on a spatial concurrent task, whereas viewing text did not. It was concluded that, because graphic organizers are more like pictures, they are processed in a way that uses the visuospatial sketchpad.

"EVIDENCE FOR USE OF THE VISUOSPATIAL SKETCHPAD IN PROCESSING OUTLINES AND CONCEPT MAPS"

Ai-Chun Fan, Andrew D. Katayama, and Daniel H. Robinson, Mississippi State University

In a previous study, it was found that comprehending text with graphic organizers interfered with a spatial concurrent task, whereas comprehending text with no pictures did not interfere with a spatial task. It was concluded that processing graphic organizers involves use of
the visuospatial sketchpad (Baddeley, 1992). In the present study, we tested whether other adjunct displays were also processed using the sketchpad. Undergraduates were randomly assigned to one of two between-subjects conditions: verbal or spatial concurrent task. The verbal group began the experiment by viewing a display of numbers, whereas the spatial group began by viewing a display consisting of a configuration of dots. All students then viewed either an outline or a concept man (a within-subjects condition) while listening to someone read the text. They were then tested on their recognition of the display and comprehension of the text. This procedure was repeated 10 times. Independent t-tests were conducted on the recognition scores, whereas a mixed model ANOVA was conducted on the comprehension scores. Results indicated that viewing either outlines or concept maps interfered with performance on a spatial concurrent task. It was concluded that adjunct displays are more pictorial than text and are processed using the sketchpad.

10:00 a.m.-11:50 a.m. PEACEFUL SOLUTION'S PEER MEDIATION TRAINING PROGRAM FOR ELEMENTARY AND MIDDLE SCHOOL STUDENTS
(Training Session).........................Petit Bois Room
Trainers: Yvetta George and Joel Keiter, Nova Southeastern University; Donna Dagnese, Florida Atlantic University; and Glennelle Halpin, Auburn University

Peer mediation is one of the most successful conflict-resolution programs being used in schools. Authors/trainers of the Peaceful Solution's Peer Mediation Training Program will provide information relative to the philosophy of peer mediation and background skills pertinent to becoming a mediator. Participants will learn how to conduct a mediation and how to model the mediation process for primary students.

Results of pretests/posttest given to a sample of trainees during the past year indicated that these students did have some awareness of mediation terms prior to training. However, the knowledge of the mediation process they gained was significant. Also, students learned the most important aspects related to the efficacy of becoming a peer mediator during training. Follow-up surveys indicated that student peer mediators are effective problem solvers and that disputants feel comfortable during the mediation process. This research is discussed during the training session.

Activities include role playing, brainstorming, and the "nuts and bolts" of initiating an elementary/middle school peer mediation training program.

11:00 a.m.-11:50 a.m. LANGUAGE, ART, AND MUSIC
(Discussion Session).............................Atlantic Room
Presider: Kathleen Pittman, Livingston University
Presenters: "SCHOOL CURRICULUM IMPROVEMENT STUDY: THE SHURLEY METHOD VS. TRADITIONAL LANGUAGE ARTS INSTRUCTION"
David Bell and Glenn Sheets, Arkansas Tech University, and Robert Calvery, Southside (AR) School District

The Shurley method provides teachers a step-by-step method for teaching language arts concepts in a logical order that reaches the visual, auditory, and kinesthetic learning styles of students. The purpose of the study was to determine if the Shurley method produced gains in achievement superior to traditional approaches.

Four third-grade classrooms in a small Arkansas school were used for the study.
Students in two classrooms received treatment in the Shurley method, and the other two classrooms received traditional language arts instruction.

The eighth edition of the Stanford Achievement test was administered to 91 students in the four third-grade classrooms. Their language arts achievement was assessed using the total battery score. Also compared were the scores for word study, reading comprehension, language mechanics, and language experience.

Students who received the Shurley method of instruction were not significantly higher (p<.05) in total language arts battery scores. A comparative analysis of the tests for word study, reading comprehension, language mechanics, and language experience indicated no significant differences between control and experimental groups (p<.05). Based on this study, the Shurley method for instruction in language arts does not produce significant gains in achievement compared with traditional methods of instruction.

"THE FORGOTTEN AND UNINFORMED COLLEGE BAND STUDENT: A COMPARISON OF ACTIVITIES, EXPERIENCES, AND MUSICAL INDEPENDENCE AMONG NON-MUSIC MAJORS AND MUSIC MAJORS"

Nan C. Bobbett, Musician and Educational Researcher, Knoxville, Tennessee; Gordon C. Bobbett, Educational Consultant and Researcher, Knoxville, Tennessee; and Wayne Dorothy, Head Band Director, North Dakota State University

The purpose of this study was to examine the relationships between the non-music majors' (NMM) college music activities, experiences, and instrumental skills and their musical independence (MI). Second, the experiences, activities, and music skills between the NMMs and music majors (MM) were compared.

A musical independence test was administered to 276 instrumental MMs and 66 NMMs participating in Ball State, Florida State, and Wichita State instrumental programs. The instrumental College Survey 2 was also used to examine the NMMs and MM's number of courses and corresponding grades in 10 college course work (CCW) areas (e.g., private lessons, ear-training, theory); the percentage of time they emphasized eight performance activities (PA) (e.g., scales, eludes, sight-reading, solos, band music) during private lessons and during practicing; and the percentage of time they emphasized 10 artistic fundamental skills (AFS) (e.g., phrasing, dynamics, intonation) during individual practicing, band rehearsals, and private lessons. Data analyses included descriptive, correlational, t-test, and regression analysis. The study used a .05 level of significance.

The findings suggested that NMMs: (1) were significantly less musically independent than MMs, (2) showed no positively significant association between their MI and CCW, and (3) did not know which PAs or AFSs were important in developing MI. Should the music education department (private teacher, band director, music faculty members) be held responsible for the NMM's poor, inadequate, inappropriate MI development?

"EFFECTS OF TWO-WAY BILINGUAL EDUCATION ON LIMITED AND NON-LIMITED ENGLISH PROFICIENT STUDENTS"

Rossana R. Boyd, Louisiana State Department of Education

The purpose of this review of the literature was to research the effects of two-way bilingual education on limited and non-limited English proficient students. Basic findings show that academic achievement, self-esteem, and neuropsychological growth are evident on students' standardized tests if these students participated in two-way bilingual programs. Research indicates that classes taught in the first language help children grow in subject matter knowledge
THURSDAY, NOVEMBER 9, 1995

and stimulate cognitive development, which in turn helps second language acquisition by providing children with the extra-linguistic context necessary for comprehension. Implications of two-way bilingual education for these students are that high scholastic performance is the result of knowledge learned in one language that can transfer to the second language as long as students have reached a certain level of native language proficiency. This facilitates second-language development. This literary review concentrates on the most recent research results on two-way bilingual education from Virginia Collier's (University of George Mason) longitudinal study.

11:00 a.m.-11:50 a.m TECHNOLOGY (Discussion Session)......................Pacific Room

Presider: Clifford A. Hofwolt, Vanderbilt University

Presenters: "THE EFFECT OF COMPUTER-ASSISTED INSTRUCTION ON THE SCIENCE PROCESS SKILLS OF COMMUNITY COLLEGE STUDENTS"

Michael Leonard Burchfield, Holmes Community College, and Vernon D. Gifford, Mississippi State University

The purpose of this study was to develop a Computer-Assisted Instructional (CAI) module designed to improve the science process skills of 90 community college students. The students were administered the Test of Integrated Process Skills (TIPS) as a pretest. After the pretest, the treatment group received instruction on the integrated science process skills from the CAI. The control group received no instruction on science process skills but received instruction on cell chemistry from four commercially prepared computer programs. After they had completed the computer programs, each group was administered the TIPS II as a posttest. A significant difference (p=0.07) between the mean gains in integrated science process skills was found favoring students who participated in the computer module on the TIPS total score. Students participating in the computer module also scored significantly higher (p=0.03) on TIPS subtest 5, Graphing and Interprinting Data, than those in the control group.

"EFFECTIVENESS OF INTRODUCING ELECTRONIC MAIL APPLICATIONS WITHIN TWO PRESERVICE ELEMENTARY SCIENCE METHODS COURSES"

William J. Sumrall, Mississippi State University, and Carrol M. Sumrall, University of Southern Mississippi

This study investigated the effectiveness of introducing electronic mail (E-mail) applications in two elementary preservice science methods courses at two distant universities. Investigators in the project interviewed the instructors for the two courses, analyzed correspondence concerning elementary science between students at the two universities, and compared the user-friendliness of the different communications systems used at the two universities through student questioning. The researchers investigated subjects' attitudes toward using telecommunications in a variety of science education contexts upon course completion by applying a two-sample independent t-test to the data collected.

After interviewing instructors and analyzing open-ended questions given students, researchers determined that both groups had positive and negative experiences in using E-mail in the two courses. A two-tailed independent t-test determined that, despite facility and course differences, there was no significant difference (p@.05) between the two groups on any of the 18 attitudinal questions.

Despite problems of incorporating E-mail into the elementary science methods courses as determined by instructor interviews and student questioning, the results of the study...
supported the concept of introducing E-mail into elementary science methods courses and provided evidence to support infusion of educational technology into other courses.

"THE USE OF A SCIENCE INTERACTIVE VIDEODISC IN A KINDERGARTEN CLASSROOM"

Edward L. Shaw, Jr., Robert L. Doan, and Richard L. Daughenbaugh, University of South Alabama

The purpose of this study was to supplement hands-on science activities with an interactive videodisc. This study was to determine the effectiveness of using an interactive videodisc in teaching science concepts of "sinkers and floaters" in kindergarten students. The researchers pressed the interactive videodisc on "sinkers and floaters," collecting all necessary materials and authoring programs. They chose a posttest-only design as the format for the research.

Data collection was done in the spring of 1995 using a variety of kindergarten classrooms (n=86) in a public school system. Using the posttest-only design, the following treatments were used: hands-on only, interactive videodisc only, and interactive videodisc with hands-on activities. Results revealed no significant differences among treatment groups, using a one-way ANOVA. Post-hoc analysis revealed no significant differences, using the Least Significant Difference (LSD).

11:00 a.m.-11:50 a.m. PERFORMANCE ASSESSMENT (Discussion Session) Caribbean Room

Presider: Angela Maynard Sewell, University of Arkansas at Little Rock

Presenters: "PERFORMANCE ASSESSMENT AND EDUCATION REFORM: PROBLEMS AND POSSIBILITIES"

Richard Shepard and Dean Owen, Morehead State University

In a recent paper Shepard and Owen argued for a more cautious, reflective approach in the application of performance assessments and various other aspects of recent education reform initiatives. Several of the assumptions underlying current reform efforts were discussed in light of their potentially unintended and/or contradictory outcomes and consequences. For example, do performance measures, such as portfolios, truly provide students with a broad spectrum of mediums to express what they know, or do they, in actuality, limit students to one esoteric skill which is writing? Exploring issues such as this, along with the tacitly held assumptions of reformers' philosophies, must continue if the latest round of education revision is to proceed in a productive and realistic manner.

The purpose of this paper is to elaborate on some of these themes using recent empirical and theoretical evidence. Specifically, the potentially deleterious effects of limiting student expression, reducing content coverage, and undervaluing the role of automatic processes in learning are discussed. A theory of instruction is preferred, which is designed to avoid these problems by providing a more balanced and integrated perspective on learning, pedagogy, and assessment.

"USING PORTFOLIOS IN THE TEACHER EDUCATION PRACTICUM: WHAT'S HAPPENING NATIONALLY?"
Lisa DeMeulle, Rebecca S. Anderson, and Dave S. Knowlton, The University of Memphis

Currently, a nationwide movement is underway that advocates assessment practices that focus on processes, growth, and reflection as well as final outcomes. One such example is portfolios. The purpose of this exploratory study was to determine how portfolios are being used in practicum experiences in teacher education programs across the nation. While there is a growing body of literature discussing portfolios in general, there is a need to understand how portfolios are being used during practicum experiences. Data collection included a questionnaire mailed to 100 supervising professors of preservice teachers, portfolio documents, and 30 follow-up, semi-structured telephone interviews. Data were analyzed using the constant comparative method and verified by triangulation. Preliminary findings suggest that portfolios are being used for three general purposes: (1) promote self reflection, (2) evaluate program outcomes, and (3) support inquiry. Types of documents included, ways they are evaluated, and criteria used for evaluating the portfolios varied according to the purpose. Although problems were identified with using portfolios, the majority of respondents emphasized that the benefits outweigh these problems. The findings of this study suggested that teacher educators must be aware of the multiple uses and formats of portfolios before they can make informed decisions that best serve the development of their preservice teachers.

"THREE YEARS OF PORTFOLIO ASSESSMENT IN A TEACHER EDUCATION PROGRAM"

Juanie L. Noland and Winifred C. Nweke, Tuskegee University

The purpose of this study was to review the experience with portfolio assessment as part of an exit examination in a teacher education program. The portfolio assessment technique was used in conjunction with classroom performance observations to ensure validity of the decision to recommend for certification.

Thirty teacher education students developed portfolios to demonstrate their satisfaction of the ETS Praxis teacher evaluation criteria. Portfolios were evaluated by two to four individuals using rating forms based on the ETS Praxis criteria. A student's portfolio grade was the average score from all raters. Portfolio grades were correlated with students' overall GPA, student internship, and average grades in foundations and methods courses.

Results show low and nonsignificant correlations between portfolios and GPA ($r=0.087$, $p>.05$), foundations courses ($r=0.150$, $p>.05$), student internship ($r=0.219$, $p>.05$), and methods classes ($r=0.320$, $p>.05$). Results suggested that portfolios make a unique contribution to certification recommendation decisions. It was also found that inter-rater reliability between cooperating teachers and teacher education faculty was very low. There were indications of leniency error and poor understanding of the criteria among both raters and students. Other problems were discussed, and training was proposed.

"DATA-BASED DECISIONS: THE FIRST DECISION IS 'WHAT DATA?'"

Charles M. Achilles, E. Michigan University, and Susan P. Hoover, Woodmont (SC) High School

This interactive session should produce a position paper to guide persons in making data-based decisions. As ideological differences polarize, groups seek data to support positions (e.g., tracking or retention in grade) or to provide bases for decisions. Another concern is use (interpretation) of the same data to support different conclusions (the Glass and Smith meta-analysis to support reduced class sizes and the Education Research Service using the same meta-
THURSDAY, NOVEMBER 9, 1995

analysis to maintain or raise class sizes).

In one case a Colorado school board election saw a newly elected "slate" overturn the prior board's decision to implement Outcome Based Education (OBE). The new and the remaining prior members finally agreed to base all decisions on good research data. This raised its own problems: e.g., What research would be used?, How to determine the value or strength of research results?, How to evaluate the strength of competing claims?, and How do qualitative results fit into the model?

Discussants will provide a draft of criteria to consider in answering these questions. Discussants will lead a critique of draft material presented, seek group consideration of the underlying questions, and generate consensus to refine the draft material into guidelines.

11:00 a.m.-11:50 a.m. INVESTIGATING THE RELATIONSHIP BETWEEN THEORY AND PRACTICE IN THE DEVELOPMENT AND DELIVERY OF CURRICULUM (Symposium)

Organizer: Frances K. Kochan, Auburn University
Presenters: "OVERVIEW"

The purpose of these studies was to investigate the relationship between curriculum theory and practice. The research occurred as part of a graduate class in curriculum development. Three curricular theories (technical, practical, and critical) formed the conceptual framework for the studies. The organizer, who was the instructor, established the topic for examination and served as a guide in the process. The activities involved applied research using qualitative methodology including triangulation, multiple checks, and peer examination of findings. Disparities were found between the espoused theories and curricular practice. Personal beliefs and abilities and organizational constraints were the major factors in creating the disparities. Implications were that practitioners must become aware of the extent to which their espoused theory of curriculum is consistent with their practice and how they can identify and overcome barriers to such consistency.

"THEORY AND PRACTICE: BARRIERS TO SYMBIOSIS"
Frances K. Kochan, Auburn University

The instructor presents an overview of the conceptual framework of the studies and a descriptive review of the literature dealing with the relationship of theory to practice in curriculum.

"A STUDY OF THE RELATIONSHIP BETWEEN CURRICULUM DEVELOPMENT AND THE IMPLEMENTATION IN A UNIVERSITY SETTING"
Julie B. Walsh, Auburn University

The study investigated a curricular change at the university level. The author examined documents, conducted interviews, collected survey information, and observed instruction. Results indicated that individuals involved in the change held different espoused theories of curriculum. There was inconsistency in the instruction delivered and the written curriculum and its purported purposes. Practical constraints, history, and personal beliefs appeared to account for the differences.
"TOWARDS THE 21ST CENTURY: A STUDY OF CURRICULUM THEORY AND PRACTICE"
Stephen L. Butler, Auburn University

The study investigated a curricular change in a college specializing in technical and leadership training. The author examined documents and conducted surveys and interviews. Disparities were found between the espoused theories of the administrators and the methods for developing the curriculum. There appeared to be consistency in the espoused beliefs of the faculty, but there was disparity in the delivery of the curriculum as perceived by the students. Student attitudes, historical beliefs, and the difficulties inherent in making the comprehensive change that was attempted appeared to be factors in creating such differences.

"PERSONAL COMPARISON OF IDEAL AND CURRENT CURRICULUM AND TEACHING THEORIES"
Evan T. Robinson, Auburn University

The author investigated his own teaching methods. Data collection methods included tape recording lessons, observations by another instructor, and student surveys. Results indicated that there was a disparity between the espoused theory of curriculum and the theory implemented in practice. Organizational constraints, student responses, and level of confidence of the instructor served as factors increasing this disparity.

AUDIENCE PARTICIPATION

Following the first presentation, participants will write down their curriculum theory for the categories presented. At the end of the session they are asked to identify the extent to which they believe they are implementing this theory. Groups will be asked to discuss the implications and ways they might investigate this issue.

11:00 a.m.-11:50 a.m. INSTRUCTION AND WRITING ASSESSMENT
(Display Session).................................Deer Isle Room

Presenters:
"INSTRUCTIONAL APPLICATIONS OF COMPUTER GAMES"
John V. Dempsey, Barbara Lucassen, and Linda Haynes, University of South Alabama

The purpose of the project was to evaluate video-arcade and computer games to determine what components or structures are useful for education, training, or instruction. Areas of interest for the study included: overall game playing strategies, strategies that different players use to play the same game, changes in strategies as the game is played, gender and background preferences (type of games, type of fantasy and competitive scenario, strategies, motivational components), and how the game or aspects of the game can be used in an educational or instructional setting.

Forty participants volunteered for this study (20 females and 20 males); 35 participants were observed playing the computer games and were interviewed. Each participant met individually with an observer/evaluator. Before playing, subjects completed a Demographic and Gaming Experience Questionnaire, Kolb's Learning-style Inventory, and Seligman's Learned Optimism Scale. Each game was played for a maximum of 50 minutes. After the completion of each game, the subjects completed two additional scales measuring motivation and gaming components, such as fantasy, curiosity, and control. These instruments were supplemented with a short follow-up interview.
THURSDAY, NOVEMBER 9, 1996

"TECHNIQUES FOR ASSESSING PROCESS WRITING"
Laura M. Rotta and Cathryn A. Huser, Mississippi State University

The purpose of this literature review was to list and describe current assessment methods for process writing. Writing instruction's shift of focus from product to process is part of education's greater shift of emphasis from knowledge transmission to inquiry that allows students to become problem solvers and independent thinkers. Process writing, popularized by proponents such as Nancy Atwell and Donald Graves, creates independent members of the writing community.

With emphases on students' interests and critical inquiry, standards for the assessment of writing, compiled in 1994 by the International Reading Association and National Council of Teachers of English, reflect the presence of process in writing instruction. However, the classroom use of alternative methods of assessment has moved more slowly, partly because such methods are often reported individually as classroom success stories.

This literature review revealed a variety of evaluation methods. The use of rubrics, checklists, portfolios, conferencing, and other techniques allows student writers to experience the process, teachers and students to assess the process and products, and the public to receive feedback on students' writing skills. The result is a compilation of techniques for assessing writing's process as well as product, with suggestions for conversion of results to traditional grading systems.

11:00 a.m.-11:50 a.m. STATISTICS (Discussion Session)......................Chandeleur Room

Presider: Bruce Thompson, Texas A&M University

Presenters: "MAXIMUM LIKELIHOOD ESTIMATION: A SPECIAL CASE OF BAYESIAN METHODS"

Jwa K. Kim, Middle Tennessee State University

Maximum Likelihood Estimation was implemented through a Bayesian method to estimate examinees' true ability in the Item Response Theory (IRT) paradigm. Both mathematical derivations and Monte Carlo studies were adopted to prove that Maximum Likelihood Estimation is a special case of Bayesian methods.

For the Monte Carlo studies, both the traditional Maximum Likelihood method and a Bayesian method with a uniform prior distribution of ability were utilized to check their identical results. The Three-Parameter Logistic (3-PL) model was used for the estimation of ability. Sixteen quadrature points from a Gauss-Hermite integration table were selected as true ability values for examinees. Item discrimination parameter (a-parameter) was set to unity. Item difficulty parameter (b-parameter) was set to either normal or uniform distribution. Chance parameter (c-parameter) was fixed to .20 assuming five alternatives per item. Both bias and standard error were computed for comparisons.

Results showed no dramatic differences between the two methods. Obvious theoretical and practical advantages of the Bayesian implementation were highlighted.

"UNEQUAL CELL SIZE ANOVA AND THE MEANING OF THE INTERACTION"

Ernest A. Rakow, The University of Memphis

A frequently used statistical procedure in education and the social sciences is the unequal cell size factorial analysis of variance. When confronted with data to analyze from the
unbalanced design, the researcher should very carefully select the method/option in the statistical package for estimation of sums of squares.

The objective of this investigation was to explain by example the nature of a two-factor interaction in balanced and unbalanced designs and argue that the experimental method in SPSS is the preferred approach. The partitioning of sums of squares utilizing the various methods in SPSS (experimental, unique, and hierarchical) is shown, and the results of using coded vectors (dummy coding, effect coding, and orthogonal coding) in multiple regression analysis are illustrated. All three types of vectors produce the same results when used for the experimental method. Examination of the interaction vectors without first entering main effects vectors produces confounded results in an unbalanced design.

The analytic examples provided give researchers a better understanding of a two-factor interaction and why in SPSS the experimental method is the option that should be chosen.

“STEPWISE REGRESSION IS A PROBLEM, NOT A SOLUTION”

Gunapala Edirisooriya, East Tennessee State University

Many educational researchers rely on the stepwise regression method for selecting the best subset of predictors (xi) in explaining a given criterion variable (Y). A popular notion is that the order of variable entry signifies the order of importance of xi on Y. The stepwise regression method fails to satisfy these expectations. To show this, a personnel data set of a medium-sized school district was analyzed.

The objective was to explain the variation in the present salary (Y) of the workforce in terms of eight personnel variables (xi). This data set was experimented with by running a series of stepwise regressions by specifying different levels of criteria for variable addition and deletion. From this, the best solution was selected judging by two criteria: parsimony and adjusted R2. Then, it was demonstrated that the stepwise variable selection procedure, starting with the predictor variable with the highest F value, does not necessarily produce the best subset of predictors. Further analysis proved that a meaningful strategy would be to factor analyze Xi and then to utilize the factor estimates to explain Y.

"LEAST SQUARES LINE ANALYSIS OF DATA FROM DIVERSE, STATE-MANDATED TESTS"

Donald L. Grigsby, University of Alabama at Birmingham

The purpose of this study was to apply the least squares line method of analysis to data from many different types of tests that the state has mandated. This method of analysis has already been shown to be useful in interpreting Stanford Achievement Test data. In this paper, it was applied to the results of the statewide end-of-year tests in second-grade reading and writing, fifth-grade writing, and seventh-grade writing and Algebra 1. The analysis compared data for city and county districts within and between types of tests. In addition, an analysis was done between the city and county school districts. The results can be used to show the overall state school performance on these tests and to identify the schools that scored the highest and lowest on each of the tests within and between the two types of districts.
Research was conducted to examine the status of school-based professional development using a behaviorally anchored instrument that identified patterns of implementation with respect to six critical attributes.

The data were collected by trained observers who conducted interviews using The Innovative Component Configuration Map for School-Based Professional Development. Discriminant analysis was conducted. The sample consisted of 48 schools randomly selected from the eight regions in Kentucky. In each school, six people were interviewed.

Results indicated that professional development options available to most schools remain the traditional forms; 33% of schools sampled indicated that evaluation data were not used for future planning. Schools described as high implementors included mentoring to transfer new skills, provided on-site support that gave teachers a reduced workload, incorporated action research to experiment with and define new practices, used shared reflection as a professional development activity, used teachers as team leaders to build capacity, and offered a wider variety of strategies, activities, and experiences.

Implications included school professionals' need to expand their concepts of what constitutes professional development. Plans should include a method of providing on-going experiences, and evaluation data should be used to plan for the future and evaluate the current program.

"PRINCIPALS' PERCEPTIONS OF TEACHER EDUCATION"

Anne G. Tishler, University of Montevallo

Principals' perceptions of teacher education programs are based on their work with the graduates of those programs. Those perceptions provide valuable data for program assessment. The purpose of this study was to determine principals' perceptions of teacher education programs among a group of principals who had worked with and evaluated beginning teachers during the last year.

A group of 128 principals, identified as working with beginning teachers over the last year, was surveyed to solicit data for program assessments including suggestions for teacher preparation improvement. Ninety-one principals (71%) responded. Response data were analyzed qualitatively.

Principals generally had positive perceptions of teacher education, citing as evidence beginning teachers' strength in knowledge of subject matter and in various areas of instructional methodology. They reported weaker areas of preparation too. Some of those included: preparation in classroom/behavior management, including conflict resolution; working with special needs students (for instruction classrooms), with ADD or LD students, with at-risk students; and in the use of more advanced types of instructional technology. Results indicated that teacher education programs can be improved by giving more emphasis to timely issues, such as inclusion, and to advances in instructional technology.

"THE INFLUENCE OF PROGRAM STRUCTURE VS. LEARNER CHARACTERISTICS ON TEACHER TRAINING OUTCOMES"

Susan M. Kelly and Amy P. Dietrich, The University of Memphis

In a pilot study of teacher education programs at a southern university, statistically significant differences were found between the self perceptions of preservice teachers in preparation programs with varying configurations. The purpose of this subsequent study was to compare perceptions of students in two preparation programs with similar configurations but
differing learner characteristics to determine which factors had the greatest impact on teacher preparation outcomes.

Subjects in this study were 48 traditionally-aged, undergraduate special education majors and 18 graduate-level MAT students. Both received teacher training in cohort groups. Measures of perceived competence in teaching skill areas were obtained from questionnaires administered prior to and after student teaching experiences. Qualitative data were obtained from journals kept by all subjects throughout their student teaching.

A multivariate analysis of numerical data from the questionnaires was conducted to determine possible differences in mean scale scores between the two programs. Pre- and post-student teaching scores were also compared to examine types of changes that occurred in the two subject groups across time. Narrative journal data were then analyzed for patterns that might reinforce or offer tentative explanations for such differences.

Results indicated similarities in coping skills and confidence between the two programs. The sense of confidence gained through cohort training transferred to professional behavior during student teaching. Self evaluation and reflection were strengths that were characteristic of both cohort groups. Differences between student perceptions appeared to be the result of entry-level skills and student maturity levels rather than program components.

12:00 noon-12:50 p.m. SUBSTANCE ABUSE (Discussion Session) Pacific Room

Presider: Lee Thomas, Auburn University

Presenters: "A LONGITUDINAL EVALUATION OF THE CHOCTAW AFTER-SCHOOL PROGRAM"

Linda J. Crone, Mississippi State University, and M. Mae Brown, Mississippi Band of Choctaw Indians

The purpose of this study was to conduct a longitudinal evaluation of the Choctaw After-School Program, a five-year federally funded drug prevention program. Native American youth are considered more "at risk" of substance abuse than any other group in the American population; yet, there is little information that is generalizable from tribe to tribe concerning substance usage or effective prevention.

The Choctaw After-School Program, serving between 500-600 students per year, was a comprehensive program that sought to delay the onset use of substances among Choctaw 12- to 14-year-olds through drug education, physical and cultural activities, tutoring, and after-school supervision.

Data have been collected (yearly) on student drug usage, locus of control, attendance, dropout, and satisfaction of students, parents, and staff. Data were examined and described, looking for any trends providing evidence of program effects. The efficacy of evaluation instruments was examined and is discussed.

An indepth description of the development of the program is also presented. This provides administrators, who may be planning to develop drug prevention programs for Native American youth, the benefits from the experiences, successes, and stumbling blocks that have been encountered in the implementation of this program.

"THE SYNERGY PROJECT: THE EFFECT OF EDUCATION, COUNSELING, AND MORAL RECONATION THERAPY ON AN ADDICTED POPULATION"

Evaluators established a profile of all participants (N=137) in the Synergy Project and of allpersisters (n=49), and established comparisons between the two groups. Goals of the project were to eliminate drug abuse and criminal activity during the two-year period of rehabilitation, reduce the client's involvement in the criminal justice system, and facilitate appropriate interpersonal and relationship behavior options to reduce violent behavior.

They analyzed data from the following: relapse prevention group, orientation group, men's group, women's group, sexual abuse group, cognitive restructuring group, self-esteem group, big book/in-depth modified 12-step study groups, anger management group, moral reorientation therapy group, psychodrama group, educational group, video group, and exercise groups, along with individual psychotherapy and family psychotherapy. A program involving work accompanied the treatment.

Observation of the program, an analysis of records, and conclusions from interviews seemed to indicate the success of the therapeutic self-help groups, an increase in the development of social skills and adjustment to society, the involvement of the community in project activities, the move from extrinsic to intrinsic motivation, and the blending of a myriad of opportunities that leads to a more peaceful, less stressful environment characterized by normative behavior patterns.

"STATUS OF ALCOHOL-RELATED SEXUAL ACTIVITY OF REGULAR AND AT-RISK COLLEGE STUDENTS: A REVIEW OF LITERATURE"

Catherine McMillan, Neelam Kher-Durlabhji, Susan Molstad, and Mike Hanik, Northwestern State University of Louisiana

Alcohol consumption is a significant part of college students' life, and alcohol-related sexual activity presents a major problem for many students. These behaviors often put students at greater risk for HIV and other sexually transmitted diseases. The purpose of this review was to examine the current research related to alcohol consumption and the sexual behavior of at-risk and traditional college-aged students.

Current research indicates that students in both classifications are more likely to abandon safe-sex practices under the influence of alcohol and are also more likely to participate in unplanned sexual activities. The grade point averages of at-risk students are adversely affected by excessive alcohol consumption and may contribute to the high drop-out rate from college. In addition, their chance for completing a degree are jeopardized.

To enhance the retention of at-risk students, those identified with alcohol-related problems need to be targeted for prevention programs. Such programs could be aimed at the responsible use of alcohol and an awareness of the linkages between alcohol consumption and sexual behaviors. Guidelines for such programs emerged from the present review of literature.

12:00 noon-12:50 p.m. PREVENTING SCHOOL FAILURE: ALTERNATIVE PROGRAMS FOR STUDENTS PLACED AT-RISK (Symposium)..............Ship Isle Room

Organizers: Steven M. Ross and Lana J. Smith, The University of Memphis

Presenters: "OVERVIEW" Steven M. Ross and Lana J. Smith, The University of Memphis

During the past year, the presenters have implemented and evaluated several intervention programs designed to help inner-city elementary children succeed academically. The present symposium consists of four papers describing these programs and their research outcomes. Both curriculum and research materials are shared with audience members. Audience reactions and questions are invited.
"SUCCESS FOR ALL' AND ITS EFFECTS: LONGITUDINAL EFFECTS OVER A FIVE-YEAR PERIOD"
Steven M. Ross, Lana J. Smith, Jason P. Casey, E. J. Walsh, and Tracy Lewis, The University of Memphis

The Success for All model (Slavin et al., 1994) is designed to prepare at-risk children to perform at grade level by the third grade through strategies consisting of: (1) cross-grade regrouping in language arts, (2) individual tutoring, (3) reduced class sizes, and (4) cooperative learning. This paper describes the implementation and evaluation of SFA at schools in Memphis, TN (5 years), Montgomery, AL (4 years), Caldwell, ID (4 years), and Fort Wayne, IN (4 years).

"RESTRUCTURING SCHOOLS TO IMPROVE EDUCATIONAL OUTCOMES: FORMATIVE EVALUATION OF THE NEW AMERICAN SCHOOLS DEVELOPMENT CORPORATION (NASDC) SCALE-UP IN MEMPHIS CITY SCHOOLS"
Marty Alberg, Memphis City Schools; Steven M. Ross, Lana J. Smith, John Nunnery, Douglas Hacker, Ann O'Connell, Leslie Phillipsen, Dianne Horgan, and others, The University of Memphis; and Samuel C. Stringfield, Johns Hopkins University

Following a three-year development period, nine school restructuring models are being disseminated nation-wide as part of the New American Schools Development Corporation Phase II Scale-UP. Memphis City Schools (MCS) was named in 1995 as one of 11 jurisdictions that will begin implementing the "break-the-mold" models. The present study presents process and formative evaluation results pertaining to schools' interest and selection of models (April, 1995), MCS' selection of 34 NASDC schools for Year 1 (May, 1995), teacher training (summer, 1995), and implementation (fall, 1995).

"THE ROLE AND SUCCESS OF MAGNET SCHOOLS IN AN URBAN DISTRICT: AN EVALUATION OF VARIED SCHOOL PROGRAMS"

Magnet schools emerged in the 1970s, primarily as a response to desegregation initiatives. Their main purpose was to create "special schools" (such as for performing arts, academic enrichment, or vocational preparation) to induce students to attend schools outside of their own neighborhoods. In the 1990s, such schools continue to exist, although the goals have shifted to place increasing emphasis on dealing with diversity as well as racial integration of schools. The present study, commissioned by the school board of a large urban system, evaluated and compared 10 magnet schools offering alternative programs.

"USING SPECIAL INTERVENTIONS TO BRIDGE THE GAP BETWEEN MINORITY AND NON-MINORITY STUDENTS"
Lana J. Smith, Steven M. Ross, and Jason P. Casey, The University of Memphis

Findings from a quasi-experimental design consisting of two Success For All (SFA) schools and two matched control schools in a midwestern city indicated: (1) overall positive SFA effects on reading performance on both individually-administered reading tests and state-mandated tests, (2) differential program effectiveness in the two SFA schools, (3) some decline in
THURSDAY, NOVEMBER 9, 1995

program effects over time, and (4) relatively stronger program effects for minority than for non-minority students.

12:00 noon-12:50 p.m. ALTERNATIVE WAYS TO PUBLISH SCHOLARLY WORKS: SELF-PUBLISHING AND THE INTERNET
(Training Session.....................................Petit Bois Room

Trainer: Eva A. Thalrer, The University of Tennessee, Knoxville

In the 1990's, it is becoming increasingly difficult to find publishers for scholarly manuscripts. Since some researchers work in important but narrow fields where profits from monograph sales could not cover the high cost of a limited run printing at an academic press, they need other viable means for sharing scholarly work. In addition to ERIC and professional journals, authors may consider self publishing; many worthwhile books would have never reached readers if the authors had not self published them. And since the Internet is having a tremendous impact on information sharing, it is the perfect medium for disseminating research findings.

Objectives of this training session are to increase participants' awareness of alternative ways to publish research, to acquaint them with steps in the publishing processes, and to point them toward sources for assistance. Topics to be covered briefly include copyrighting documents, marketing and publicity, obtaining assistance in the publishing process, creating Home Pages, and using Hypertext Markup Language. The activities in this session (considering the concepts and steps in the processes, examining pertinent examples, and discussing problems and issues) will prepare novices to find additional information and assistance with their own efforts in self publishing and electronic publishing.

12:00 noon-12:50 p.m. ADMINISTRATION (Discussion Session).............Chandeleur Room

Presider: Robert N. Hutchison, Mississippi State University

Presenters: "GRADE CONFIGURATION OF SCHOOLS: PART II"
Bobby J. Franklin and Catherine H. Glascock, Louisiana Department of Education

This is the second paper in a series about possible student differences based on grade configuration. This paper examines possible differences for students in grades 9-12. The secondary environment offers many academic and social negatives that actively interfere with learning. If the premise holds that a continual community (K-12) inhibits some of these negative effects, then differences should exist between traditional high schools (9-12) and K-12 schools for those grade-levels found in both settings.

School configurations can affect children's self-esteem and academic achievement (Harter et al., 1992). Within Louisiana public schools, a random sample was selected from combination (K-12) and high schools (9-12). Grade-level comparisons were made for attendance, suspensions, expulsions, dropouts, and test scores for grades 9, 10, 11, and 12. MANOVA was used to compare the two groups, and statistical differences were found in all grades. Extraneous variables were held constant or included in the design, such as SES and size.

"A QUALITATIVE STUDY OF ALTERNATIVE SCHEDULING PRACTICES IN TENNESSEE SECONDARY SCHOOLS"
Educators throughout the United States are studying various scheduling models for reforming education to meet diverse student needs. To this point, the traditional six-period day has been the predominant scheduling model. Last year in Tennessee, 25 secondary schools implemented alternative scheduling programs, including Block, 4 X 4, and flex models. The purpose of this qualitative study was to determine the successes, problems, and solutions associated with implementing these models. A survey of principals obtained information related to implementation, training, financial support, scheduling, and parent involvement.

Results indicated that teacher concerns related mainly to problems associated with extended instructional time, including covering the curriculum and maintaining students' interest throughout the class. Successes included more varied instructional strategies, improved classroom management, fewer encroachments on teaching, and improved teacher and student morale. Principals also offered advice for implementing alternative scheduling that focused primarily on preparation, training, and involvement of teachers and the community.

The Tennessee State Department of Education has indicated that over 100 schools will be implementing alternative scheduling next year, with more to follow in the near future. The results of this study should help to prepare other schools and school districts to move toward systematic and planned implementation.

"BLOCK SCHEDULING IN THE SECONDARY ARENA: PERCEPTIONS FROM THE INSIDE"

Patricia Davis-Wiley, Angela Cozart, and Marshall George, The University of Tennessee, Knoxville

The explicit purpose of this study was to examine perceptions of selected administrators, faculty, and students in two rural southeastern high schools toward their first year following a block schedule format. Items specifically investigated in this study were: preparation for and induction to block scheduling, comparison of block scheduling to the previous traditional format, and reflections on the efficacy of block scheduling.

Data were collected using a two-pronged questionnaire with open- and close-ended questions in conjunction with follow-up interviews with selected participants. Results were hand-calculated and qualitatively analyzed, reflecting a variety of perceptions from each source and indicating that subsequent years following the block schedule would be needed to better evaluate its efficacy.

"STUDENT ACHIEVEMENT IN BLOCKED AND CONVENTIONAL HIGH SCHOOL COURSES"

William A. Spencer, Auburn University, and Carole Lowe, Benjamin Russell (AL) High School

The advent of block scheduling has brought with it a demand for greater knowledge regarding the effects of this alternative method of scheduling instruction. In particular, how does achievement differ, if at all, under the block approach?

The purpose of this study was to continue an earlier line of inquiry comparing the achievement of students in courses that are taught on a semesterized block schedule with those in which instruction follows the conventional one hour per day schedule. Block courses were offered two hours per day with all work being completed in a semester. In most of the comparisons, the same instructor was used for both block and conventional sections. While the previous study was limited to an examination of only four subject areas and only the ninth grade, the current study expanded both the curricular scope of the groups and the number of grade levels involved.
In most public schools and universities, providing routine student examinations involves considerable time and difficulty in developing, copying, administering, and scoring examinations. Large organizations such as universities have access to computerized testing using scanners and scannable answer sheets, but this is not true of most public school systems.

The authors developed computerized tests that would be feasible for development and use by classroom teachers. Authorware Professional, an icon-based authoring system, was used to develop tests for an undergraduate educational computer technology course. Three instruments were developed for the study: two successive, 30-question unit examinations using a true-false format, and a survey instrument to elicit students' reactions to the tests. The total population of 108 undergraduates participated in the study. The tests were presented in both a computer and paper-and-pencil format. Half of the students were randomly selected to take the first examination on the computer, whereas the other half took the paper-and-pencil exam. The groups were switched for the second exam. Data were analyzed using t-tests.

Results of the t-tests indicated no significant differences between the scores for the two groups. Survey data indicated that students preferred taking the tests on a computer.

"CONSTRUCTING MEASURES COMPOSED OF CAUSE INDICATORS"

Robert H. Bradley and Leanne Whiteside, University of Arkansas at Little Rock

Researchers in the social sciences are familiar with the use and development of measures of human characteristics, such as intelligence, temperament, or social support. These measures are composed of indicators that represent the effects of the latent (unobserved) construct they purportedly measure. That is, the latent human characteristic is thought to generate the observable indicators.

This paper contrasts such measures with those that are composed of indicators that are thought to determine (sometimes called causal indicators) the latent construct, such as risk indices or some environmental measures. For the latter type of measures, the standard psychometric techniques, such as factor analysis and reliability indices, are generally not recommended. The paper gives examples to illustrate the contrast and recommendations on the development and evaluation of causal measures.

"THE KINGORE OBSERVATION INVENTORY AS A SCREENING DEVICE FOR USE WITH PRIMARY CHILDREN"

Elizabeth I. Vaughn-Neely, Southeastern Louisiana University

The purpose of this study was to determine whether the inferences derived from the Kingore Observation Inventory (KOI) as a screening device were sufficiently valid for the identification of potentially gifted youngsters. A stratified sample consisted of 89 second-grade
children ranging in age from 6.5 to 8.7 years. They were assessed with the KOI in the first grade and administered the WISC-III as well as the KOI as second graders. A correlational analysis, discriminant analysis, and t-tests for paired differences were performed using SAS programs (SAS Institute Inc., 1990), version 6.07.

The purpose of the discriminant analyses was to determine a mathematical rule for estimating a classification for an observation based upon KOI results, age, and gender of the subject. Evidence was shown for the effects of age on KOI Percentile scores for the target population. Those children identified as gifted on both the KOI and WISC-III tended to be significantly younger than those who were identified as gifted on the KOI but not on the WISC-III (p=0.01). Thus, it appears that KOI classifications were influenced by intellectual changes rather than behaviors that demonstrated intellectual ability.

"DEVELOPMENT AND VALIDATION OF THE COLLEGE EXPERIENCE SATISFACTION QUESTIONNAIRE (CESQ), AN INSTRUMENT WHICH MEASURES THE SATISFACTION OF THE UNDERPREPARED COLLEGE STUDENT"

Lew J. Hall, Emma Nan Owens, and Genifer M. Hall, University of Southern Mississippi

The purpose of this study was the development of an instrument appropriate for measuring the variables associated with the underprepared college students' satisfaction with the college experience as it related to persistence. Measures of reliability and validity were obtained from three sample populations (n=312). Students' satisfaction was measured along three dimensions, including Academic, Social, and College Preparation. Analyses included readability, alpha reliability, and principal components factor extraction. Alpha reliability coefficient .8955 was obtained from these data, indicating high internal consistency. Three constructs emerged for measuring the underprepared college students' satisfaction (Academic, Social, and College Preparation) from the principal components factor analysis. These three constructs accounted for 58.3% of the explained variance. The CESQ was deemed an appropriate instrument for measuring college students' satisfaction when using an "at-risk" college student population.

1:00 p.m.-1:50 p.m. MULTICULTURAL EDUCATION (Discussion Session) Atlantic Room

Presider: William A. Spencer, Auburn University

Presenters: "MULTICULTURAL DIVERSITY: KNOWLEDGE, SENSITIVITY, AND INSERVICE EDUCATION TRAINING NEEDS OF VOCATIONAL REHABILITATION PROFESSIONALS IN ALABAMA"

Renee A. Middleton, Auburn University

The purpose of this study was to determine the knowledge, sensitivity, and inservice education training needs of vocational rehabilitation professionals regarding multicultural rehabilitation concerns and affirmative action—knowledge and sensitivity. Responses were attained via a seven-item questionnaire obtained from a sample of 205 respondents. Questions were formed to determine professionals' understanding on the difference between multicultural diversity and affirmative action, individuals' support of these concepts/programs, and their agency's corporate culture relative to these issues.

The Pearson chi-square statistic was used for analysis to determine if there were significant differences when gender and racial/ethnic comparisons were made between
THURSDAY, NOVEMBER 9, 1995

respondents relative to specific knowledge and sensitivity questions. Statistically significant differences were found with regards to ethnicity. The observed significance level was less than (p= 0.01).

Based on findings in this study, several recommendations were made to the Management Team of the State Vocational Rehabilitation Agency. These recommendations are shared with sessions participants.

"INVOLVING PRESERVICE TEACHERS IN DISCUSSIONS OF DIVERSITY"

Patricia L. Daniel and Janet E. Benton, Western Kentucky University

This position paper examines the ways that we as educators created safe environments in our undergraduate teacher education courses for students to talk about cultural diversity. We have discovered that creating a safe, open environment for discussion is a critical first step in any examination of topics of diversity. Because public schools may be the only social arena in this nation where different social classes, ethnicities, and genders come together on a regular basis, we maintain the position that it is imperative to actively involve preservice teachers in discussions involving different perspectives.

Our position is based on our experiences as instructors in teacher education courses at two different universities. Throughout our courses, students informed us that openly discussing issues of cultural diversity in a public forum like a university classroom was a new experience. This position paper represents post-instructional reflection on strategies that worked effectively and has allowed us continued exploration of areas that need further consideration. A primary finding is the need to create a safe environment where students can take the risk and break the taboo of silence that insulates these topics of cultural diversity.

"REASSESSMENT OF A PROGRAM FOCUSING ON INSTRUCTIONAL STRATEGIES FOR CULTURALLY DIVERSE PUPILS"

William A. Person, Neil G. Amos, and Robert L. Jenkins, Mississippi State University

The purpose of the study was to reassess a series of intensive summer institutes conducted at Mississippi State University in 1989, 1990, 1991, and 1992 to determine the extent to which institute participants have implemented strategies for working with culturally diverse students. A total of 73 elementary and secondary Mississippi educators participated in the institutes during the four-year period.

On a five-point scale, the participants were requested to complete a 25-item survey consisting of strategies for working with culturally diverse students by indicating the extent to which they have implemented them. Participants were also asked to provide a narrative description of additional strategies that they have implemented since their involvement in the institute.

Preliminary results indicated that the participants continued to be quite assertive in their efforts to address the needs of culturally diverse students through the implementation of the appropriate strategies.

1:00 p.m.-1:50 p.m. TESTS (Discussion Session)........................................Caribbean Room

Presider: George M. Thomas, Mississippi State University
"THE USE OF AN ENTRANCE EXAM FOR PLACEMENT AT THE HIGH SCHOOL LEVEL"

Mark A. Roberts, Lexington (KY) Christian Academy, and Kenneth Clawson, Eastern Kentucky University

This study examined the results of using an entrance examination for placement in math, reading, and language courses with students entering a private high school. A critical concern was appropriate placement of students who enrolled in a private college preparatory high school, who came from public schools with varied academic backgrounds, and reasons for making the change. This study compared the academic success (GPA's during the first semester of students placed in math, reading, and language courses based on their scores on the 3-R's Test compared to new students' grades when no placement tests were used. Fifty-five students (29 males and 26 females) comprised the sample group with a similar group used as a control.

The grade point averages in math, reading, and language courses were all significantly higher (p.01) using the t-test when students were placed in courses based on their scores on the 3-R's Test. More A's and B's were earned and fewer C's, D's, and F's were earned in the experimental group. Therefore, the use of a placement test is highly recommended for placing students moving into a private school in order to help them be more successful in their core courses.

"NONSTANDARDIZED ADMINISTRATION OF THE MISSOURI MASTERY AND ACHIEVEMENT TESTS"

Joetta F. House, Thayer Schools, and John R. Slate, Arkansas State University

Decisions about educational progress and teacher effectiveness are made on the basis of group achievement test scores. A few studies, conducted on the administration of group achievement tests have indicated that teachers fail to administer these tests in a standardized manner. Because of the importance of decisions made from these measures, however, administration must be uniform and objective. In this study, we examined the extent to which teachers at an elementary and secondary school in a rural mid-south town followed standardized procedures in the administration of the Missouri Mastery and Achievement Tests (MMAT).

Eighteen sessions of teacher behaviors were observed. Also, teachers completed an 11-item questionnaire about standardized test administration. All teachers committed errors in MMAT administration, with an overall mean of 10.2 errors. Teachers exhibited errors in not following procedures (57% of total errors), cueing of correct answers (21%), inappropriate responses to student questions (15.8%), and modifying directions (5.5%).

Regarding the survey, only one teacher disagreed with the suggestion that teachers should substitute words in giving directions to help students better understand the directions. Moreover, four teachers disagreed with strict adherence to time limits.

Implications for school and teacher education programs are discussed.

"RELATIONSHIPS BETWEEN TEST MODIFICATION AND ENGLISH PERFORMANCE FOR ELEMENTARY SCHOOL LEP STUDENTS"

Hae-Seong Park and Scott M. Norton, Louisiana Department of Education

The purpose of this study was to determine the relationships between test modifications and English performance for elementary school students. The study utilized data from a sample of 162 Hispanic Limited English Proficiency (LEP) students and 270 Asian LEP
students who participated in the Louisiana Educational Assessment Program (LEAP). The test modifications as independent variables were individual/small group administration (ISG), repeated directions (RD), and use English/native language dictionary without definitions (END). The English performance was measured through five dimensions: Vocabulary, Comprehension, Writing Mechanics, Language Structure and Usage, and Study Skills.

A series of Hotelling’s T² test was employed for each ethnicity and each type of test modification. The results of the multivariate data analysis showed that there is a significant association between RD and English performance for Hispanics, while ISG and RD had statistically significant associations with English performance for Asians. However, the results of the post-hoc tests exhibited a variety of relationships between test modifications and five dependent variables.

The patterns of the relationships between test modifications and English performance were not consistent across two ethnic groups. Based on the results, some policy implications were discussed.

1:00 p.m.-1:50 p.m.  SCHOOL IMPROVEMENT THROUGH USING THE ONWARD TO EXCELLENCE SCHOOL IMPROVEMENT PROCESS  
(Symposium)........................................Ship Isle Room

Organizer:  Jeanne Phillips, Mississippi State University--Meridian Campus

Presenters:  "OTE AT NEWTON COUNTY ELEMENTARY SCHOOL"  
Gary Benton, Mississippi State University--Meridian Campus

"OTE AT PARKVIEW ELEMENTARY SCHOOL"  
Linda Walker, Mississippi State University--Meridian Campus

"OTE AT BAY SPRINGS MIDDLE SCHOOL"  
JoAnne Belk, Mississippi State University--Meridian Campus

The purpose of the symposium is to present case studies of schools that have participated in the Onward to Excellence school improvement program. During the two-year training process, the schools have developed an in-depth profile of student attendance, attitude, and achievement. Goals have been set, a prescription written and implemented, and a monitoring process established. The school practices selected for implementation have been based on the most current research available for study. The Onward to Excellence process is described with three presentations.

Each school, individually reported, is compared using the original school profile and the profile resulting from implementation of the research-based practices. Also, each school faculty utilized the School Improvement Process Assessment, a validated instrument. Significant factors of the faculty’s perception of improvement goals set and the documented evidence of goal attainment are reported.

1:00 p.m.-1:50 p.m.  TECHNOLOGY (Display Session).......................Deer Isle Room

Presenters:  "USING THE INTERNET TO SUPPORT EDUCATIONAL RESEARCH"  
Blake Burr-McNeal and E. Dean Butler, The University of Memphis

The purpose of this display is to exchange information regarding the resources available through the internet to support educational research in the six MSERA states.

In 1994, under Title III of the Education America Act, a total of $5 million was awarded to states to assist in the integration of state-of-the-art technology as part of their state
improvement plans. The primary aim of the Title was to enhance elementary and secondary student learning and staff development. The past year has been one in which state departments of education have joined forces with institutes of higher learning, state legislatures, and other entities to provide information on state education laws and policies, student profiles, and school successes. These state networks are already proving valuable to educational researchers, both as research tools and as dissemination tools.

A hand-out provides an overview of preK-12 networks in the MSERA states. A more detailed summary of Tennessee's education resources on the Internet, the state's long-term technology plans, and their implications for educational research in Tennessee are provided. Discussion focuses on the establishment of a regional education research network for MSERA members.

"THE INTERNET FOR RESEARCHERS: ACCESSING AND DOWNLOADING"
Margaret L. Glowacki and Michele G. Jarrell, The University of Alabama

The purpose of this presentation is to introduce researchers to the Internet. The presentation uses computer simulations to demonstrate several ways to access the Internet and download files, including using FTP and gophering. The demonstration includes downloading different types of files: text (binary and ascii), graphics, etc. A list of Internet-sites of interest to researchers is available. Participants have the opportunity to run the simulations on the computer should they desire to do so. This presentation demonstrates the usefulness of the Internet for accessing information researchers might not otherwise be able to access.

"CONVERTING A PAPER-BASED WORKBOOK TO ELECTRONIC MEDIA (CBI): WHAT WORKS AND WHAT DOESN'T"
Anne-Marie Armstrong, AmerInd, Inc., Pensacola, FL, and John V. Dempsey, University of South Alabama

After six months of development, the computer-based instructional format for a print-based workbook on the principles of instructional design was beta-tested using graduate students enrolled in the principles of instructional design course. The students used either the print-based workbook and the CBI or just the workbook. Six students used the CBI along with the workbook and text for the first half of the course. Six different students used the CBI along with the workbook and text for the second half of the course. Student comment sheets were distributed for both editorial and content suggestions and recommendations. Students were asked to assess the material according to: its ability to help learners meet the chapter and course objectives, how effectively the material was presented in the CBI environment, how easily they were able use the program, and how motivating the program was to learn the material.

Additionally, the CBI was evaluated by the student-users for time required for use, how well the chapter objectives were covered, screen design, feedback given, and whether or not the CBI provided better instruction and/or practice than the print-based workbook. Results indicated that the students felt that the CBI was easier to use than the workbook and provided more effective feedback. However, they also felt that the CBI lacked the depth of instruction that the workbook provided. Because of the importance of the student comments, recommendations, and suggestions, this type of beta-testing of the CBI should take place as early as possible in the development process.

This is a hands-on computer display of the actual program along with the workbook and printed screens. Participants may choose to evaluate the chapters and add their comments to those of the students.
THURSDAY, NOVEMBER 9, 1995

1:00 p.m.-1:50 p.m.  COGNITION (Discussion Session)......................... Caprice Room

Presider:  Scott M. Norton, Louisiana State University

Presenters:  "EVOLUTION OF COGNITIVE STYLES FOR PREPROFESSIONAL EDUCATORS"

F. Morgan Simpson, Sarah C. Portis, Vaughn Snyder, and Lynne Mills, Auburn University at Montgomery

This study examined students' cognitive style at the beginning and end of preprofessional training, and examined students' academic performance in six undergraduate courses. Cognitive styles of 537 students were assessed with the Group Embedded Figures Test (GEFT) when students entered their first education course; 235 students were retested at completion of internship.

Initial and intern field-dependent/independent scores, course grades from six courses, and gender were collected for all subjects. The field-dependent/independent scores were compared with a t-test and correlational analysis. A factorial ANOVA was used to analyze scores and course grades.

Results indicated that preservice educators tended to become more field-independent by the end of the internship experience. Males tended to be more field-independent than females; females performed better academically. Students with higher course grades generally had higher mean embedded figures scores.

"AN EXPLORATION OF THE RELATIONSHIP BETWEEN LOCUS OF CONTROL AND CREATIVE PROBLEM SOLVING AMONG PERSERVICE TEACHERS"

Cynthia L. Beanblossom, Auburn University

The purpose of this study was to explore the relationship between teachers who problem solve from an internal locus of control and those teachers who problem solve from an external locus of control. Measures of locus of control and creative problem solving were obtained from a sample of 70 perservice teachers. Locus of control was measured using the Rotter's Internal/External Locus of Control Scale. Measures of creative problem solving were obtained by scoring constructs of creativity on Finke's Instrument of Creative Cognition.

Creative problem solving scores of the top 20 subjects scoring the highest on internal locus of control were compared with creative problem solving scores of the top 20 subjects scoring the highest on the external locus of control. Results were analyzed. It was found that there is a difference in the relationship between those teachers who creatively problem solved from an internal locus of control and those teachers who creatively problem solved from an external locus of control. Potential teaching implications of problem solving from the two loci of control were discussed.

"TEACHING AS REFLECTIVE PRACTICE"

Rosa L. Kennedy and Amy Wyrick, The University of Tennessee, Knoxville

The purpose of the study was to describe, using qualitative methodology, the use of "critical incident" as a form for teaching/learning by fifth-year teacher interns. The theoretical basis of the study was that of Mezirow (1990) whereby critical reflection as a group process triggers
transformative learning. Transformative learning takes place when a teacher's personal assumptions about a critical incident are analyzed and discussed at length.

The critical incident, written by a fifth-year intern, modeled the way the reflective practice was initiated. Next, a description of the group process of questioning, analysis, and discussion was reported. The small group included veteran teachers as well as other fifth-year interns. The intern's personal assumptions, both before and after the incident, were scrutinized as a means of learning for every member of the group. Finally, a reflective process of how our personal assumptions during a critical situation effect our decision making and how changed assumptions evoke a different action were reviewed.

The conclusion reported the intern's assumptions before the incident and the changed assumptions after the reflective practice process as determined by interview and group audio-tapes. The use of reflective practice as a teaching/learning tool was recommended.

"TEACHERS AS REFLECTIVE PRACTITIONERS: THEIR PERCEPTIONS AND STRATEGIES"

Lynn C. Gillaspie, John D. Light, and Janice Myhan, University of North Alabama

The purpose of this study was to determine if graduates of our teacher education program were using reflective practices in their classrooms and professional lives. Since our university knowledge-base was founded on a reflective model, we wanted to examine how teachers perceived the importance of using reflective practices on a day-to-day basis. We also wanted to establish how important they felt the use of reflection should be in modifying their teaching behavior.

In order to examine the aforementioned relationships and differences, information was obtained from graduate students via a survey entitled Teacher Survey of Reflective Practices. Questions were designed to assess information related to the use of professional practices to modify teaching strategies, the use of activities and behaviors to modify teaching strategies, the use of activities and behaviors to teach others, factors affecting reflective practices, and sources influencing teaching practices.

The data analysis was carried out via ANOVA to discern the degree of the actual use of reflective practices in contrast to whether such practices should be used in modifying classroom instruction. Conclusions were drawn.

1:00 p.m. - 2:50 p.m. INTERVIEW WITH THE EDITORIAL VAMPIRES: PLEASING EDITORS WITHOUT HAVING ALL OF THE BLOOD SUCKED OUT OF YOUR MANUSCRIPT (Training Session)................Petit Bois Room

Trainers: Jeffrey Gorrell and Stephanie Bond, Auburn University; James McLean, The University of Alabama at Birmingham; Bruce Thompson, Texas A&M University; and Larry Daniel, University of Southern Mississippi

The purpose of this training session is to improve researchers' understandings of the editorial expectations of professional journals. Editors and Associate Editors from five professional journals (The Professional Educator, Research in the Schools, Journal of Experimental Education, Educational and Psychological Measurement, and National Forum: the Phi Kappa Phi Journal) discuss issues associated with meeting editorial standards for publishability, clarity, and style.

James McLean, Bruce Thompson, Larry Daniel, Stephanie Bond, and Jeffrey Gorrell address such general topics as the following: journal standards for contribution to the knowledge of the field; submission, revision, and in-press stages of a manuscript; good
THURSDAY, NOVEMBER 9, 1995

manuscript style and presentation; and negotiating revisions. Specific information concerning each journal's expectations and ways of improving publishability are addressed.

Trainers supplement their written comments with a brief, oral summary of their topic and an invitation for participants to engage in colloquy concerning stylistic, formal, and ethical issues associated with manuscript preparation. The session will be highly interactive, allowing for audience participation throughout. Participants are encouraged to bring their questions and concerns to the session.

2:00 p.m. - 2:50 p.m. SCIENCE EDUCATION (Discussion Session)...Atlantic Room

Presider: Joyce Stallworth, Alabama A&M University

Presenters: CONSTRUCTIVIST VERSUS BEHAVIORIST METHODS OF SCIENCE EDUCATION

Kimberly R. Reid and Read M. Diket, William Carey College

In the fall of 1994 a study was conducted to explore constructivist and behaviorist practices among science teachers in Mississippi. A table of random numbers was used to select in excess of 90 districts to receive survey packets. Superintendents were asked to designate a science teacher as respondent for their district. A return rate of 41% (n=40) was achieved for the study. Most respondents taught at the high school level. Teachers averaged 14.2 years teaching experience in the sciences. Forty-three percent of respondents were from the northern portion of Mississippi, 23% were from the central Mississippi, and 35% were from southern Mississippi.

Responses indicated that teachers tended to employ behaviorist types of instruction in their classrooms in areas associated with identifying issues, identifying resources, locating written resources, and planning investigations and activities. Constructivist tendencies were noted for questions originating with both students and teachers (mean 3.0; 1 = student control, 5 = teacher control) and students participating in contacting resources (mean = 3.47). Moderate correlation coefficients were found between the following: identification of resources and location of those resources (r = .48), and contacting resources persons for the class and planning investigations and activities (r = .52).

Researchers suspect that a paradigm shift has just begun among science teachers.

"AN INTEGRATED SCIENCE SEQUENCE FOR PRESERVICE ELEMENTARY TEACHERS"

Debra W. Jackson, Sandra H. Harpole, and Vernon D. Gifford, Mississippi State University

The problem of this study was to determine if participation in one or more core science courses developed as a result of a National Science Foundation (NSF) grant increased the Mississippi Teacher Assessment Instrument (MTAI) rating of elementary education student teachers. The NSF grant, entitled "An Integrated Science Sequence for Preservice Elementary Education Teachers," developed courses that combined model teaching, content material, and science methods designed especially for elementary education majors. The MTAI is an evaluative tool used in Mississippi to evaluate all first-year teachers and student teachers at Mississippi State University. Ten items of the MTAI relate directly to science teaching and were used in this study.

Significant differences were found on two of the 10 indicators: Indicator 22 demonstrates ability to conduct lessons using a variety of teaching methods, and Indicator 35 conveys the impression of knowing what to do. Differences favor student teachers who had participated in the NSF developed courses.
"CRITICAL ISSUES IN SCIENCE EDUCATION IN SUB-SAHARAN AFRICA"

Dennis W. Sunal, R. Lynn Jones, and Cynthia S. Sunal, The University of Alabama

Science teaching and teacher preparation in sub-Saharan Africa is diverse. Efforts at change range from local to large-scale projects to increase the technical capacity of developing countries. What critical issues and needs must be addressed as we begin the next century? With great diversity in culture, time, and space, the approach taken in this study analyzed science education in sub-Saharan Africa beginning with an overview of its status and then developed an indepth analysis of research on critical issues. Those identified were: (1) language transitions and cultural metaphors, including language factors and science learning, and science education research in Africa vs Western Culture, (2) gender issues in science, (3) environmental education, (4) impact of science and technology, (5) preservice and inservice education, and (6) African classroom teaching.

The study involved sampling specific research efforts through databases, original documents, program evaluations, and interviews with African science educators in order to identify patterns and trends leading to critical issues. The melding of modern science with local culture to enhance life in the local setting and national development is occurring. Severe limitations will continue. Nevertheless, the enterprise is moving forward and has made significant gains that inform other regions of the world.

2:00 p.m. - 2:50 p.m.  COLLEGE STUDENTS (Discussion Session)..........Pacific Room

Presider:  Jerry Brooksher Gee, Nicholls State University

Presenters:  "THE EFFECT OF A SEMESTER OF EXPERIENCE ON THE SELF-REPORTED ACADEMIC AND SOCIAL/TRANSITIONAL ANXIETIES OF FIRST-YEAR COMMUNITY COLLEGE STUDENTS"

Douglas L. Adams, Mississippi Delta Community College

This study examined whether a semester of experience affected the self-reported academic and social/transitional anxieties of first-year community college students. Entering freshman (N=356) completed a pretest/posttest administration of a locally developed Likert-scored questionnaire that quantified the intensity of academic and social/transitional anxiety. Pretest and posttest means for this survey instrument were compared via two-tailed t-tests for non-independent variables. Results were computed for all subjects by race, by sex, and by race and sex.

Significant increases (p<.05) were recorded in academic anxiety in the black subjects subgroup (n=156) and in the black male subgroup (n=52). Significant increases (p<.05) in self-reported social/transitional anxiety were recorded by all subjects (N=356) and in the white student subgroup (n=198).

With mean scores in the proximity of the median and in the absence of comparative data, the subjects were classified as neither anxious nor assured. Increases in academic and social/transitional anxiety were recorded among all subjects and in all subgroups except for a decline (-.01) in academic anxiety among white males. Anxiety among first-year community college students generally increased, in some cases significantly.

"LIBRARY ANXIETY: CHARACTERISTICS OF AT-RISK COLLEGE STUDENTS"
THURSDAY, NOVEMBER 9, 1995

Qun G. Jiao, Baruch College/CUNY, and Anthony J. Onwuegbuzie, University of Central Arkansas

Since Mellon's (1986) grounded theory, library anxiety has become a recognized psychological barrier to academic success among college students. In order to measure library anxiety, Bostick (1992), based on Mellon's theory, developed the 43-item Library Anxiety Scale (LAS) comprising five subscales.

The purpose of this study was to use the LAS to examine factors that predict library anxiety. The sample comprised 293 mid-southern and 200 northeastern university students, whose responses were combined, since no difference in mean library anxiety level was found between the two groups (t=1.5, p>.05).

A setwise multiple regression analysis revealed the following variables that contributed significantly to the prediction of library anxiety: sex, age, native language, grade point average, year of study, employment status, frequency of library visits, and reason for using the library.

Discriminant analyses revealed that freshmen reported the highest level of library anxiety associated with "affective barriers" and the lowest level with respect to "barriers associated with using library technology and equipment." The converse was true for seniors.

Based on these findings, recommendations included making both librarians and teaching faculty aware of the characteristics of high-anxious students, as well as increasing the accessibility of anxiety-reducing interventions for these students.

"EDUCATOR PERCEPTION OF UNDERGRADUATE STUDENT HONESTY IN AN ACADEMIC SETTING"

Jimmie N. Smith, Rebecca F. Nolan, and Yong Dai, Louisiana State University in Shreveport

The purpose of the study was to investigate college educators' perceptions of student honesty in an academic setting. Scenarios portraying typical situations were presented to undergraduate university students and educators. The students were requested to reply "yes" or "no" as to whether they would behave in a dishonest manner if they would not be detected. Educators answered the scenarios as they believed students would respond. Educators were divided into three groups based on their rank.

The Mann-Whitney U nonparametric test was used to compare the responses of students and educators. Experience will have an impact on how accurate educators will be in their assessment of student self-reported honesty.

2:00 p.m. - 2:50 p.m. ACHIEVEMENT (Discussion Session)................. Caribbean Room

Presider: Kathy Kramer Franklin, East Tennessee State University


Lon Brown and Clifton C. Addison, Jackson State University

The purpose of this study was to determine the similarities and differences that exist between the top 10% schools and the bottom 10% schools in the state of Mississippi. All publications and evaluations issued by the State Department of Education pertaining to performance of all the schools were carefully examined and analyzed to determine rankings and performances of the schools during the past year. Other kinds of demographic data were also

Chi-square comparisons were used to analyze the categorical data, achievement data with size of school, and economic status of parents with student achievement, indicating a relationship between parent economic status and student achievement (p .05). In addition, school size was also seen to be related to test scores and achievement.

Several characteristics were seen to be related to student achievement, and the study presented information that may serve to determine if the instructional process and curriculum alone could successfully address the needs of students across the state of Mississippi.

"RELATIONSHIPS AMONG NUMBER OF SIBLINGS, INTELLIGENCE QUOTIENTS AND ACHIEVEMENT"

Charles W. Davidson, University of Southern Mississippi

Family configuration has long been suspected by educators as being related to IQ as well as to academic achievement. The purpose of this study was to determine the relationship between number of siblings and academic achievement, and between number of siblings and IQ, while holding constant sex, race, and lunch status.

The subjects for the study were approximately 400 children who attended a rural public school in a southern state. The data were obtained by testing the subjects and from the subjects' cumulative records. Multiple regression analysis was used to analyze the data. Significant relationships were found among a number of sets of variables.

"THE EFFECT OF MULTIPLE INTERVENTIONS ON IMPROVING STUDENT ACHIEVEMENT IN INNER-CITY SCHOOLS"

Less Doll Twillie and Ruby Payne, Memphis City (TN) Schools, and John R. Petry, The University of Memphis, and Jody Powell, State Technical Institute of Memphis

An analysis was made of gain scores of 20 third-grade and 20 fourth-grade students to ascertain the effect of a treatment consisting of textbook materials, computer-assisted instruction, peer tutoring, tutorial assistance, curriculum guide, home visits, parental training and involvement, and teacher guidance as measured by test items relating to competencies required by Memphis City Schools, which are reflective of the Tennessee Comprehensive Assessment Program (TCAP).

Students from both grades were pre- and posttested in reading. Gain scores were compared using dependent t-tests. Significance was found (p<.05) in questions relating to comprehension, decoding and word study, vocabulary, and study skills.

Results suggested that students performed significantly better in reading on posttests following the interventions. Significant changes were credited to multiple use of interventions that included parental involvement and facilitating student academic performance.

2:00 p.m. - 2:50 p.m.  THREADS OF HUMAN AGENCY IN THE FABRIC OF AT-RISK POPULATIONS: TAILORING THE PERSONAL TO THE GLOBAL (Symposium Session)..................................Ship Isle Room

Organizer: Graham E. Higgs, The University of Tennessee, Knoxville
Presenters:  
"STREAM OF CONSCIOUSNESS DANGER VIGNETTES OF DOCTORAL STUDENTS"
Nancy L. Tarsi, The University of Tennessee, Knoxville

"WHO IS RESPONSIBLE FOR THE ADULT STUDENT'S EDUCATION: FACULTY AND ADMINISTRATION OR THE STUDENTS THEMSELVES?"
Joseph L. Armstrong, The University of Tennessee, Knoxville

"SCHOOLS AS HUMAN SERVICE AGENCIES"
Robert F. Kronick, The University of Tennessee, Knoxville

"RETHINKING THE LOCUS OF AGENCY IN THE AT-RISK CONDITION"
Graham E. Higgs, The University of Tennessee, Knoxville

"DAILY PRACTICE OF EDUCATORS AS AGENTS FOR GLOBAL AWARENESS AND CHANGE"
Al N. Lind, The University of Tennessee, Knoxville

Five authors from The University of Tennessee, Knoxville, present and discuss differing perspectives on the concept of human agency as it relates to at-risk populations. The research moves from the highly individualized phenomenological exploration of the danger fantasies of doctoral students to a philosophical exploration of epistemology in the teacher as agent in the global village.

At the micro-level, Nancy L. Tarsi examines the thematic structure of "Stream of Consciousness Danger Vignettes of Doctoral Students" that points to personal agency as figural in the onset, frequency, and intensity of these experiences in doctoral students. She argues that doctoral students as a group are at-risk by virtue of high drop-out rates associated to their position in the academic culture. The implications map to the impact of fear on learning, creativity, and leadership. Her study provides unique and provocative exploration of the concept of human agency at the personal psychological level.

Using a similar population of doctoral students, Joseph L. Armstrong asks, "Who is Responsible for the Adult Student's Education: Faculty and Administration or the Students Themselves?" He has observed and participated with graduate students in the adult education program as they have organized in order to control their own programs. This observation has suggested that not only should students assume responsibility for their education, but that by doing so they may reduce their level of stress and improve their chance for successfully completing their programs. A model for student action is provided and a discussion of agency follows.

Robert F. Kronick, in "Schools as Human Service Agencies," provides an argument for radical reform of school systems based on findings that demonstrate the ineffectiveness of current models to adequately prepare students to survive in today's world. He argues that schools should be seamless organizations in which educators and human service professionals work together as teams. The model proposed here would require new educational models that encourage collaboration and team work among members of a learning community. Human agency is considered to be a product of empowering organizations, examples of which are seen in Charter Schools, Professional Development Schools, Full Service Schools, and other models, that involve parents and students in decision making.

Graham E. Higgs explores the "Locus of Agency in the At-Risk Condition." Agency is formulated as a psychological construct of personality deeply implicated in the relationship between intrinsic motivation, locus of control, personal responsibility, and a connection to the larger social culture. His thesis is that we should reconsider our schooling practices and our conceptions of behavior management in order to build academic self efficacy in individuals and respect for human agency in the culture.

Finally, Al N. Lind explores the epistemology, responsibility, and methodology in
the "Daily Practice of Educators-as-Agents for Global Awareness and Change." Agency themes are explored from traditional theory, eastern traditions, and Robert Pirsig's Metaphysics of Quality.

Each of the presenters participating in this symposium are aware of issues surrounding theory and research methodology associated with their respective populations of interest. Audience participation is encouraged.

2:00 p.m. - 2:50 p.m.  MSERA (Display Session)..........................Deer Isle Room
Presenters:
"THE NEW, IMPROVED, EXTRA-LONGLASTING MSERA ARCHIVES DATABASE: A RESEARCH TOOL FOR INQUIRING MINDS THAT WANT TO KNOW"

David T. Morse, Mississippi State University

A difficult part of the research enterprise is that of locating whether relevant, prior research has been conducted. For over two decades, MSERA members have contributed papers on a dizzying array of topics, many times without later submitting those papers for publication. The holdings of the MSERA archives serve as a useful resource, but had to be accessed by first knowing the title of the desired paper (or at least the author) and the year in which the paper was presented. Searches for relevant papers by topic, author, or year simply were not possible except by hand. Those days are thankfully coming to an end. This display session features the MSERA archives database.

A computer database in dBase format that includes all of the MSERA program entries has been updated, spanning programs from 1987 through 1994. A simple retrieval program is included. Information that may be searched includes: author(s), affiliation, year of presentation, title, type or topic of session, and availability through the MSERA archives. During the session, the use of the database will be demonstrated, and copies are available at no cost. With this tool, researchers no longer need overlook the growing body of knowledge that is disseminated through MSERA when conducting a literature search.

"AREAS OF RESEARCH INTEREST AND EXPERTISE AMONG MSERA MEMBERS"

Dawn M. Ossont, Gerald Halpin, and Glennelle Halpin, Auburn University

The purpose of this project was to evaluate and to identify patterns of research interest and expertise among members of a regional professional research association. Measures of interest and expertise were obtained from self-report surveys completed by a population of 331 individuals submitting proposals for the annual meeting of the organization and by 103 volunteer proposal reviewers.

Initial analyses revealed dominant patterns of interest and expertise in computer applications, assessment and evaluation, and special populations. Other emerging configurations were cognitive science, qualitative research, and subject-specific specialty areas. Implications of these trends for future research, professional practice, and the preparation of professionals are discussed.

2:00 p.m. - 2:50 p.m.  LEADERSHIP (Discussion Session).......................Chandeleur Room
Presider:  Adam Winsler, The University of Alabama
"DEVELOPING LEADERS FOR THE TWENTY-FIRST CENTURY"

Linda T. Coats, Mississippi State University

The purpose of this study was to examine changes in the self-perceived leadership style and leadership adaptability of participants after completing a leadership development course. The central focus of this course was to provide a basic understanding of leadership and group dynamics theories and an awareness of the moral and ethical responsibility of leadership.

The participants in this study were 14 community college students. These students were sophomores and enrolled in the course on a voluntary basis. Because of the structure and planned activities, enrollment was limited to 15 students.

To measure the participants' perceived leadership style and adaptability, the Leader Effectiveness and Adaptability Description (LEAD) Self (Hersey & Blanchard, 1988) was administered at the beginning of the semester and again at the end of the semester. The data obtained from this study were analyzed in descriptive and graphic forms using SPSS. The LEAD Matrix was used to provide feedback on the participants' leadership style and adaptability. To assess the changes in leadership style, t-tests were used.

The results of this study revealed significant changes in the perceived leadership styles of the participants. There was a significant level of adaptability among the participants.

"TRAINING TOMORROW'S COMMUNITY COLLEGE LEADERS TODAY: THE MISSISSIPPI COMMUNITY COLLEGE FELLOWSHIP PROGRAM"

Billy Stewart, Robert N. Hutchison, and Ned B. Lovell, Mississippi State University

The current generation of Mississippi's community college leaders has moved the state's system of two-year institutions into a position of prominence through clear vision, hard work, and tireless dedication. However, many of the incumbent administrators, deans, and presidents are approaching retirement. The purpose of this paper is to describe and evaluate the collaborative efforts of Mississippi State University and the Phil Hardin Foundation in the identification and training of the next generation of Mississippi's community college leaders.

The Mississippi Community College Fellowship Program (MCCFP) was developed in 1994 as a pilot leadership development program designed to identify, develop, and train tomorrow's community college leaders. The Fellowship Program provides leadership training and professional networking for those who aspire to attain leadership positions within Mississippi's community colleges. The MCCFP enjoys the unanimous support of the 15 community college presidents and the Executive Director of the State Board for Community and Junior Colleges.

The participants in the MCCFP take part in six activities conducted throughout the academic year. These include a one-week Leadership Retreat, Service Project, Professional Development Plan, The Phil Hardin Leadership Symposium, Community College Network (CCN) Seminars, and Legislative Training. These activities form the core of the MCCFP leadership experience.

"LEADERSHIP AND INTERPERSONAL BEHAVIOR: A CRITICAL REVIEW OF THE FIRO THEORY"

Linda T. Coats, Mississippi State University

This paper is a critical review of the literature related to the development and usage of the Fundamental Interpersonal Relations Orientations (FIRO) theory. The author argues that
interpersonal behavior, the focus of the FIRO theory, is an essential component of effective leadership. The FIRO theory has been used sparingly in higher education research. The author presents the empirical findings from research conducted in other disciplines that have used this theory and relates these findings and conclusions to higher education leadership. To present a thorough and objective review, the author chronicles this theory from its development in 1958 to its current applications. Consequently, numerous theories identify interpersonal behavior as a part of effective leadership; however, the FIRO theory focuses completely on interpersonal behavior.

"AN EXPLORATORY ANALYSIS OF INSTRUCTIONAL TEAM LEADERS: SCHOOL LEVEL, EXPERIENTIAL AND DEMOGRAPHIC DIFFERENCES"

Peter Strodl, University of South Alabama; Nancy Mims, West Georgia College; and Rosalind Hale, University of South Carolina

The purpose of the study was to identify typical linkages among team members and their leaders. A focal exploratory research problem incorporated in the study was: describe leadership differences among teaching team leaders according to ethnic, experiential, gender, and demographic characteristics.

Measures of teacher leadership were obtained from a questionnaire developed by the principal author, the Teaching Team Leadership Questionnaire (TTLQ) incorporating questions about team leadership, questions on aspects of team identity, and communications. Factor analysis of the TTLQ revealed factors with an overall Alpha reliability coefficient for the survey instrument (> .90). The first factor, the Lead-Teacher factor, provides a perspective of Facilitative Leadership. Significant differences in perceptions of team leadership were found on two factors for all of the demographic characteristics postulated, except for ethnic differences. Ethnic differences were significantly different for the second factor of teacher leadership, but not for the other factors.

Implications of this study are to provide a basis for the development of leadership among potential leaders of teaching teams, and also to bring together concepts useful for improving working relationships among teachers on teaching teams of various kinds.

2:00 p.m. - 2:50 p.m. EFFICACY (Discussion Session)..............................Caprice Room

Presider: Donald DeMoulin, The University of Memphis

Presenters: "THE EFFECTS OF ROUTINES-FOCUSED FIELD EXPERIENCES ON EARLY NOVICE TEACHERS' SELF-EFFICACY AND PERCEPTIONS OF TEACHER ROLES"

Karen Martin Cole, The University of North Carolina-Asheville

This study investigated early novice teachers' senses of self-efficacy prior to and after their first clinical placements. Additionally, the study sought to investigate beliefs held by early novices prior to and after their placements. Participants were 82 novice teachers completing the field experience in their preprofessional experiences course. The control group (n=19) participated in six hours of teaching and unstructured observation. The remaining participants completed 32 clinical hours focusing on teacher roles/responsibilities, including non-instructional duties, in addition to teaching.

Quantitative data and qualitative data were gathered. Quantitative data consisted of pre- and post-clinical responses to a modified version of the STEBI-B, which contains subscales for Personal Teaching Efficacy and Outcome Expectancy Efficacy. Qualitative data were collected through the use of questionnaires, narrative interviews, and self-reported narrative data.
Quantitative results indicated a significant group-test interaction on early novices' Personal Teaching Efficacy scores.

Qualitative data analysis indicated differences on questions dealing with teacher goals, teaching time, non-instructional duties, and classroom management.

Results may indicate that spending larger amounts of time in schools increases novices’ perceived security within schools, thus increasing personal efficacy. Novices may base their beliefs about their own reflectivity on naive assumptions.

"A COMPARISON OF SENSE OF EFFICACY BEFORE AND AFTER CLINICAL EXPERIENCE FOR PRE-STUDENT-TEACHING NOVICES IN AN ELEMENTARY METHODS PROGRAM"

Beth McCulloch Vinson, The University of Alabama

This investigation was conducted in an effort to determine changes in the levels of teaching efficacy, as a function of the clinical experience in six public elementary schools, among pre-student-teaching novices in four subject areas: science, social studies, language arts, and mathematics. The sample included 58 novices who participated in the methods program at The University of Alabama.

Data for the study were gathered before and after full-time clinical experience in the public elementary schools, using two strategies. First, all novices completed 23-item, Likert-type questionnaires. Second, through the use of questionnaire-guided narrative interviews, some of the factors that influence these levels of efficacy were sought. Quantitative comparisons were made between novices’ sense of efficacy before and after clinical experience by utilizing both multivariate and univariate analysis of variance.

Findings revealed statistically significant personal teaching efficacy gain scores (p<.05). Tukey's HSD revealed significant differences between science and social studies, with the latter being the highest. No significant differences were found between the general teaching efficacy gain scores. Results of the study have implications for teacher education programs concerning the measurement of efficacy levels among novices and the determination of specific contexts in which that efficacy can be interpreted.

"KNOWING WHEN YOU KNOW: INCREASING EFFICACY AND MANAGEMENT SKILLS OF TEACHERS IN TRAINING"

E. Jean Newman, University of South Alabama

The study was undertaken with teachers in training to assess whether experiences in a classroom would increase teacher efficacy or self-perceived success at task. Further, the study contained a descriptive component to assess whether management behaviors were different among high versus low efficacy teachers in training.

The teachers in training (n=58) were enrolled in an undergraduate educational psychology class. The task was to target two students in a classroom for specific intervention, choose either an academic or behavioral plan, implement it, and evaluate it. The classroom teacher served as on-site supervisor, with the university professor as consultant. Teacher efficacy was assessed in a pretest/posttest design using Gibson and Dembo's Teacher Efficacy Scale. To assess management behaviors, information was gleaned from reports and logs of teachers in training. Teachers in training spent a minimum of two hours per week with the targeted students for a ten-week period.

T-test results showed a significant (p=.02) and positive increase from pretest to posttest. Analysis of descriptive statistics reflected several differences between the higher versus lower efficacy subjects: more specific target goals, use of small tangible reinforcers, more behavioral interventions than academic ones, and more academic work completed during
The efficacy results supported Bandura's theory. Perhaps more far-reaching, the study emphasized the necessity for teachers in training to learn how to set up behavioral interventions and to experience firsthand the importance of individual attention.

3:00 p.m. - 3:50 p.m.  COUNSELING (Discussion Session)......................... Atlantic Room

Presider: Lee Thomas, Auburn University

Presenters: "THE EXAMINATION OF CODEPENDENT CHARACTERISTICS IN TWO STUDENT GROUPS"

Leslie (Robin) Wilbourn and Kathy Dooley, Mississippi State University

It has been hypothesized in the current literature that individuals who exhibit codependent characteristics are drawn to the helping profession. The purpose of the study was to determine the level of codependent characteristics of counselors-in-training as compared to business students. The Friel Co-Dependency Assessment Inventory was used to assess the level of codependency in the two student groups. The sample consisted of 47 graduate counseling students and 47 graduate business students.

A one-way analysis of variance was used to determine significant differences between the two groups. Results revealed no statistically significant difference between the groups. A chi-square goodness of fit was conducted to determine differences between levels of codependent characteristics within the groups (e.g., moderate-to-severe, mild-to-moderate, or few concerns).

Because no differences were found between the groups, the hypothesis that individuals who exhibit codependent characteristics are drawn to the counseling field may need to be reconsidered. Although this may be an implication for the counseling field, an examination of the levels of codependency may add a different perspective in that the level of codependent characteristics may be a factor to consider.

"LOVE STYLE PREFERENCES IN RELATION TO PERSONALITY FUNCTION"

Margery Ellen Arnold and Bruce Thompson, Texas A&M University

Love is among the most fundamental of human experiences, even though approximately 10% of adults report never having been in love and another 10% report an unwillingness to ever love again. Freud himself noted that various illnesses can originate from the failure to love.

Counselors often see clients who present complaints or issues involving love relationships. Understanding love phenomena is important to facilitating counseling interventions with such clients, and to marriage and family counseling intended to improve relationships. Yet, relatively little scientific information is available about love.

One heated controversy involves whether lovers can be so enmeshed and codependent that their love is dysfunctional. The descriptions of codependence are remarkably similar to the descriptions many people offer regarding so-called true love.

The present study was conducted to explore relationships between features of codependency and preferred love styles. The Hendrick and Hendrick Love Attitudes Scale and the Millon Clinical Multiaxial Inventory were completed by 196 adult university students. Canonical correlation analysis was employed to investigate multivariate relationships among love attitudes and personality functions.
"DIAGNOSING RAPE SURVIVORS WITH POST TRAUMATIC STRESS DISORDER"

Michele E. Caruso and Kathy Dooley, Mississippi State University

Although in the mid 1970’s rape trauma syndrome began describing after effects of rape similar to the criteria for PTSD, crisis theory was the major theoretical framework used to understand and treat responses to rape until the late 1980’s. Studies have found that as many as 76% of rape victims meet the diagnostic criteria for PTSD. Studies on the treatment of PTSD found early recognition of PTSD, firm social support, behavior therapy, drug therapy, and integrative therapy to be successful. Recognizing rape as a traumatic event and treating PTSD as a viable diagnosis for rape victims produces widespread implications. First, general practitioners, who may see few rape survivors, can utilize knowledge of treatment strategies for other types of trauma. Second, those who treat rape victims on a regular basis can increase their treatment options by turning to the literature on the treatment of PTSD.

"LEGAL AND ETHICAL ISSUES INVOLVING THE DUTY TO WARN: IMPLICATIONS FOR COUNSELORS AND SUPERVISORS"

Leslie (Robin) Wilbourn and Christopher H. Skinner, Mississippi State University

The issue of duty to warn has been addressed in legal cases as well as within the mental health profession. This duty resulted from the landmark decision of the California Supreme Court in the case of Tarasoff vs Regents of University of California when the court ruled that a therapist has a legal obligation to warn intended victims of impending danger from their clients. Currently, the American Counseling Association Ethical Codes stipulate to members the ethical obligation to assess clear and imminent danger of clients and notify responsible authorities. The Association for Counselor Education and Supervision Standards for Counselor Supervision stipulate that supervisors should communicate to their supervisees an understanding of both legal and ethical issues.

This paper provides a comprehensive review of the landmark case Tarasoff vs Regents of University of California and a review of other court cases related to confidentiality, privileged communication, and duty to warn. The paper discusses legal and ethical implications for counselors, supervisors, and internship directors to be informed of the ethical obligation and possible legal ramifications.

3:00 p.m. - 3:50 p.m.  SCHOOL IMPROVEMENT (Discussion Session)..............Pacific Room

Presider:  Oneida L. Martin, Tennessee Technological University

Presenters:  "MEASURES OF THE SCHOOL ENVIRONMENT AS A PREREQUISITE TO CHANGE: A STUDY OF A SCHOOL IN TRANSITION"

Dennis J. Sabo, Auburn University, and Lynne Patrick, Auburn (AL) City Schools

The purpose of this study was to underscore the importance of the multiple dimensions of the school workplace when undertaking school change. Specifically, during the change of leadership, the principal and staff needed to understand the prerequisites for change by gathering measures of the work environment as a foundation for dialogue and discussion prior to
and during the change process.

This study was based on a single school at the beginning of the tenure of a new principal. The school's climate committee wanted to carefully define and measure the extent to which the school atmosphere promoted openness, collegueship, professionalism, trust, loyalty, commitment, pride, academic excellence, and cooperation in their school workplace. During a regularly scheduled faculty meeting, the entire staff completed a battery of instruments measuring various organizational dimensions. The data provided the principal and the school improvement committee a snapshot of themselves prior to change efforts. Based on the data, the principal and the school committee developed professional improvement plans, schoolwide improvement projects, and inservice activities to address those areas of their work environment that the literature reports as personal and organizational barriers to school restructuring.

"COLLABORATIVE SCHOOL CLIMATE ACTION RESEARCH FOR SCHOOL IMPROVEMENT: PART II"

Dennis C. Zuelke and Teresa M. Nichols, Jacksonville State University

The purpose of this research was to assess perceived school climate for students in a southern, small-city high school. Data collection involved perceptual survey instrument responses from 43 teachers, 265 parents, and 383 high school students. Descriptive and inferential statistical techniques were utilized for the data analyses. Interpretation and dissemination of findings occurred in meetings between the school's staff and two College of Education professors and during two faculty inservice days.

The professors prepared and presented a research findings implications report to the school's staff along with suggestions for action. School staff determined short-term actions, including a teacher-led panel to update teachers on the teaching of study skills and the assignment of homework, increased administrator visits to classrooms, and use of area business leaders to inform teachers of their expectations for students. Long-term actions included block scheduling and on-going staff development on teaching to learning styles and cooperative learning strategies.

This action research project had steadily moved to the action planning and implementation stages over a two-year time period. The gradual acceptance of project control by the school's staff and diminution of the technical research dominance by the two College of Education professors was occurring.

"IMPROVING CLASSROOM LEARNING CULTURE THROUGH INTERVENTION"

Linda T. Jones, Jack Blendinger, and Cynthia Ware, Mississippi State University

This research was conducted to determine if intervention by university faculty and staff in two K-12 rural schools identified as ineffective by the State Department of Education and placed on accreditation probation because of low academic achievement would have a positive impact on classroom culture. The research design called for establishing a university-school partnership in which selected teachers would become partners in the project. The focus of the project was on creating, strong, positive, classroom cultures that would encourage academic achievement through literacy enhancement and involving parents in their children's education.

Ten teachers from the two schools were selected to be project partners. The teachers established classroom libraries featuring books and related learning materials intended to be sent home for the purpose of developing school-home partnerships that would encourage children to read outside of school. Children's success was recognized and celebrated. The teachers also
conducted "hands-on" workshops for parents designed to help them assist in their children’s learning.

Qualitative methods were used to assess the project’s outcomes. University intervention through a research project emphasizing a partnership approach appears to have had a positive impact on creating and shaping classroom learning cultures.

"MORAL LEADERSHIP PRACTICE WITHIN AN URBAN CONTEXT"

Joseph Murry and Ira Bogotch, University of New Orleans, and Louis Miron, University of California at Irvine

How realistic are a priori definitions of moral leadership with respect to life within urban public schools? Can morality be imposed upon public schools from external authorities, be they religious institutions, government agencies, or court decisions? Conversely, can morality and moral leadership emerge within the context of lived experiences, however difficult for administrators, teachers, and students? This paper looks at the latter possibility from the perspective of Spencer Maxcy's framework on critical pragmatism.

The researchers used three data sources: administrator interviews, student interviews, and administrator-teacher interactions. Looking across the data sets, the researchers identified the values in practice; then, using what Maxcy called process-value, three general findings were highlighted: that democratic communities within schools were primarily interpersonal, situational, and ad hoc; that communications were aligned more closely to organizational and societal goals, rather than to individuals’ needs; and that discussions regarding the aesthetics and intelligences displayed in schools were rare, with participants engaged in either pragmatic struggles for better results or in resistance activities, covert among adults and overt among specific student populations.

3:00 p.m. - 3:50 p.m. PERFORMANCE (Discussion Session)................Caribbean Room

Presider: Barbara Lewis, The University of Alabama at Birmingham

Presenters: "PERSISTENCE AND PERFORMANCE OF REGULAR AND AT-RISK STUDENTS IN A TWO-YEAR PRACTICAL NURSING PROGRAM"

Vickie P. Hawsey, Reid State Technical Community College, and Debra H. Hackett, E. Raymond Hackett, and Sarah D. Carrigan, Auburn University

The Practical Nursing program at a community college experienced increased enrollments and decreased pass rate for the NCLEX licensure exam after changing entrance requirements to admit students whose academic credentials had previously excluded them from the program. This study investigated whether the higher attrition rates and lower pass rates on the licensure exam were related to lower admission criteria and relaxed program continuance requirements.

Data from the registrar's student record files were collected from two groups of practical nursing students over a four-year period. The data included the student's status as a regular admission or special admission, ASSET entrance test scores, grade point average, number of courses failed, regular courses attempted, regular courses completed, developmental courses attempted, developmental courses completed, program completion, and NCLEX licensure exam score.

A chi-square test of significance was employed with a p-value to provide evidence to support the hypothesis that special admission students are less likely to graduate than regular admission students. Of the 664 admitted as regular students, 42.6% had completed the program.
THURSDAY, NOVEMBER 9, 1995

Of the 208 admitted as special students, 25.5% had completed the program. A chi-square analysis of 19.645 with a p-value of .00001 indicated that there was a correlation between entrance status and program completion.

"FACTORS RELATED TO PERSISTENCE IN ENGINEERING: RESULTS OF A QUALITATIVE STUDY"

Susanne MacGuire and Glennelle Halpin, Auburn University

Over half of the students who enter a college or university are likely to leave before getting a degree. In a technical area such as engineering, this proportion is often larger. Poor student retention is a problem that must be addressed if we are to have the educated workforce needed as we move into the 21st century. Central to solving the problem of student dropout is a better understanding of the reasons why students leave. In this study, 24 college students matriculating in pre-engineering at a major state university participated in indepth individual interviews, the purpose of which was to determine why some did not continue with their studies in engineering and, conversely, why some did. Of this group, 12 were dropouts and 12 were persisters. Black and white men and women were represented. Their responses to the interview questions were analyzed for prevailing themes that were verified in order to document the reliability of the findings. Factors found to be related to persisting in engineering are compared/contrasted with those found to be related to dropping out. Implications for the development of retention programs are discussed.

"PREDICTING STUDENT PERFORMANCE ON THE PRE-PROFESSIONAL SKILLS TEST"

James C. Mainord, David L. Naylor, and Kathleen Atkins, University of Central Arkansas, and James Whorton, University of Southern Mississippi

This study was designed to determine if student performance on the Pre-Professional Skills Test (PPST) can be accounted for or explained by measures reflecting accumulated grade point average, ACT scores, freshmen English, and college algebra. PPST scores were obtained on 50 currently enrolled preservice teacher education students that were randomly selected for this study. Raw scores from the Reading, Writing, and Mathematics sections of the PPST served as dependent variables. The grades obtained by the selected preservice students in freshmen English and college algebra, ACT scores, and acquired grade point averages served as independent variables and were cast in linear regression models. The data suggested that at least part of the variance in PPST Reading, PPST Math, and PPST Writing could be accounted for by these variables.

3:00 p.m. - 3:50 p.m. AN EXAMINATION OF THE NATURE AND COMPLEXITY OF TEACHERS' WORK (Symposium).................Ship Isle Room

Organizer: Carolyn Reeves-Kazelskis, University of Southern Mississippi

Presenters: "OVERVIEW"
intellectual functioning, and (2) the appropriate occupational label for describing the nature of teachers' work. At the beginning of this symposium, the audience is invited to respond to items assessing the complexity of teachers' work so that they may compare their responses to those of the sample included in the study reported here.

"TEACHERS' WORK: ISSUES RAISED IN THE LITERATURE"
Gahan Bailey, Mick Gilhool, and Mildred E. Kersh, University of Southern Mississippi

A review of the literature indicated the lack of agreement among researchers about: the complexity of teachers' work, the appropriate occupational label for describing the nature of teachers' work, the reasons teachers' work receives lower prestige and earnings than occupations that require similar professional preparation and licensing, the best approach for comparing teachers' work to other occupations, the extent to which educational reforms impact teachers' work, and the length of teacher preparation as well as the most appropriate place for preparing teachers. The literature related to these issues and the theory base supporting measures of work complexity are summarized.

"DEVELOPMENT OF AN INSTRUMENT TO ASSESS THE NATURE AND COMPLEXITY OF TEACHERS' WORK"
Dan Fontenot, Sirpa T. Grierson, and Carolyn Reeves-Kazelskis, University of Southern Mississippi

The U. S. Department of Labor's ratings of the complexity of teachers' work, using the Definitions of Worker Function Scales (DWFS), were questioned. The worker function scales were redefined to make the scales more applicable to teachers' work. Based on the redefined scales, an instrument, the Inventory of Teacher Tasks (ITT), was developed to assess the nature and complexity of teachers' work. A pilot study using the ITT produced acceptable score reliability. Copies of the DWFS, the redefined scales, and the ITT are presented and discussed.

"PRESERVICE AND INSERVICE TEACHERS' RESPONSES TO THE INVENTORY OF TEACHER TASKS"
Ben Rushing, Mary Nell Bullock, and Richard Kazelskis, University of Southern Mississippi

The purpose of the study was to examine the nature of teachers' work by assessing the functions (tasks) performed by teachers and the level of complexity associated with each function. A sample of 74 preservice teachers and 230 inservice teachers responded to the ITT.

Data analyses indicated that inservice teachers frequently perform five functions related to data, 12 functions related to people, and five functions related to things, with functions related to data and people scales representing the highest levels of complexity. The means of preservice and inservice teachers differed significantly (p < .006) for the data and things scales, and significant differences (p<.05) between the means of the two groups were found for 18 of the 48 ITT items. Pre- and post-student teaching responses of preservice teachers differed significantly (p< .05) for the people scale, and significant differences (p<.05) between the pre- and post-means were found for 16 of the 48 ITT items. None of the demographic variables examined made significant contributions to preservice and inservice teachers' perceptions of teaching tasks.

3:00 p.m. - 3:50 p.m. STATISTICS (Discussion Session)................. Chandeleur Room
Presider: Charles M. Achilles, Eastern Michigan University
THURSDAY, NOVEMBER 9, 1995

Presenters: "CONSIDERING POWER IN THE SELECTION OF SAMPLE SIZE"

James E. McLean, The University of Alabama at Birmingham, and Stephen W. Hebbler and Ramaswamy Balgopal, The University of Alabama

The question most often asked statisticians by researchers preparing for a study is "How large a sample do I need?" While an answer to this question is provided in most elementary statistics books and in articles such as the often cited one by Krejcie and Morgan, these answers often ignore the concept of power. This leaves one to wonder what the power of their solutions are and, indeed, if power should be a consideration. The purpose of this paper is to present a derivation of the power of several popular sample size determination solutions, suggest formulae that incorporate power, and present several tables and software that illustrate the use of these formulae.

It can be shown that popular formulae for sample size determination assume a power of .50. Minor modifications in the formulae allow for the selection of power. For example, a researcher wishing to have a power of .75 could incorporate that into the selection. The paper presents modified formulae, sample size tables, and computer software for estimating population proportions, means, and differences between means with powers of .50, .75, and .90. The formulae could be used to estimate sample sizes for any power between .01 and .99.

"AN INVESTIGATION OF THE STATISTICAL POWER OF INFERENTIAL RESEARCH PUBLISHED IN MATHEMATICS EDUCATION JOURNALS"

Regina F. Halpin, Mississippi State University, and Kenneth E. Easterday, Auburn University

The purpose of this paper was to conduct a post-hoc power analysis using the major statistical procedure of 100 inferential studies sampled from the literature published during the past five years, 1988 through 1992, inclusively, in the following three mathematics education journals: Journal of Research in Mathematics Education, Educational Studies in Mathematics, and School Science and Mathematics. The articles were examined to determine the post-hoc statistical power value of the major inferential procedures, if the research methods applied were appropriate for the research design, and if the values and methods for determining the statistical power, level of significance, effect size, and sample size were reported.

The average post-hoc statistical power of the sample indicated that statistical power was neglected as reported by researchers. A discussion is presented concerning how the neglect of these statistical parameters affects the results of research designed to address issues in mathematics education.

Finally, recommendations are given to encourage current and future researchers and reviewers of mathematics education journals to consider statistical power analyses an essential component of the planning stage of every inferential research design for determining the adequate level of significance, effect size, and sample size needed to correctly evaluate the null hypothesis.

"UNDERSTANDING THE SAMPLING DISTRIBUTION AND ITS USE IN TESTING STATISTICAL SIGNIFICANCE"

Nancy Ann Breunig, Texas A&M University

Although researchers have become increasingly disenchanted with statistical significance testing, particularly since the publication of the 1994 APT style manual, it remains important to understand the logic statistical significance testing so that the limits of such tests will
be appreciated. All test statistics can be conceptualized as any sample statistic divided by the standard deviation of repeated estimates of the same statistic. This standard deviation of the so-called sampling distribution is sometimes called the standard error of the statistic.

This brief tutorial explains the sampling distribution and how its standard deviation either is calculated based on statistical assumptions or is empirically estimated using logic such as the "bootstrap." Computer programs that can be used to teach students how sampling distributions are created are described.

"RESEARCH METHODS, IDEOLOGY, AND VALUES"

Jeffrey P. Aper, The University of Tennessee, Knoxville

Differences in methodological orientations described by various researchers and theorists are grounded in ideology and values. However, these methodological differences need not lead to a conclusion of complete relativism in the search for standards to evaluate research. There are appropriate criteria for evaluating research of all orientations, and common values and social purposes underlie most, if not all, educational research. Methodological debate need not be "resolved," since it is out of this dialectical, if untidy, process that values, methods, and application can mix to provide a closer connection between research and practice.

3:00 p.m. - 3:50 p.m.  LEARNING STYLES (Discussion Session)................. Caprice Room

Presider: Darlene Ogdon, Eastern Kentucky University

Presenters:

"THE RELATIONSHIP BETWEEN STUDENT AND FACULTY LEARNING STYLE CONGRUENCY AND PERCEPTIONS OF THE CLASSROOM ENVIRONMENT IN COLLEGES OF TEACHER EDUCATION"

Patrick N. Kariuki, Milligan College

The purpose of this study was to determine the extent of congruence between teachers' and undergraduate education majors' learning styles in selected colleges of the Tennessee Association of Colleges for Teacher Education, and to determine if the style congruence was related to student perceptions of the classroom learning environment.

Kolb's Learning Style Inventory and the Adult Classroom Environment Scale were administered to 203 students and 10 teachers. Data were analyzed using measures of central tendency and measures of dispersion, tests for dependent (correlated) means, tests for independent means, and Pearson product moment correlations.

Results indicated that the predominant learning style for both students and teachers was Accommodator. However, the teachers incorporated logical thinking, systematic thinking, and intellectual thinking in their learning behavior, while the students preferred to learn by passively viewing situations from different points of view. Matching students' learning styles with those of teachers was not found to be related to the ratings of the classroom environment. Significant relationships were found to exist between all classroom dimensions except student influence.

"LEARNING STYLES: MAKING A DIFFERENCE WITH HYPERMEDIA?"

Karen L. Rasmussen and W. Gary Howard, University of West Florida, and Gayle V. Davidson, University of South Alabama
Intuitively, we know that students learn differently. Taking into account individual differences, such as learning style, can affect the structure and presentation of material. The use of hypermedia offers a unique opportunity to design tailored programs to meet individual needs. In this study, student learning style was assessed first. The study was conducted over three semesters. A pretest-posttest control group, with intact groups, design was used (n=125). During the first semester, one group was instructed traditionally (n=54). The other group, in the second and third semesters, completed a hypermedia lesson (n=71). As predicted, means for both groups increased after instruction.

A more interesting aspect of the results involved the examination of performance in relation to the learning style. Using Kolb's theory of learning style, we examined dimensions of learning, abstract-concrete and reflective-active, to discover what types of students learn best in different situations. Initial results indicated that concrete-active learners learned best through hypermedia instruction and abstract-reflective learners preferred traditional methods such as lecture. These results can be used by professional educators to design effective instruction that considers the influence of learner individual differences.

"A STUDY OF RELATIONSHIPS BETWEEN PERCEPTUAL MODALITY DOMINANCE AND CHOICE OF COLLEGE MAJOR"

Marsha Butler Tindell, The University of Tennessee, Knoxville

This study focused on the relationships among advanced students' perceptual learning style(s) and their college majors. Forty college seniors representing four academic majors (architecture, engineering, human performance/sports studies, and social work) were tested using the MMPALT-II (Multi Modal Paired Associates Learning Test), an in-mode assessment requiring the individual to remember and discriminate in seven perceptual modalities (print, aural, visual, interactive, haptic, kinesthetic, and olfactory). Deans/department heads representing each of the four majors studied were also interviewed and asked to predict the dominant perceptual learning styles of "successful" students in their academic areas.

All seven perceptual styles manifested themselves in this university population; however, olfactory was not a dominant learning mode for any of these students. Secondly, college seniors in a given major exhibited similar patterns of perceptual learning style dominance as measured by the MMPALT-II, but there were also differences in styles among them. Thirdly, college administrators representing the academic majors studied were not always able to correctly predict the dominant styles of successful students in their programs.

These and other results have important implications for structuring further research and for the examination of current advisement and counseling procedures as well as instruction and curriculum development.

"DEVELOPMENTAL STUDY OF EFFECTIVE INSTRUCTIONAL ACTIVITIES FOR PERCEPTUAL MODALITY DOMINANCE IN TENNESSEE MARKETING EDUCATION"

Patricia S. McCurry, The University of Tennessee, Knoxville

The purpose of the study was to determine the most effective instructional activities for Marketing Education instruction and to classify those activities into a framework according to perceptual modality. During Phase I of the study, the population of 138 Tennessee Marketing Education instructors was surveyed to determine effective instructional activities drawn from the Tennessee Curriculum Guide for Marketing Education. During Phase II of the study, a 10-member, national panel of experts used the Delphi Technique to classify the instructional activities according to perceptual modality dominance. The activities were classified both at
dominant and secondary levels using the perceptual elements print, aural interactive, visual, haptic, kinesthetic, and olfactory exclusive to the Multi-Modal Paired Associates Learning Test, Revised (MMPALT II).

The hierarchy of effective instructional activities from Phase I of the study was combined with the perceptual modality element classification for each activity. The result was an instructional framework that combined the ordered and classified activities with the hierarchy of perceptual learning modalities based on past research. The framework, which lists both dominant and secondary element classifications, may be used by educators in instructional planning for meeting the needs of the individual learner based on her/his dominant perceptual learning modality.

3:00 p.m. - 4:50 p.m. FOCUS GROUP INTERVIEWS: CONDUCTING AND REPORTING (Training Session) .................. Petit Bois Room

Trainers: Carol Plata Etheridge and Lei Weiping Wang, The University of Memphis; Fee -- $20.00

This two-hour session introduces education researchers to techniques for conducting successful focus group interviews that yield meaningful data. Participants are guided through each step, including planning and conducting the group as well as recording, analyzing, and reporting the data. Participants learn how to sequence questions, establish a facilitating tone for discussion, and establish ground rules at the beginning. Additionally, techniques for focusing the discussion, probing, and managing particular personality types are demonstrated. Tips for recording analyzable notes in the most efficient manner with and without a computer are presented. Finally, participants are introduced to an analysis sequence and options for reporting findings.

Participants are engaged in role plays to practice some elements and will receive a handbook for future reference.

4:00 p.m. - 4:50 p.m. MATHEMATICS (Discussion Session).............. Atlantic Room

Presider: Marian Talley, Jackson State University

Presenters: "MATH ALL DAY: USING MATHMOBILES"

Lavada J. Parmer, University of Southern Mississippi

This session discusses the development and details of a program designed to saturate kindergartners in the Mobile area, throughout the day, with opportunities to use an overhead projector and a variety of manipulatives to demonstrate and communicate math concepts before their peers. The program emphasizes verbalization of ideas and discoveries as the students use the overhead projector in problem-solving and reasoning activities. Research is discussed related to children's use of language, which indicates it is important for them to verbalize what they are doing in order to internalize concepts. The Mathmobile Program is based on the premise that the more children discuss, analyze and reflect on math processes, the more competent they will become at evaluating solutions and communicating math learnings.

The Mathmobile Program incorporates a learning sequence that includes awareness, exploration/discovery, and utilization. Details regarding an assessment plan that evaluates concept development based on processes and products, feelings, and dispositions are also presented. The prime goal of the program is to involve children in authentic learning experiences that will help them solve problems successfully in both educational settings and in everyday life.
"EFFECTS OF HEURISTIC SET ON THIRD GRADERS' WORD PROBLEM-SOLVING SKILLS"

Marilyn L. Larmon and Dana G. Thames, University of Southern Mississippi

This study focused on the instructional use of three heuristic sets as a means for improving word problem-solving skills in mathematics. Subjects were 138 third-grade students who were randomly assigned to classrooms and to one of the three treatment groups.

Data were collected over a five-week period. The first week consisted of the administration of a pretest, and the fifth week, the posttest. Three instructional days followed by a practice test given on the fourth day were included in each of the three consecutive weeks following the administration of the pretest.

Data were analyzed using analysis of covariance procedures. The effects of the three heuristic sets on third graders' abilities to choose the correct operation yielded statistically significant (p<.05) results. Also, the effects of the three heuristic sets on third graders' abilities to correctly solve three types of word problems yielded statistically significant (p<.05) results. All three groups improved significantly over the first two instructional weeks in their abilities to choose the correct operation necessary in order to solve the word problems.

"CHILDREN'S ATTRIBUTIONS OF SUCCESS IN MATHEMATICS: A STUDY OF BOTH PARENT AND CHILD"

Mark A. Davenport, Patricia A. Whang, and Pamela C. Boyd, Auburn University

This study examined the relationship between children's self attributions of mathematics success and parents' predictions of the same. Instruments designed to measure several dimensions within attribution theory, as defined and measured by Nicholls, Cobb, Yackel, Wood and Wheatley (1990) were administered to 309 student/parent pairs at a small, suburban public elementary school in central Alabama. Data from the 114 pairs that returned complete instruments were reduced to the following theoretically consistent dimensions: task-involvement, intrinsic motivation, and extrinsic motivation. These dimensions were identical for both the parent and child data sets. A multitrait (attribution)-multimethod (parent/child) model was constructed and analyzed using confirmatory factor analysis as described by Byrne (1994). The results provided evidence for the validity of the attribution constructs and limited evidence that parents are not good predictors of their children's attributions of math success. Some interesting yet nonsignificant relationships are discussed.

"SCHOOL ACHIEVEMENT, AGE, TYPE OF SCHOOL ATTENDED, AND STUDENTS' PERCEPTION OF PARENTAL EMOTIONAL SUPPORT FOR MATH"

Jupian J. Leung, University of Wisconsin-Oshkosh

The purpose of this study was to determine if students' perception of parental emotional support for math was related to their age, gender, type of school attended (public vs. Roman Catholic), socioeconomic status, and school achievement. A total of 903 sixth-, eighth-, tenth-, and 12th-grade students in an east-central region of Wisconsin responded anonymously to a questionnaire developed by the author.

Results from factor analysis and stepwise multiple regression analysis showed that students' school achievement contributed the most to the prediction of their perception of parental emotional support for math (measured by a seven-item factor/scale with a Cronbach's
alpha of .80). Students' age and type of school attended also contributed significantly to the prediction above and beyond that of school achievement. Specifically, higher achievers, younger students, and students attending public schools perceived greater parental emotional support for math than lower achievers, older students, and students attending Roman Catholic schools. Intercorrelations among the five predictors ranged from non-existent to low (less than .27). The implications of these findings for educational practice are discussed.

4:00 p.m. - 4:50 p.m. EXCEPTIONAL EDUCATION (Discussion Session)........Pacific Room

Presider: Robin Groves, Auburn University

Presenters: "THE IMPACT OF WHOLE LANGUAGE TEACHING ON LANGUAGE DEVELOPMENT IN AT-RISK, LEARNING DISABLED, ELEMENTARY-AGED CHILDREN"

Marilyn Houston-Coleman and James C. Coleman, Tougaloo College, and Lee Napier and Georgia Napier, Jackson State University

The purpose of the study was to assess the attitudes and perceptions of elementary school teachers toward the use of the whole language approach to teaching and its impact on language development of at-risk, learning disabled students.

The subjects for this study were 50 elementary school teachers who were currently teaching at-risk, learning disabled students using the whole language approach. Each participant was sent a questionnaire as a means of soliciting a response toward the effectiveness of their teaching method and obtaining specific demographic information.

Data analysis revealed that overall the teachers surveyed responded positively toward the whole language approach as being an effective teaching method for improving language development of at-risk, learning disabled children. However, teachers surveyed were more positive about the effectiveness of the program in the areas of integrated experiences and existing learning environment. A majority of the teachers opposed using a basal text.

The results of this study suggested that the whole language approach should be considered as a possible viable option for teaching at-risk, learning disabled students, and empirical research should be considered to more effectively assess the impact of this learning approach on achievement.

"TEACHING SPELLING WITH STUDENTS WITH LEARNING DISABILITIES: A REVIEW OF SPELLING RESEARCH"

Seobang Ch Kim, Auburn University

The purpose of the presentation is to provide guidelines on the development of effective methods for improving spelling achievement with students with learning disabilities in the elementary school. Studies on teaching spelling are reviewed under three major sections: spelling problems of students with learning disabilities, research findings on spelling instruction, and effective spelling programs for students with learning disabilities. First, descriptive studies that determine spelling problems students with learning disabilities experience in school are presented. Issues such as ways that students with learning disabilities employ to spell words, including differences between the strategy use of learning disabled and general education students are discussed. Second, intervention studies on spelling instruction are presented. Finally, suggestions for spelling instruction are discussed in terms of developing more effective spelling methods for poor spellers. In particular, teaching spelling using a variety of medial techniques are discussed.
"STUDENTS WITH LEARNING DISABILITIES AND ARITHMETIC WORD-PROBLEM SOLVING: STUDENT CHARACTERISTICS AND INSTRUCTIONAL APPROACHES"

Hollis E. James, Auburn University

The purpose of this presentation is to identify the learning and behavioral characteristics of students with learning disabilities (LD) and discuss how these characteristics impact performance in arithmetic word-problem solving. 

First, a review of research in arithmetic word-problem solving with students with learning disabilities is presented. Special emphasis is given to descriptive studies that have attempted to document the strategies LD students use when solving arithmetic word problems.

Next, a detailed review of published research that has documented the effectiveness of various approaches to teaching LD students arithmetic word problems is presented. The focus of this review is on studies that have investigated the relative effectiveness of explicit problem-solving strategies with other approaches.

The presentation concludes with a proposed outline of an effective instructional program for teaching LD students arithmetic word problems. Included are proposed teaching strategies and detailed correction procedures that can be used with students with learning disabilities.

"EFFECTS OF COMPUTER INTERACTION AND COMPUTER-ASSISTED INSTRUCTION WITH EMOTIONAL-BEHAVIORAL DISORDERED AND EXCEPTIONAL CHILDREN"

Rebecca B. Carpenter, Ola Mae Jones, Rinsey McSwain, and Ann Rushton, William Carey College

Previous research has found that using CAI with EBD students can improve behavior. The purpose of this study was to analyze improvements in behavior, academics, and self-efficacy when utilizing computers in the instructional process. 

A quasi-experimental design was used by the researchers in three learning environments with a total of six subjects. The first group was drawn from inclusion students, the second group was drawn from a self-contained special education class, and the third group was drawn from students at a day treatment facility. Data that were collected through teacher observation, test scores, and the SEAT test, were analyzed and interpreted using multiple baseline graphs.

The findings validated the hypothesis that using CAI with EBD and exceptional children can improve behavior, facilitate learning, and increase self-efficacy.

4:00 p.m. - 4:50 p.m. NEW DEVELOPMENTS IN WHOLETHEME-CONSTRUCTIVISM
(Symposium) Ship Isle Room

Organizer: Asghar Iran-Nejad, The University of Alabama

Presenters: "AN OVERVIEW OF WHOLETHEME CONSTRUCTIVISM"
Asghar Iran-Nejad, The University of Alabama

Constructivism is becoming an increasingly popular approach in education. Contrasted with the view of education as the transmission of knowledge to passive students, constructivist education stresses the active role learners play in constructing knowledge. However, traditional constructivism is too general an approach to be clearly distinguishable from the knowledge-transmission perspective. As a result, much of the so-called constructivist
research consists of knowledge transmission teaching and research practices fraught with constructivist buzz words. Derived from constructivist-type developments in neuroscience and biofunctional cognition, wholetheme constructivism offers the foundation for working toward an indepth understanding of some the major developments in current educational thinking. The presentations in this symposium represent significant progress toward an indepth understanding of such educational issues as reflective practice, intercultural education, brain hemisphericity, and the nature of the role of background knowledge.

"COMPARING TRADITIONAL AND WHOLETHEME CONSTRUCTIVISM"
Jeffrey Choron, The University of Alabama

With the variety of interpretations of constructivism and the confusion with its implications, there is widespread concern voiced by those who warn that misunderstandings of the general notion of constructivism will lead to disenchantment with constructivism and its abandonment. This paper addresses these concerns and their resolution from the perspective of wholetheme constructivism.

"REFLECTIVE EDUCATIONAL PRACTICE FROM THE PERSPECTIVE OF WHOLETHEME CONSTRUCTIVISM"
David A. Heflich and Asghar Iran-Nejad, The University of Alabama

Inspired by the work of Schon and Dewey, educators today consider reflective practice as a viable alternative to the technical-rational paradigm that has historically dominated educational thought in America. This presentation discusses how a deeper understanding of reflective practice may be achieved from the perspective of wholetheme constructivism.

"THE INTUITIVE KNOWLEDGE BASE: THE ROLE OF PRIOR KNOWLEDGE IN WHOLETHEME CONSTRUCTIVISM"
Asghar Iran-Hejad and Doug Cound, The University of Alabama

Traditional constructivism views the role of prior knowledge in learning in terms of discrete schemas, conceptual frames, and semantic networks. This paper discusses research suggesting that learners' intuitive knowledge base provides a more comprehensive, more flexible, and more readily available source to represent the influence of background knowledge on learning.

"WHOLETHEME CONSTRUCTIVISM AND WHOLE-BRAIN EDUCATION: EDUCATIONAL IMPLICATIONS OF THE RESEARCH ON LEFT- AND RIGHT-BRAIN HEMISPHERES"
Amany Saleh and Asgar Iran-Nejad, The University of Alabama

The left side of the brain has been said to process speech along with logical, rational, convergent, objective, and sequential tasks. The right side of the brain is thought to process nonverbal, spatial, musical, and analogical information. This paper discusses the research on brain hemisphericity from the perspectives of traditional and wholetheme constructivism.

4:00 p.m. - 4:50 p.m.  HIGHER EDUCATION (Discussion Session)..........Chandeleur Room
A number of studies have suggested that an increasing number of faculty will be leaving higher education through retirement or resignation and that there will be a decreasing number of replacement candidates overall. This paper presents the design for a planning model that could be useful to estimate the impact of faculty hiring, promotion, and separation strategies. This model is illustrated with data from one college within a land-grant university. At interest is the ability to understand and predict faculty appointments, tenure, and age distribution.

Time-dependent Markov chain models have been used successfully as modeling and predicting tools in manpower forecasting. It is suggested that a similar strategy could be used to predict faculty hiring needs and patterns. Such a Markov chain model would be a matrix where each row and column corresponds to a current faculty state such as age, tenure status, retirement, resignation, or death. The matrix contains coefficients calculated from historical data that refer to the probability of faculty members moving to different states. As a modeling tool, the transition probabilities can be adjusted for different forward years to represent changes in external conditions or institutional policy.

Assessment in higher education includes the potential for colleges and universities to lose both their funding and accreditation if students do not meet minimum achievement expectations. Assessment has become a legislated fact in at least 11 states. Calls for assessment, currently heard in several states, raise issues beyond the classroom and individual higher educational institutions. Indeed, some 70% of all United States institutions of higher education are engaged in the development of programs of assessment. However, the calls for assessment and the reexamination of higher educational priorities may conflict with some of the basic tenets upon which higher education has traditionally operated. In effect, assessment may challenge academic freedom as well as tenure and promotion policies and practice.

For years, higher educators have debated the relative importance of research versus teaching and service. While research and publication have come to be the hallmarks of the productive higher educator and strong factors in decisions made relative to both tenure and promotion among professorial ranks, assessment may force reexamination of values and of traditional processes for rewarding faculty activity in service, teaching, and scholarship. Assessment is perhaps the most difficult and important practical, legal and philosophical issue in contemporary higher education.

Current standardized students' satisfaction instruments assess satisfaction as if it
is a static construct. Furthermore, the traditional assessment format is a satisfaction-dissatisfaction question measured on a Likert-type scale that ranges from "strongly dissatisfied" to "strongly satisfied." This format is grounded in the job satisfaction theory of the 1970s and a "student as employee" philosophy. With the current "student as consumer" philosophy, we hypothesize that the traditional methods of satisfaction assessment based on job satisfaction theory may not be reliable.

To investigate the student satisfaction process, we used an instrument grounded in the disconfirmation theory of customer satisfaction. Data were gathered from undergraduate students attending a comprehensive regional university. Respondents completed a questionnaire at the beginning of the spring semester on their expectations (n=165) and then completed a follow-up questionnaire at the end of the semester on their experiences (n=104). Included in the follow-up questionnaire was the traditional satisfaction/dissatisfaction question. In a preliminary analysis of the data, the disconfirmation process indicated that students were dissatisfied with their educational experience. However, on the traditional question of satisfaction, students indicated that they were satisfied with their experience. This discrepancy in findings between methods of assessment supported our hypothesis.

"THE ROLE OF A FACILITATOR IN TQM IMPLEMENTATION IN BUSINESS AND HIGHER EDUCATION: A TWO-CASE STUDY"

Nancy Owens Bartell and W. Hal Knight, East Tennessee State University

Total Quality Management (TQM) is a philosophy and process that is used in both business organizations and institutions of higher education. Facilitators involved in TQM implementation need to be cognizant of organizational differences and use facilitation methods appropriate to the type of organization undergoing change.

The purpose of this paper is to report findings of two case studies that investigated the facilitator's role in implementing TQM. The research case analysis used qualitative evaluation and research methods and compared a TQM facilitator's role in the training department of a major manufacturing firm and in a school of applied science and technology at a regional university.

The study took into account each unit's contextual factors (mission, culture, structure, communication and decision-making processes, and reward systems) and investigated three phases of implementation: policy formulation, technical and administrative learning, and institutionalization or sustained commitment.

Findings of major organizational differences are discussed as well as facilitator skills and methods used in the TQM change process. Barriers to facilitation are examined. Finally, recommendations on factors that facilitators should consider when implementing TQM in different types of organizations are presented.
women's colleges as compared to their coed college counterparts. Results from a number of studies have indicated generally more positive outcomes for women's college students and graduates in comparison to co-ed college women. Some researchers have suggested that women in coed classrooms receive less attention from their faculty, while women's college students feel more positive about their classroom experiences. They also are more likely to become leaders, complete their degrees, and attend graduate school.

These findings indicate several avenues of future research: (1) ascertain whether the differences between women's college and coed college students exist prior to college attendance, (2) determine whether differences exist between different women's colleges due to such effects as regional location or college selectivity standards, and (3) compare the college experiences of women's college students with those of male college students.

"FACULTY PERCEPTIONS OF GENDER EQUITY AND OPPORTUNITIES IN THE ACADEMIC SETTING"

Regina M. Watkins, Jerri H. Bullard, Lynn C. Gillespie, and John D. Light, University of North Alabama

Institutional issues and practices directly impact on career opportunities for both men and women in higher education. In particular, research has shown that structural and personal constraints impact the aspirations and the level of success of women. The purpose of this study was to examine the perceived impact of the academic environment on the professional attainment of male and female faculty.

Information was obtained through mail questionnaires distributed to a random sample of faculty at two southern postsecondary institutions. Questions were designed to assess the degree to which a university's environment promotes and supports, or should support, personal and professional opportunities for faculty. An evaluation of the work environment was carried out through a series of questions designed to assess the perceived degree to which an institution provided child care, tuition waivers, opportunity for advancement, faculty development and mentorship, and employment assistance for spouses. It was anticipated that significant differences in perceptions of equity and opportunities would be found for male/female faculty/administrators surveyed.

"FLIRTING OR HURTING: FEMININITY AS A PREDICTOR OF SEXUAL HARASSMENT IN COLLEGE WOMEN"

Katherine S. Greene and Malcolm D. Gynther, Auburn University

The purpose of the study was to examine the relation between level of femininity and perception of sexual harassment in college women. One hundred fifty female undergraduates completed two measures of femininity as well as a survey assessing experience with and perception of sexual harassment. Femininity was measured using the Behavioral Self-report of Femininity and the Personal Attributes Questionnaire. The Job Experiences Survey was used to survey the two measures of sexual harassment.

No relation was found between experience with sexual harassment and femininity as measured by the Behavioral Self-report of Femininity (p .02). Results are discussed in terms of differential expectations by highly feminine women regarding sexual behavior, as well as men's sexual expectations regarding highly feminine women.

"TRENDS, ISSUES, AND IMPLICATIONS: THE INFLUENCE OF CHILD CARE NEEDS ON THE EMPLOYMENT OF WOMEN"
Cathy H. Hamilton, Louisiana State University

This report focused on current trends of women in the workforce, issues they faced with child care, and how the implications of those trends and issues have influenced corporate and governmental response. The slow shrinking of the pay gap between men and women has less to do with discrimination and more to do with the role child care plays in women's employment.

A significant difference can be seen in the female labor force between those women with children and those without. The 1992 figures show that 72.9% of married mothers worked outside the home. In 1992, 90% of all single parents were women, and about one-third of those families had incomes below the poverty line. The high cost of child care restrict women's employment status and the amount of time they spend in paid work.

The feminization of poverty will not abate, nor will employed women successfully balance the demands of work and home until fundamental support structures for child care are in place.

5:30 p.m. MSERA BUSINESS MEETING Emerald and Crystal Rooms
Presider: Glennelle Halpin, MSERA President

6:30 p.m. JOINT UNIVERSITIES RECEPTION Topaz Room

FRIDAY, NOVEMBER 10, 1995

7:15 a.m. - 8:30 a.m. PAST PRESIDENTS' BREAKFAST Caprice Room

8:00 a.m.-10:00 a.m. REGISTRATION South Promenade (Second Floor)

8:00 a.m. - 8:50 a.m. EXCEPTIONAL EDUCATION (Discussion Session) Pacific Room
Presider: Nola Christenberry, Arkansas State University
Presenters: "INTERNALIZATION OF PRIVATE SPEECH IN ADHD AND NORMAL BOYS"
Adam Winsler, Kermit L. Carter, and Sallie K. Speed, The University of Alabama

Children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) have difficulty with the self-regulation of behavior. An important tool normal children use for guiding behavior is private speech, or self-talk. The process by which overt private speech eventually disappears to become silent, inner, verbal thought in early childhood is called internalization. The purpose of this study was to explore the process of speech internalization in ADHD children.

Nineteen 6- to 8-year-old ADHD boys and 20 controls were videotaped as they individually completed two tasks (lego construction and selective attention). Private speech utterances were transcribed from the videotapes and reliably coded into various categories representing differing degrees of either physical (volume of speech) or syntactic (grammatical completeness) internalization.
Significant results from two-way mixed ANOVAs revealed that: (1) ADHD boys use a considerable amount of self-regulatory private speech, (2) the speech of ADHD boys is not qualitatively different from that of controls, (3) the private speech of ADHD boys follows the same basic pattern of internalization as control boys, and (4) ADHD children appear to be developmentally delayed in the speech internalization process compared to control children. Implications of the study for teachers and clinicians are discussed.

"PARENTS' AND TEACHERS' KNOWLEDGE ABOUT ATTENTION DEFICIT DISORDER AND ATTENTION DEFICIT HYPERACTIVITY DISORDER"

Joan C. Harlan and Sidney Rowland, The University of Mississippi

The purpose of the study was to assess what parents and teachers know about attention deficit hyperactivity disorder (ADHD). While estimates vary as to how many ADHD students exist, even conservative figures underscore the importance of teachers being knowledgeable about the prevalence and characteristics of such students so appropriate instructional and management strategies can be selected. A 15-item, field-tested, validated, researcher-derived questionnaire was administered to over 100 volunteer teachers and parents in February, 1995. The sample was primarily female and was 60/40 white/African-American. Subjects could respond with "Yes," "No," or "Don't Know." Questionnaire items probed respondents' knowledge about the prevalence and characteristics of ADHD students. Following administration of the questionnaire, the subjects participated in an instructional presentation and a review of the questionnaire items. Data were tabulated for the response choices, and post-presentation discussion with the participants yielded additional insights into their degree of sophistication/knowledge about ADHD students.

Results indicated that this sample was unaware of typical and atypical characteristics of ADHD students. They were most misinformed concerning hyperactivity, medication, and prevalence, and they overwhelmingly indicated a need for inservice and preservice education.

"THE INTERACTION OF SOCIAL AND BIOLOGICAL CAUSES IN ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)"

Adam Winsler, The University of Alabama

Much confusion exists among educators and parents about the nature and causes of Attention Deficit Hyperactivity Disorder (ADHD). This presentation discusses the roles that the social environment and biology play in the etiology of ADHD, and how environmental and biological factors interact in the development of this problem.

ADHD can be seen as a problem of self-regulation. Vygotsky's theory of the development of self-regulation is advanced along with a discussion of the roles that parent-child interaction, children's private speech (self-talk), and the internalization of language play in the emergence of self-regulation in children. Self-regulation, children's ability to plan, guide, and monitor their own behavior, is related to the quality of parental caregiving or "other-regulation" children receive.

Biology contributes significantly to the etiology of ADHD, but this does not rule out the equally important role that social and family factors can play in the origin of this disorder. Because parent-child interactions of ADHD children are typically characterized by excessive negativity and control (which impedes the development of self-regulation), these children can benefit from early interventions designed to improve parent-child relationships and children's participation in collaborative activities.
FRIDAY, NOVEMBER 10, 1995

8:00 a.m. - 8:50 a.m. OUTSTANDING PAPERS (Discussion Session)........Petit Bois Room

Presider: Glennelle Halpin, Auburn University

Presenters:
"EVOLUTION OF NOVICE THROUGH EXPERT TEACHERS' RECALL: ITS RELATIONSHIP TO THE FREQUENCY OF THEIR REFLECTION"

Ruth M. Allen, University of New Orleans

Accurate/thorough recall is a necessary precursor to teachers achieving the capability of effective reflection. This study examined the evolution of accuracy/thoroughness of novice through expert teachers' recall of their own and their students' specific classroom behaviors and its relationship to the frequency of their reflection.

Elementary school teachers participated: four novices, five intermediate teachers, and four experts. Audiotaped observations of their teaching were conducted in a natural setting for one class period. Detailed notes of the teachers' and students' classroom behaviors were recorded. One-hour audiotaped structured interviews followed each observation. Teachers' accuracy/thoroughness of recall and frequency of reflection at Van Manen's three levels were determined. Using qualitative methods, comparisons were made within and across groups.

Teachers progressed in thoroughness of recall along different paths; i.e. novices, and at different rates, i.e. novices through two years of experience. Continua were observed from general, seemingly less thorough recall and from hesitant, uncertain, inconsistent, strained recall to fluid, certain, consistent, and generally effortless recall. Thoroughness of recall was positively related to the teachers' frequency of reflection.

These data can guide teacher educators and administrators in planning curricula and preservice and inservice workshops.

"THE RITUAL AND LIMINAL DIMENSIONS OF STUDENT RESISTANCE TO THE FORMAL CULTURE OF SCHOOLING"

Vincent A. Anfara, Jr., University of New Orleans

Schools do not just impress themselves on students; they engage students in reaction. Students resist. Despite an expanding literature on resistance (Apple, 1982; Everhart, 1983; Giroux, 1983; Willis, 1977), few empirical studies on student resistance exist. Additionally, answering the critique of Giroux (1983), researchers need to delve into the "historical and relational conditions from which oppositional behavior develops while at the same time linking such behavior to interpretations provided by the subjects themselves" (p. 291).

Using qualitative methods, including indepth structured interviews, focus-group interviews, and participant observations, this study focuses on four inner-city high schools located in the southeastern United States. Two of the schools are neighborhood schools, while the other two schools (citywide) draw their populations from the entire school district using relatively high admission standards. Forty-eight interviews were conducted.

Four historical and relational conditions were found to promote resistance: (1) the formulation of the student as "child," (2) the lack of a trusting and caring school culture, (3) the silencing of student voice, and (4) the irrelevance of the school curriculum. These four conditions were found to be prevalent in the neighborhood schools but not in the citywide schools. This study also investigates the ritual and liminal dimensions of resistance in an effort to see if "resistance" can be afforded further conceptual utility.

"PHYSICAL EDUCATORS' INSERVICE NEEDS AND VARIABLES THAT PREDICT THEM"

129
Literature regarding physical educator inservice education and training (INSET) needs has been limited. Consequently, little basis existed on which to plan or design INSET programs for such specialized teachers. Thus, the purpose of the study was to identify physical educators' perceived INSET needs, and to determine if there are predictors of such needs.

The sample consisted of 265 Alabama physical educators who responded to 16 demographic questions and a six-factor, 30-item Professional Development Needs Questionnaire—Physical Education (PDNQ-PE) developed by the researcher. Data were analyzed using frequencies, means and percents, with multiple regression analysis performed to determine if predictor variables were statistically significant.

The results indicated that physical educators' strongest INSET needs related to current issues and trends. Final mean rankings of INSET needs revealed preferences for several topics. INSET needs, on the six a priori scales indicated that several variables significantly predict physical educator INSET needs.

The findings supported a desire for INSET that is designed to enhance instruction. Moreover, evidence suggests that select context and teacher variables have a relationship with teachers' INSET needs. Finally, an up-to-date, reliable, and valid INSET needs assessment instrument now exists for use in local systems.

"NONPOLITICAL EDUCATION: THE LURE AND DANGER OF NEUTRALITY"

Denise Egea-Kuehne, Louisiana State University

A survey showed that threats to freedom of education have been increasingly serious. Rhetoric of "excellence" has been used as a basis for excluding cultural diversity in the hope of achieving educational "efficiency" and "choice." Podesta warned against the risks of educational choice when students can "opt out" of any program, and Ranson (1987) cautioned against "rigid thinking."

The main argument is: where there is neutrality and frozen consensus, there is no possible authentic learning. This paper presents some authors' arguments against attempts to "neutralize" curriculum. Moreover, it shows how any effort to improve "education effectiveness" ignores the true dialogical nature of a genuine learning process, and is a threat rather than an enhancement to learning.

After a look at different approaches to deal with political elements in curriculum, this paper proposes to consider problems raised by the positivist concepts of idea and learning, contrasting them with a dialogical approach to education. It points to the necessity of otherness and multiple voices, and suggests that, to experience "effective" learning and promote crucial metalinguistic competence, students must not be prevented from encountering complexity, diversity, and controversy.

8:00 a.m. - 8:50 a.m. TEACHING FOR AUTONOMOUS LEARNING (Symposium Session) ....................................................Chandeleur Room

Organizer: Laura Bolen, The University of Alabama

Presenters: "AN OVERVIEW OF TEACHING FOR AUTONOMOUS LEARNING"
Laura Bolen, The University of Alabama

Today's schools are designed to make students dependent learners. By their nature, they encourage students to wait for one classroom after another to begin learning about the next topic or to find out what one must learn about the topic. Homework or reading assignments set
the boundaries within which students are free to roam. In the classroom, they take notes, but they are encouraged to wait for the next exam period to begin reviewing their notes. The papers in this symposium explore ways, learning principles, and teaching approaches to help teachers teach their students to become autonomous learners.

"NATURAL AND ACADEMIC LEARNING"
Sunya E. Collier and Asghar Iran-Nejad, The University of Alabama

Natural learning represents the wealth of learning that implicitly occurs outside the realm of formal education. Academic learning is representative of a very different kind of learning that takes place within the structured learning environment of the schools. For an explanation of a resolution of the disparity between these two types of learning, this paper discusses various educational models of learning with regard to their implications for autonomous learning.

"IMPLICATIONS OF BIOFUNCTIONAL COGNITION FOR TEACHING FOR AUTONOMOUS LEARNING"
Laura Bolen and Asghar Iran-Nejad, The University of Alabama

Biofunctional cognition offers a new way of thinking about self-regulated learning. It explains how the individual's cognitive system is biologically designed for both active and dynamic self-regulation of learning. This means that the learner is not only capable, but predisposed biologically for autonomous learning. This paper discusses the implications of biofunctional cognition for teaching that encourages autonomous learning among students.

"A WHOLETHEME APPROACH TO TEACHING ADHD CHILDREN FOR AUTONOMOUS LEARNING"
Sheree S. Miller and Asghar Iran-Nejad, The University of Alabama

ADHD children experience difficulties because of their inability to sustain on-task attention. This paper discusses evidence suggesting that teaching for autonomous learning may hold an answer to the problems encountered by some of these children. Views of Vygotsky, optimal-level theory, and multisource self-regulation theory are considered.

"STUDIES ON SOURCES OF SELF-REGULATION AND THEIR IMPLICATIONS FOR WHOLETHEME TEACHING AND AUTONOMOUS LEARNING"
Asghar Iran-Nejad, The University of Alabama

This paper discusses the results of three studies investigating the sources that contribute to the self-regulation of learning processes and examines the implications of the results for a wholetheme theory of teaching for autonomous learning.

8:00 a.m. - 9:50 a.m. SUPPORTING THE INSTITUTIONAL RESEARCH AND STUDENT ASSESSMENT PROGRAMS AT COMMUNITY COLLEGES AND SMALLER FOUR-YEAR INSTITUTIONS (Training Session) Deer Isle Room

Trainers: E. Raymond Hackett and Sarah D. Carrigan, Auburn University
Over the last several decades most universities have added offices of student assessment and institutional research to meet their information needs. Many community colleges and smaller four-year institutions did not add an active institutional research and planning function during this period. Instead, they relied on inspection of basically raw data, coupled with anecdotal information, to support the decision-making process. In the 1993-94 Higher Education Directory, only 31% of the 61 public community colleges in Alabama and Georgia listed an institutional research or planning officer. The focus of the new Criteria for Accreditation on institutional effectiveness, and new realities, have motivated most smaller colleges to explore how they can acquire the necessary components of an effective institutional research and student assessment program.

This training session outlines how an institution with limited resources can develop an effective institutional research and student assessment program. A model institutional research program and student assessment program is presented. The use of institutional research and student assessment information in planning and the evaluation of institutional effectiveness are discussed, and the link between planning and budgeting explored. Discussion focuses on data collection, database design, hardware and software needs, the processes and politics of institutional research, and the human resources necessary for the institutional research function at a smaller institution.

9:00 a.m. - 9:50 a.m.  ADMINISTRATION (Discussion Session).................Pacific Room

Presider:  Randall Foxworth, Mississippi State University

Presenters:  "MISSISSIPPI NTE SCORES FOR POTENTIAL ADMINISTRATORS BY RACE, GENDER, AND AGE"

William F. Ferguson and James T. Johnson, University of Southern Mississippi

Do NTE scores for potential administrators differ significantly by race, gender, and age? In order for its teachers to become certified as administrators, Mississippi required them to make designated scores on the NTE tests of General Knowledge (GK), Communication Skills (CS), and Educational Leadership: Administration and Supervision (EL). Archival records for more than 400 teachers were secured; however, complete records were found for fewer than 200. Multivariate analysis was used for statistical comparisons.

African-Americans were excluded from most analyses because of insufficient numbers. Among whites, females had higher mean scores than males on all NTE tests except GK. For gender comparisons, without regard to race, female mean scores exceeded those of males on all comparisons. Age data are still being gathered and are not yet sufficient for analysis.

When using GK and CS scores to predict CS scores, only for African-American females do minimally acceptable GK and CS scores predict an acceptable EL score. For whites, minimally acceptable GK and CS scores predict far less than required EL scores. These findings have obvious implications for advisors of teachers who wish to pursue administrative certification.

"REPORT CARD ON SATISFACTION: AN INVESTIGATION OF TEACHER PERCEPTION OF LEADERSHIP WITHIN THEIR SCHOOLS"

Otis K. LoVette and Ralph Karst, Northeast Louisiana University

How are school leaders perceived by their teachers? This question was investigated to gain insight into areas of strength and weakness of practicing school administrators. This
information will be useful to university personnel as they examine the efficacy of existing programs and courses and make needed changes.

A "Report Card on Satisfaction" was administered to graduate students in the Educational Administration and Supervision Program at Northeast Louisiana University during the spring semester 1995. The investigation instrument was designed to be used on a longitudinal (yearly) basis, to allow the examination of a variety of aspects within the school environment, and to provide demographic data that could be easily analyzed.

The "Report Card on Satisfaction" investigated 31 items, but for the purposes of this study only those seven items relating to "my building administrator (principal)" were statistically analyzed. Additional analyses were made of other areas within data to provide baseline information for future comparisons.

An analysis of the data indicated that this select group of teachers, preparing to be administrators, perceived their principals as greatly in need of improvement in several of the areas investigated. Further analysis of the data was conducted using correlation techniques.

"A CASE STUDY ON SISTER JENNIE JONES SSF"

Charley Wade Baldwin, Corpus Christi School

In a time when many inner-city Catholic schools are closing, the purpose of this case study was to look at why this school is thriving. The study focused on the leadership of the principal, examining vision, culture, instructional leadership, and business management. Surveys and interviews were used to determine both where the school is now and where it wants to go in the future. The study found that the school seemed to have a very specific mission in mind, directed by its history, and essentially organized by its current principal.

"THE PERCEPTION OF THE ROLE OF THE SUPERINTENDENT IN MISSISSIPPI AS PERCEIVED BY THE SUPERINTENDENT AND THE CHAIRPERSON OF THE SCHOOL BOARD"

Lon Brown and J. Harvey Gillespie, Jackson State University

The purpose of this study was to understand the role of the superintendent in performing decision-making tasks. The researchers examined the perception of the role of the school superintendent as perceived by the district superintendent and by the district school board chairperson. The population for this study consisted of 153 superintendents and 153 school board chairpersons. A survey was mailed to the respondents with a 76% overall return rate. The 0.05 level of confidence was used for rejecting the four null hypotheses posed. A one-way analysis of variance was used to test these hypotheses that were significant, indicating a difference in the perception of the role of the superintendent as perceived by the superintendent and school board chairperson relative to district enrollment, service time, elected or appointed position, and education levels.

Given that the decision-making tasks in the public schools rest with the superintendent and the school board, this study is significant in that it provides insight into the perceptions of the role of the superintendent as perceived by the superintendents and the school board chairpersons in Mississippi.

9:00 a.m. - 9:50 a.m. DISCIPLINE (Discussion Session) Caribbean Room

Presider: Charles W. Davidson, University of Southern Mississippi

Presenters: "EVALUATING AN IN-SCHOOL SUSPENSION PROGRAM"
In the summer of 1992 the Jefferson Parish taxpayers approved a local sales tax for the purpose of establishing an in-school suspension program (ISSP) at the district's 25 public secondary school sites. The program provides academic and daily counseling services to students who have been suspended for nonviolent disciplinary offenses. Since its beginning in the fall of 1993, more than 10,000 secondary school students, grades 7–12, have participated in the ISSP program.

The purpose of this study was to assess the level of program impact in the areas of student behavior, as measured by out-of-school suspension rates and recidivism (ISSP) ratios, and program effectiveness and benefit, as measured by student and staff participation. Results of an implementation study conducted the first year showed that a high level of student service did not equate to a high quality of service and that unequal program implementation severely limited program effectiveness. Illuminative evaluation techniques added in year two showed serious inequities in service across the district and between organizational levels and the presence of a non-standardized ISSP program that varied significantly from the initial design.

"AN ANALYSIS OF DISCIPLINARY SUSPENSIONS"

Daniel Fasko, Deborah Grubb, and Jeanne Osborne, Morehead State University

In response to a question regarding the incidence and resolution of behavioral problems in the Rowan County School District since the banning of corporal punishment, a survey and analysis of student suspensions was undertaken based on district student records.

Demographic overview of the school district indicated that the population (3,077) was predominately white (99%), fairly evenly split between males and females (51% to 49%), and included 500 (14%) disabled students.

Results of a descriptive analysis of 465 students suspended during the 1994-95 school year indicated that no suspensions were tabulated for minority students; 385 white males were suspended as were 80 white females. Twenty percent of suspension overall (92) were tabulated for disabled students. Although the number of male suspensions increased by school level, the proportion of suspended males with disabilities tended to decrease by level from 67% (two of three) at the elementary level, to 21% (17 of 70) at the middle school, and 24% (25 of 102) at the high school level.

The implications of these findings are relevant to both practice and research and suggest the need for developing alternate discipline strategies for disabled students as well as determining the generalizability of these results.

"PERCEPTIONS OF MISSOURI HIGH SCHOOL PRINCIPALS REGARDING THE EFFECTIVENESS OF IN-SCHOOL SUSPENSION (ISS) AS A DISCIPLINARY PROCEDURE"

Ward H. Billings, Kennett (MO) Public Schools, and John M. Enger, Arkansas State University

The purpose of this study was to examine the perceived effectiveness of various disciplinary procedures used by Missouri high school principals, and in doing so, determine whether In-School Suspension (ISS) was perceived to be an effective disciplinary procedure. A stratified sample of 2000 high schools was randomly chosen from the population of 562 Missouri 1A, 2A, 3A, and 4A high schools. Of the sample, 159 high school principals responded, establishing a response rate of 77%.

Missouri high school principals perceived each of six disciplinary procedures
(verbal reprimand, detention, corporal punishment, in-school suspension, out-of-school suspension, and recommended expulsion) as the most effective disciplinary procedure for one or more of the disciplinary incidents, with the exception of corporal punishment used in only 28% of Missouri high schools. ISS was used by 88% of Missouri high schools and was perceived to be the most effective procedure for serious disciplinary incidents involving serious disruptions to the school environment, yet not so serious as to necessitate out-of-school suspension. ISS was perceived as the most effective procedure for behavior that, although hostile and threatening, was not significantly physical, violent, dangerous and/or illegal.

9:00 a.m. - 9:50 a.m. OUTSTANDING PAPERS (Discussion Session............Petit Bois Room

Presider: Judith A. Boser, The University of Tennessee, Knoxville

Presenters: "A CONSTRUCTIVIST EXPLANATION OF THE TRANSITION FROM ARITHMETIC TO ALGEBRA: THE ROLE OF REFLECTIVE ABSTRACTION"

Tracy J. Goodson-Espy, University of North Alabama

Students’ transitions from arithmetic to algebra emerged as a critical issue that influenced how students interpreted linear inequality. Explaining the differences in the problem-solving activities of students who were able to make a transition from arithmetical methods to algebraical methods as opposed to those solvers who were unable to do so became the main focus of the study.

Five case studies were developed from 13 individual, unstructured interviews. The students were asked to solve nine word problems that, from an expert’s perspective, involved the concept of linear inequality. The notion of reflective abstraction and the theory of reification provided a framework for analyzing the case studies to explain student transitions from arithmetic to algebra.

Solvers who were unable to make a transition from arithmetic to algebra could not think of arithmetic process as abstract objects that could be compared. They did not reflect on problem-solving activities mentally. Solvers who completed a transition to algebra could reflect on potential and previously-used methods of solution. They were aware of the structure of their solution activity and became able to think of arithmetic processes as abstract objects that could be manipulated. The use of situation-specific imagery encouraged the development of mental representations.

"A COMPARISON OF 1994 MISSISSIPPI SCIENCE FAIR WINNERS AND NONWINNERS AT THE LOCAL, REGIONAL, AND STATE LEVELS OF COMPETITION"

Elizabeth L. Jackson, Delta State University

The purpose of this study was to determine whether all students had an equitable chance of winning science fair competitions. Winners and nonwinners at local, regional, and state 1994 Mississippi science fairs were compared for project costs, status of participation, computer utilization, outside help, and parental educational level and occupation. A stratified random sampling technique was utilized to select subjects from local, regional, and state science fair contestants. Samples for each of the five groups above the local nonwinner level consisted of 42 subjects, for a total of 210. The local nonwinner group had 162 subjects.

Data were collected via a questionnaire sent to parents of sample contestants. Data were analyzed using SAS/STAT software; Fisher’s exact test was used to check for significance of difference.
At all levels, students using a computer had a better chance of winning. At the state level, students receiving outside help were more likely to win. At the state and regional levels, contestants participating voluntarily, having higher project costs, and college-educated parents employed in professional occupations were more likely to win.

"THE EFFECT OF MOTIVATION ON THE RELATIONSHIP OF SCHOOL CLIMATE, FAMILY ENVIRONMENT, AND STUDENT CHARACTERISTICS TO ACADEMIC ACHIEVEMENT"

Katherine E. Niebuhr, University of Montevallo

The purpose of the study was to explore the influence of motivation on the relationship of school climate, family environment, and student characteristics to academic achievement. The subjects were 241 high school male and female ninth-grade students, of which 66% were white, 32% were black, and 1% was other. The study utilized a survey instrument that provided responses to perceptual measures for each of the study variables. School climate was measured along 15 dimensions, including Teacher-Student Relationships and Racial Discrimination. Family environment was measured by four dimensions: Work, Ethic, Competitiveness, Intrinsic, Extrinsic, and Self-Efficacy.

The findings of the study suggested moderate support for the proposed hypotheses, including the relationships between parenting strictness and motivation, home crowding and grade point average, school student-academic orientation and intrinsic motivation, and the school's teacher-student relationship and grade point average. Self-efficacy was found to act as a mediator between both a school climate measure and a family environment dimension and academic achievement.

As public high schools strive to maximize academic success, they must recognize the importance of the family, the school climate, and the motivation of the students.

"THE SOCIALIZATION OF BEGINNING PRINCIPALS IN LOUISIANA: ORGANIZATIONAL CONSTRAINTS ON INNOVATION"

Scott M. Norton, Louisiana Department of Education

The purpose of this study was to examine the organizational socialization experiences of beginning principals. This study approached the problem through a mixed methodology strategy of research, using both quantitative and qualitative techniques.

A factor analysis of 187 survey responses resulted in three components of socialization, used as the dependent variables in the study. Variation was found in the principal's socialization level, but this variation was not predicted by any of the independent variables. For the dependent variable vision, African-American principals reported higher mean scores than white principals, and principals in elementary schools showed higher scores than non-elementary school principals. Male principals and principals who worked in a different school during the previous year showed a great dependence on staff than female principals and principals promoted from within the school.

Six individuals were selected as case study subjects and were compared on the basis of the primary socialization forces encountered in their work, their responses to the socialization process, and their resulting level of socialization.

The study found that beginning principals in Louisiana have a vision about what they want their schools to be, but constraining forces within the organization often prevent them from placing that vision into action.
FRIDAY, NOVEMBER 10, 1995

9:00 a.m. - 9:50 a.m. TESTS (Discussion Session).........................Chandeleur Room

Presider: Cisse Dogoni, Western Kentucky University

Presenters: "AGE AND TIMES EXAMINATIONS"

Anthony J. Onwuegbuzie and Christine E. Daley, University of Central Arkansas

The purpose of this study was to investigate the effects of timed examinations on achievement as a function of age. The sample comprised 26 graduate students, aged 23-59, enrolled in an educational statistics course at a large university. Subjects were administered the Statistical Anxiety Rating Scale and were then assigned randomly to either a timed or untimed examination condition (13 per group).

A general linear model, using the midterm score as the covariate, revealed a significant two-way interaction of age and examination condition, $[F(1, 21) = 8.33, p<.01]$ than for the untimed group ($r=-.18$, $p>.05$). That is, older students experienced performance decrements in the timed, but not in the untimed, examination condition.

In addition, age correlated inversely with statistics test anxiety ($r=.45$, $p<.05$) and achievement ($r=-.47$, $p<.05$). Finally, an inverse relationship was found between age and completion time for the timed ($r=-.80$, $p<.05$), but not for the untimed, condition ($r=-.08$, $p>.05$). It appeared that cognitive-slowing and anxiety, rather than a lack of ability, may underlie statistics underachievement of some older students in timed examinations.

Recommendations included administering untimed and take-home examinations because they were closely approximate to real-life applications.

"FLUCTUATION IN SPATIAL ABILITY SCORES DURING THE MENSTRUAL CYCLE"

M. Suzanne Moody, Auburn University

The purpose of the study was to determine whether or not fluctuations in spatial ability as measured by Vandenberg's Mental Rotations Test occur during the menstrual cycles of college females. Participants were 28 male and 133 female students recruited from nine undergraduate educational psychology and nursing classes. Of the 133 female students, scores from 55 females fell into the relevant menstrual phases during three repeated testings held approximately seven days apart. A mixed ANOVA procedure utilizing Keppel's method for removal of practice effects indicated that female performance on the spatial test was significantly higher ($p<.01$, eta $s^2=0.182$) during the menstrual phase (Days 2-7) than during the luteal phase (Days 16-28). The performance of contraceptive pill users was not significantly different from the performance of nonusers. These findings confirmed the findings of Silverman and Phillips (1993) in an area in which previous results have been inconsistent. The 28 males performed significantly higher ($p<.01$) than the 55 females during the initial testing. However, during this initial testing, male scores were not significantly different from scores obtained from females who were in the menstrual phase but were significantly higher than scores obtained from females who were in the luteal phase.

"THE RELATIONSHIP OF GUESSING STRATEGY ON MULTIPLE CHOICE TESTS WITH TEST-WISENESS, TEST-TAKING BEHAVIOR AND SELECTED DEMOGRAPHIC VARIABLES"

Linda W. Morse, David T. Morse, and Michelle G. Harmon, Mississippi State University

137
The purpose of this study was to investigate how guessing strategy affects performance on multiple-choice tests in relationship to measures of test-wiseness and self-report of test-taking behavior. Subjects included 343 undergraduates who completed a questionnaire concerning perceptions of their test-taking skill and information regarding their strategies utilized when answers were unknown. Each of these reported guessing strategies were categorized as: (a) limited content knowledge strategies, (b) positional bias, and (c) test-wiseness. They also reported how frequently they guessed on multiple-choice tests, under what conditions they omitted items and changed answers, and the minimum likelihood of another answer being correct before they changed answers. Each subject also completed a 40-item measure of test-wiseness.

Using likelihood ratio tests, the results indicated that there were significant differences for ethnicity by guessing strategy reported, and for QPA and guessing strategy. Additionally, significant results were found for type of guessing strategy and perceived test-taking ability. An analysis of variance yielded significant differences using scores from the test-wiseness measure by the categorized guessing strategies. These results suggest that there is a relationship between the types of guessing strategy reported and academic skill, test-taking, test-wiseness, and ethnicity. Interventions designed to assist academic performance should consider addressing test-taking strategies.

"THE RELATIVE DIFFICULTY OF TEST-WISENESS SKILLS FROM FOUR TEST-WISENESS MEASURES AMONG COLLEGE STUDENTS"

David T. Morse, Michelle G. Harmon, and Linda W. Morse, Mississippi State University

While much research indicates that students from children through college vary in test-wiseness (performing well on tests above and beyond subject matter knowledge) and that test-wiseness skill can be improved through training, the matter of whether various test-taking skills are equally easy to apply has received scant attention. Researchers investigating test-wiseness, or educators trying to enhance the test-taking skill of learners could profit from an understanding of differences in the difficulty of various test-wiseness skills.

Participants were 782 undergraduate students (81% women, mean age=21.1 yrs, SD=4.7) from three universities, representing a variety of majors. There were 152 items taken from four test-wiseness measures, covering nine specific test-wiseness skills.

One-parameter item response model (Rasch) calibration of items yielded a substantial range of mean difficulty by skill, over 1.6 logits (SDs). Two-way ANOVA yielded a significant interaction for test and skill (p=.044); follow-ups by test indicated conflicting patterns. For two of the tests (76 items total), test-independent skills were easier to apply than test-dependent skills, whereas the opposite was true for the other two tests. Context and item content appeared to influence the results.

These results suggested that not all test-wiseness skills are of equal difficulty, and that content is important. Researchers or trainers addressing test-wiseness should take such differences into account.

10:00 a.m. - 10:50 a.m. EDUCATION REFORM (Discussion Session)..................Pacific Room

Presider: Patricia Davis-Wiley, The University of Tennessee, Knoxville

Presenters: "NATIONAL BOARD FOR PROFESSIONAL TEACHING STANDARDS: IMPLICATIONS FOR TEACHER EDUCATORS"

Scott Hopkins and Vel Moss, University of South Alabama, and Kenneth D. Moore, East Central University
FRIDAY, NOVEMBER 10, 1995

Three years after *A Nation at Risk*, the Carnegie Task Force on Teaching as a Profession, issued a report, *A Nation Prepared: Teachers for the 21st Century*, which called for the establishment of a National Board for Professional Teaching Standards. Its mission is to establish high and rigorous standards for what experienced teachers should know and be able to know and do. Just as state licensing systems set entry-level standards, this voluntary plan identifies standards for experienced teachers. Designed and implemented by classroom teachers, these standards reflect a new generation of assessment processes that honor the complexities and demands of teaching. Once recognized by the NBPTS, these teachers will provide leadership in assisting other teachers in developing the work habits and skills recognized as essential for accomplished teachers.

These standards provide avenues for recognizing that improving the activities of classroom teachers is essential to improve the schools, as well as being essential agents in school reform. There are avenues of concern as states begin to equate NBPTS Certification with graduate coursework or advanced degrees. This presentation focuses on what the NBPTS has accomplished, what it hopes to accomplish, and what are the implications for teacher educators and teacher education programs.

"THE PRACTICES OF TEACHERS IN KENTUCKY'S NONGRADED PRIMARY CLASSROOMS"

Lynn C. Gillaspie, University of North Alabama

The purpose of this study was to determine if nongraded primary teachers in Kentucky perceived that their role had changed and, if so, had teaching practices also changed since major reforms had been mandated. The subjects of this study were randomly-selected teachers who were working in public school nongraded primary classrooms in Kentucky during the 1992-93 school year.

A self-designed survey instrument was developed and modified from the information gathered during two pilot studies and a review of the literature. Of the 133 randomly selected nongraded primary teachers who received the survey, 93 returned their questionnaires for a response rate of 70%. The questions that compared the roles and teaching practices of the traditional elementary teacher with that of the nongraded primary teacher were analyzed by using the ANOVA. The rest of the quantitative questions were analyzed by the percentage of responses that each answer received. The four qualitative questions were analyzed according to common trends.

Almost 89% of the respondents felt that their roles had changed since nongradedness was implemented. Teachers also reported that they had changed the amount of time planning for the school day and evaluating students, their instructional and management strategies, and the way they made curricular decisions.

"ANALYSIS OF POLICY APPLICATION OF EXPERIMENTAL RESULTS"

Charles M. Achilles, Eastern Michigan University, and Jayne B. Zaharias and Barbara A. Nye, Tennessee State University

In 1989-90, Tennessee leaders funded 17 school districts to apply results of STAR, a longitudinal experiment causally linking class size and student achievement. Researchers have studied Project Challenge (1989-1995) by analyzing the statewide rankings of the 17 (now 16) participating systems. Reduced class sizes (1:15) have shown positive results in Challenge counties (n=17) as shown by mean ranks on pupil scores in Reading and Math of the Tennessee Comprehensive Assessment Program (TCAP) at grade two of: 99 (Reading), 85 (Math) in 1992, to 79 (Reading), 57...
(Math) in 1993. Tennessee has 138 systems, so a rank of 69 is average. Challenge systems (collectively) were below average in 1990; by 1993 they were above average in math and 20 ranks closer to average in reading (1994 and 1995 data are in process).

After finding virtually identical results using Challenge and Tennessee Value Added Assessment System (TVAAS) analysis of Challenge, researchers suggested using the TVAAS database to evaluate Challenge as it will offer options for expanded analyses.

Class sizes of about 1:15 in Challenge systems accompanied achievement results in reading and math that paralleled those predicted from the STAR experiment. This application of research results seems justified.

"A DYNAMIC MODEL OF LITERACY"

Lori V. Hunt and Robert M. Hashway, Grambling State University

Evidence exists that the traditional model of education is not working. The purpose of this study was to dissemble a research project that provides a model to guide the researcher in exploring the dynamics of education.

The community-belief structures included community background, school characteristics, and teacher nurturing. The family belief structures included parental background and home nurturing. The personal belief structures included personal attitude and goal orientation. Literacy, the ability to demonstrate competency in written and oral communication, was influenced by curriculum choices and course completions. Relationships were examined using data from the National Assessment of Educational Progress.

The sample included students within the United States who were either in the eleventh grade or 17 years old. The endogenous variables of the modified model included interaction in school, writing outside school, parents' education, pupil/teacher ratio, mediated instruction, academic preparation and support systems, general teacher interaction, language arts orientation, writing inside of school, teacher interaction, and language arts. The structural model explained 38.3% of the literacy variance (R=0.62).
papers written by experimental classes. Results verified the efficacy of the cooperative editing technique in reducing major grammatical errors on remedial freshman composition papers.

"ARE EDUCATORS GUILTY OF PRESENTATION BIAS?"

Lee Hearn and Robert L. Kennedy, University of Arkansas at Little Rock

Advances in print quality resulting from laser and inkjet printer technology have improved the appearance of student-produced writing assignments, far exceeding that of dot-matrix computer printers, but have educators developed a "presentation bias"? This study tests that hypothesis by engaging in an innocuous deception.

A panel of 10 raters was asked to rate three essays on a criterion-related scale. Essay #1 and Essay #2 were distributed to the 10 raters as first-generation laser printer hardcopies, while Essay #3 was distributed to the panel of raters as a first-generation dot-matrix printer hardcopy. Following this initial rating, the panel of raters was told that the documents were revised and resubmitted for reevaluation. No revisions, however were actually made. After an eight-week "fading" period, the essays were redistributed. Essay #1 (control) remained a laser-printed first-generation hardcopy, Essay #2 (experiment) reprinted as a dot-matrix document, and Essay #3 (experiment) reprinted as a laser printer document.

Using Cohen's Kappa test to determine interrater reliability, pretest ratings compared to posttest ratings to determine if there is any correlation between scoring and print quality in the absence of other variables.

"CRITICAL THINKING ACTIVITIES IN SECONDARY ENGLISH LITERATURE TEXTBOOKS: A COLLECTION OF ASSUMPTIONS"

Laura M. Rotta, Mississippi State University

The purpose of this literature review was to examine the research devoted to critical thinking activities in secondary English course literature textbooks. The problem addressed by this literature review arose from the recent interest generated by proponents of critical thinking skills, skills that have been characterized as necessary tools for students' survival in the world. Advocates of critical thinking, such as Richard Paul and Barry Beyer, have proposed the inclusion of critical thinking activities in the classroom curriculum and even provided examples of such activities. Textbooks with appropriately labeled activities have been suggested as resources for teachers.

This literature review's findings revealed a disturbing void. Despite suggestions for promoting critical thinking throughout the entire English curriculum, reading received less attention than writing. Although literature textbooks received recognition for their role in establishing and guiding English classroom curriculum and activities, descriptions of how textbooks fulfilled that role were lacking. The choice of secondary English textbooks' literature selections, rather than the accompanying activities, was the focus of much of the research.

Implications of this literature review include the need for attention to reading critical thinking activities and for a thorough examination of the activities promoted as critical thinking in the textbooks.

"UTILIZING CHILDREN'S LITERATURE IN CONFLICT RESOLUTION AND MANAGEMENT"

Linda K. Walker and George M. Thomas, Mississippi State University-Meridian Campus
In an age where social and cultural conflict are the norm, teachers must learn to recognize and deal positively with conflict. This session presents methods and techniques intended for the recognition, analysis, equitable resolution, and management of conflict in a multicultural society. Literature utilized demonstrates bibliotherapeutic approaches. Familiar stories from a variety of cultural and achievement levels are used. The presentation includes theoretical explorations as well as demonstrations of specific techniques, including the use of overhead transparency projections and printed handouts.

10:00 a.m. - 10:50 a.m. RESTRUCTURING CLASSROOMS TO REFLECT DIVERSITY: TEACHING TO STYLES (Training Session).............Deer Isle Room

Trainers: Linda F. Cornelious and W. C. Johnson, Mississippi State University, and Glenda A. Gunter, Troy State University at Dothan

During the past decade, our understanding of individual differences has become richer and deeper. Yet, the widespread recognition that students learn in different ways has not been satisfactorily accompanied by the development of teacher knowledge and skills in recognizing and dealing with diversity in ways that maximize the academic success of all students.

Teachers must be taught to assess their personal styles and learn to look for a variety of ways to help all students reach their potential by manipulating classroom conditions to support diversity. Inadequate attention of teachers to teach to diversity will result in continued criticism of public schools and teacher education.

This training session is designed to assist teachers in assessing their personal learning styles and teaching style preferences. An overview on learning and teaching styles is presented. Detailed instruction is provided on how teachers can effectively create learning environments that are supportive of their teaching styles as well as their students' learning style. Strategies show how teachers can apply learning styles and intentionally teach to diversity.

10:00 a.m. - 10:50 a.m. OUTSTANDING PAPERS (Discussion Session)............Petit Bois Room

Presider: Diana Lancaster-Gardiner, Louisiana State University

Presenters: "MAGNET SCHOOL STANFORD ACHIEVEMENT TEST SCIENCE SCORES BY LEARNER GROUP"

Shelley L. Plett and Ava Pugh, Northeast Louisiana University

The purpose of this study was to measure the effects of a magnet school's science programs on fifth-grade Stanford Achievement Test science scores. The 60 magnet and 716 non-magnet students were divided into three subgroups: Chapter 1 eligible, regular education, and gifted eligible students. Every fifth grader's Stanford Achievement Test science score was analyzed for the 1992-93 academic year.

Simple statistics revealed means for each school and learner group. A Spearman Rho correlation found a relationship between score and learner groups (p<.01). A two-way analysis of variance (ANOVA) found no significant effects (p>.05) of school attended on science score for the three learner groups. Duncan's New Multiple Range Test indicated significant differences between all learner groups.

Results indicated no significant differences in Stanford Achievement Test science scores of fifth-grade magnet school students based on the interaction of school and learner group as compared to students at the traditional schools. Conclusions implied that school status was not a factor for promoting higher test scores.
"PREVENTING EARLY SCHOOL FAILURE: IMPACTS OF SUCCESS FOR ALL ON STANDARDIZED TEST OUTCOMES, MINORITY GROUP PERFORMANCE, AND SCHOOL EFFECTIVENESS"

Steven M. Ross, Lana J. Smith, and Jason P. Casey, The University of Memphis

Success For All (SFA) is an elementary-level reading program designed at Johns Hopkins University to prevent early failure by students placed at-risk. Prior research has produced consistent evidence showing higher reading performance for SFA program participants compared to matched control students. The present study extended this research by examining student performance across three grades on both individually-administered reading tests and state-mandated standardized tests. Of particular interest was longitudinal outcomes over a three-year period for minority students versus non-minority students. Findings from a quasi-experimental design consisting of two SFA schools and two matched control schools indicated: (1) overall positive effects for SFA on reading performance, (2) relatively stronger effects on the standardized tests than on the individually-administered tests, (3) differential program effectiveness in the two SFA schools, (4) some decline in program effects over time, and (5) relatively stronger effects for minority than for non-minority students. The implications of the findings for SFA implementation, particularly in helping the most disadvantaged students, and school restructuring are discussed.

"INTERSPERISING EFFICIENT TASKS TO INFLUENCE STUDENTS' CHOICE OF ACADEMIC ASSIGNMENTS: MORE IS LESS"

Christopher H. Skinner, Patricia Logan, Gregg A. Johns, and Sherry L. Robinson, Mississippi State University

We assumed that completing a mathematics problem was reinforcing and attempted to increase rates of reinforcement by interspersing additional problems that took less time to mathematics computation sheets containing problems that took more time to complete. In Experiment 1, we exposed students to a control mathematics computation sheet containing 16 three-digit by two-digit multiplication (3 x 2) problems and an experimental computation sheet that contained 16 similar 3 x 2 problems plus six additional one-digit by one-digit (1 x 1) problems that were interspersed following every third 3 x 2 problem. Results showed that interspersing the 1 x 1 problems significantly increased the probability that students would choose to complete the computation sheet and decreased students' perceptions of difficulty, effort, and time required to complete the computation sheet without affecting accuracy levels or rates of responding on the target 3 x 2 problems.

In Experiment 2, we replicated the earlier results while controlling for novelty effects and evaluating on-task levels. Results supported the hypothesis that rates of reinforcement could be increased by interspersing additional time efficient problems. Discussion focuses on the application of concurrent schedules research in educational settings and directions for future research.

"PRINCIPALS' PERCEPTIONS OF PARENT INVOLVEMENT IN HIGH AND LOW ACADEMICALLY ACHIEVING ELEMENTARY SCHOOLS"

Gail Snipes, Hattiesburg (MS) Public Schools, and Jack Blendinger and Linda T. Jones, Mississippi State University
The purpose of this descriptive study was to investigate whether significant differences existed in the perceptions of principals from elementary schools with high academic achievement compared to the perceptions of principals from elementary schools with low academic achievement in relation to parent involvement practices at their schools. The subjects in this study consisted of 39 principals from elementary schools with high academic achievement and 30 principals from elementary schools with low academic achievement. Data were collected using a questionnaire developed by the researcher.

Based on chi-square statistical tests, statistically significant differences (p < .05) were found for how principals rated their parent-teacher organizations (PTA), teachers sending home classroom newsletters, and relations between teachers and parents. Principals from high achieving elementary schools rated their parent-teacher organizations as more active, reported that their teachers sent home classroom newsletters more frequently, and perceived more positive relationships between teachers and parents than did the principals from elementary schools with low academic achievement. No statistically significant differences were found for efforts made by teachers to involve parents, importance given to parent involvement, leadership role taken by the principal, and parent involvement training provided teachers.

10:00 a.m. - 10:50 a.m. EVALUATING STUDENTS' CONCEPTUAL UNDERSTANDING
(Symposium)........................................Chandeleur Room

Organizer: Judith A. Burry-Stock, The University of Alabama
Presenters: Judith A. Burry-Stock and Laura E. Bolen, The University of Alabama

In order to have students think conceptually, teaching and evaluation of classroom learning need to change. The purpose of this study was to determine the effectiveness of the psychometric properties of a Concept Mapping Rubric that was designed to evaluate students' conceptual learning. Over 200 students from eight classes participated in the initial study to establish the reliability and validity of the Concept Mapping Rubric. Students in grades four through eight participated in an Alabama statewide study. Students spent from two to three weeks studying a unit/module in science. At the end of the unit/module they completed a concept map. These maps were used to evaluate the rubric.

After principle component factor analysis exploratory factor analysis was done, eight concept mapping scoring items remained in the rubric. An orthogonal rotation provided the best fit to simple structure capturing 86% of the variability with five factors. A Cronbach alpha reliability coefficient was .85.

Instead of teaching isolated vocabulary words, teachers will need to find ways to turn these words into relevant concepts. The use of concept maps as an evaluative means will encourage teachers to include experiences that will enhance students' conceptual understanding.

11:00 a.m. - 11:50 a.m. PROFESSIONAL DEVELOPMENT SCHOOLS
(Discussion Session).................................Pacific Room

Presider: Dennis Sabo, Auburn University
Presenters: "SCHOOL/UNIVERSITY COLLABORATION: A CASE STUDY"
Robert N. Hutchison, John E. Forde, Joan Butler, and Ned B. Lovell, Mississippi State University

Collaboration between public institutions is a positive process; however, personalities, territorial issues, and the competition for funds often erode collaborative efforts. The purpose of this paper was the evaluation of a unique collaboration between a public university
Mississippi State University recently provided grant opportunities through a new Public School Partnership Program enabling university faculty to work with local school district personnel. The case study, "A Model Community Marketing and Communication Program: Building Coalitions for Public Education," illustrates what can be accomplished when diverse people from schools, universities and the community work together toward common goals.

Overall program outcomes were beneficial. Surveys were conducted with students, parents, school personnel, and the community members. A telephone response line, 324-ABCD, was initiated and is still being used by the district. Interns produced new stories concerning the project and implemented two district-wide newsletters.

A major accomplishment of the collaboration was passage of a school bond issue. The vote passed approximately 65% to 35%, and many who were previously uninvolved have become supportive of public schools. The collaborative efforts of the grant committee and bond referendum committees are vital to the long-term success of the Starkville School District.

"CHANGING ROLES AND RELATIONSHIPS IN AN URBAN PROFESSIONAL DEVELOPMENT SCHOOLS PARTNERSHIP"

Vivian G. Morris, Satomi Izumi Taylor, Janie Knight, and Rebecca W. Wasson, The University of Memphis

This case study of an elementary school investigated the extent to which the roles and relationships of university and P-12 practitioners changed after two years of collaboration in a Professional Development School (PDS). Data were gathered through a teacher survey, individual and focus group interviews, and participant observations.

The survey focused on teacher perceptions related to changes in the PDS in three areas: (1) mentoring student teachers, (2) teaching and learning at the school, and (3) empowerment. Survey results are reported using descriptive statistics.

The analysis of the qualitative data indicated that the teachers took on new roles and responsibilities in mentoring student teachers and in teaming with university faculty to conduct research projects. In addition, university faculty taught more in school classrooms. The data also indicated that the university and P-12 professionals had increased their involvement in the number of other team efforts, including planning and conducting inservice programs, writing grants, developing school improvement plans, recommending areas to improve the teacher education programs at the university, writing articles for professional publications, and presenting papers at professional meetings.

The findings of this study suggested that university and school collaboration strengthens the school, empowers teachers, and guides colleges of education in constructing relevant programs of teacher preparations.

"FORGING SCHOOL-UNIVERSITY PARTNERSHIPS: VIEWS FROM PUBLIC SCHOOL ADMINISTRATORS AND TEACHERS"

Nancy H. Barry, Auburn University; Susan Boes, West Georgia College; Dawn M. Ossont, Auburn University; and John Painter, Lee County (AL) Schools

This study examined public school administrators' and teachers' perceptions of ways school-university partnerships benefit both school and university faculty and students. A secondary purpose examined differences between administrators and teachers. Pursuant to preliminary interviews, a "free-response" questionnaire was developed to ascertain administrators' (N=61) perceptions about school/university services. Questionnaire responses were used to develop discrete categories for a second questionnaire for teachers (N=257).
Descriptive statistics indicated that administrators believed the university could be most helpful by providing teacher inservice training, and schools could be most helpful by providing field experiences. Most administrators (93.4%) reported willingness to accept laboratory students, and interest in using university students to provide remedial instruction.

Nineteen of the 108 teacher items were selected by teachers as most useful, with highest ratings for university services, including access to facilities, a free library card, sharing materials and resources, and a university parking permit. One service that the school could provide the university was selected—"hands-on" classroom experience. Comparison of administrator/teacher responses provided a framework for developing meaningful partnerships.

11:00 a.m. - 11:50 a.m. MINORITY RECRUITMENT/RETENTION (Discussion Session) Caribbean Room

Presider: Renee Middleton, Auburn University

Presenters: "RECRUITMENT OF MINORITY HIGH SCHOOL STUDENTS IN THE TEACHER EDUCATION PROGRAM"

Beth H. Counce, Jenny Avery, Addie Crutcher, Marquita Furness, and Cheri Smith, University of Montevallo

Recruiting and retaining minority students is essential for the growth of any institution of higher education. Diversity improves the learning environment for all students and is essential for a realistic representation of our society. Because there is presently a lack of minority students in teacher education programs, the purpose of this research was to address the shortage of minority students in the area of education based on recruitment efforts, diversity or lack of diversity of the campus, faculty, and staff. This was accomplished through a survey of 412 minority high school seniors from schools in the Birmingham area in which students were questioned about their attitudes and feelings related to attending college and about their thoughts concerning the teaching profession. The survey was divided into categories: Why They Choose College, Teacher Education, and Feelings and Expectations About College Life. The survey included checklists, open-ended questions, and questions indicating agree, disagree, or unsure.

The results of this survey were analyzed according to race, sex, and college plans. These results will be used to improve the efforts to better address the needs of minority students and to appropriately plan programs that will increase retention.

"SECOND CHANCE TEACHERS PROGRAM DEVELOPMENT IN AN HISTORICALLY AFRICAN-AMERICAN UNIVERSITY"

I. Emett Burnett, Jr., Xavier University of Louisiana

The purpose of this paper was to describe the ongoing development of the United Negro College Fund/Ford Foundation-Funded Second Chance Teachers Program in an historically African-American university. Originally conceived as a project to draw surplussed military personnel into careers in elementary secondary teaching while earning a master’s degree in education, several strategic adjustments to the realities of recruitment were found necessary to achieve enrollment targets.

Adaptation of the original program concept to individual student background and career goals in education, financial and personal support needs of participants, and limitations of organizational structure proved necessary. Effective adjustment to those factors results in successful implementation of the program.
It was concluded that viable program development includes a sound original vision, willingness to adapt that vision to the empirical realities encountered in the field, and ongoing focus on the real needs of participants.

"EVALUATION OF THE TEACHING ENHANCEMENTS AFFECTING MINORITY STUDENTS (TEAMS) PROGRAM"

Leanne Whiteside, Richard Hanson, Melissa Crawford, and Larry Dickerson, University of Arkansas at Little Rock

Teaching Enhancements Affecting Minority Students (TEAMS) is a program to increase retention of minority students in higher education. Two goals of the TEAMS program are to increase the knowledge of minority students about university services and increase the satisfaction of participants with the university experience.

In order to assess these goals, a survey was mailed to all non-white, U.S. citizens (N=2100) enrolled as of fall 1994 in the university of study. The survey assessed their knowledge about and use of a variety of student services and feelings about their educational experience. Of the 459 responses, 75 (16.7%) were TEAMS members (TM), and 374 (83.3%) were non-TM. Logistic regression was performed controlling for student gender, GPA, and academic level.

Results of this study provided evidence that TEAMS was successful. More TM were aware of the nine student services assessed, and a significant number was more aware of Student Support Services than non-TEAMS members. TEAMS members reported more positive views of their experiences in general than non-TM. Significantly more TM than non-TM reported that they felt included in social activities and that the university was sensitive to student's needs.

11:00 a.m. - 11:50 a.m. SAMPLING: A REFRESHING REVIEW
(Training Session)..............................................Deer Isle Room

Trainer: Anna T. Waggener, University of South Alabama

Sampling in educational research signifies that every member of defined population has a "fair and equal" or "equal and independent" chance of being selected for the sample. Even when a researcher follows the guidelines of random sampling, one cannot be sure of obtaining an unbiased sample.

The characteristics of the "M&M's" candies, a product of The Mars Company, represent the unusual situation of a large, known population. Using the "M&M's" candies, the presenter will demonstrate the theories of sampling error, sampling distribution, standard error of the mean, and standard error of the difference between sample means by completing a frequency distribution of the six colors in a one pound bag of "M&M's" candies and comparing results to the known population of the "M&M's" candies.

Furthermore, the following types of sampling can be demonstrated with "M&M's" candies: simple random sampling, stratified sampling, systematic sampling, cluster sampling, and two-stage random sampling. Finally, the presentation will conclude by describing the differences in generalizability, or inference, of random sampling and non-random sampling methods.

11:00 a.m. - 11:50 a.m. OUTSTANDING PAPERS (Discussion Session).............Petit Bois Room

Presider: David T. Morse, Mississippi State University
"USING PREDICTORS OBTAINED BY CLASSICAL TEST THEORY AND BY ITEM RESPONSE THEORY: A COMPARISON OF PREDICTED GROUP MEMBERSHIP ACCURACY RATES FOR SEX OFFENDERS AND NONSEX OFFENDERS"

Malenna A. Sumrall, The University of Alabama

This study compared the accuracy of the graded response model of item response theory and classical test theory in predicting group membership. Using the Sumrall Child Care Employment Screening Scale (SUCCESS), trait estimates using classical test theory (factor scores) and item response theory (factor thetas) were generated and used separately as predictors in a discriminant analysis using the full model. The results were crossvalidated using a jackknife procedure showing both analyses to be replicable. The accuracy rates for the two methods were compared using a 2 x 2 contingency table and were found not to be significantly different.

Factor scores and factor thetas were used separately in stepwise discriminant analyses. The three factors retained by the stepwise selection were the same for both methods, but the order in which factors were introduced varied slightly. Results for each of these models were shown to be replicable when crossvalidated. No significant differences in accuracy rates were found in any of the models; however, a potential for practical significance was noted because similar misclassification rates did not necessarily misclassify the same individuals. It was concluded that the better method could not be determined until characteristics of misclassified individuals are investigated more fully.

"PROGRAM AND CAREER PERCEPTIONS OF UNDERGRADUATE STUDENTS MAJORING IN FINE ART"

Eva A. Thaller, The University of Tennessee, Knoxville

Although more than 15,000 college students complete bachelor's degrees in studio areas of Fine Arts annually, little research has been conducted in this area. This qualitative case study investigated how students majoring in Studio Art perceived their undergraduate educational experiences and what connections they saw between their matriculation and future plans. Data were gathered through on-site participant observation, detailed written questionnaires were completed by 22 respondents (approximately 58% of the population), and indepth interviews were limited to six of the respondents because qualitative interviews produce such a tremendous amount of data. The data were integrated and analyzed into relevant categories, such as the importance of art work, financial considerations, and expectations for the future.

Although 41% of the Studio Art students had expected college to prepare them for a better job, 68% estimated that their earnings after graduation would be close to or below the "poverty level," and 50% were expecting to find themselves doing menial or odd jobs to make a living. None had gone to the campus Career Services Center for help. When asked about connections between college and their future plans, they said that college was preparing them to create art work, go to graduate school, and to teach art.

"THE CONSTRUCT VALIDITY OF SCORES ON THE CAREER BELIEFS INVENTORY"

Beverly Dolenz Walsh, University of Houston, and Bruce Thompson, Texas A&M University
Making a career choice can be one of the most important decisions in a person's life. Instruments recently developed for use in career counseling have placed an increased emphasis on evaluating career-related beliefs, as opposed to measuring interests or skills. The purpose of the present study was to evaluate the construct validity of scores on a recently-published measure of career-related beliefs, the Career Beliefs Inventory.

Two independent samples of data (n1=251; n2=1,788) were analyzed to explore the replicability of results across samples. Factor analysis was the primary vehicle for this validity investigation. Both confirmatory first-order and exploratory second-order factor analyses were conducted. Results were mixed regarding the integrity of the various scores from this new measure.

"METHODS AND STRATEGIES OF EXEMPLARY FIFTH-GRADE TEACHERS: SCIENCE AS PREFERRED AND NON-PREFERRED SUBJECT"

Jacqueline M. Woodbury, University of Southern Mississippi

The purpose of this study was to describe the elementary educators' expertise in teaching science. Transcripts and field notes from 18 science and 18 non-science classroom observations were analyzed quantitatively and qualitatively. Methods and strategies were analyzed along six dimensions: (1) Instructional Center, (2) Noise Level, (3) Connections with Real Life, (4) Paper Usage, (5) Use of Manipulatives, and (6) Textbook Usage.

The results of the research showed a distinct dichotomy in the preferred subject teaching methods of exemplary fifth-grade teachers. When teaching their preferred subject teachers taught lessons that were: (1) more student centered, (2) noisier, (3) had more connections with real life, (4) used significantly less paper, (5) used more manipulatives, and (6) seldom used a textbook.

11:00 a.m. - 11:50 a.m. TECHNOLOGY (Discussion Session)..................Chandeleur Room

Presider: Suzanne Moody, Auburn University

Presenters: "MCCLUSKEY'S COROLLARY TO GRESHAM'S LAW: THE IMPACT OF COMPUTER TECHNOLOGY ON SECONDARY EDUCATION"

Randolph E. Gunter and Glenda A. Gunter, Troy State University at Dothan

In 1994, McCluskey's Corollary to Gresham's Law was published and stated that the continued use of computer technology without an equal emphasis on knowledge acquisition may lower the achievement test scores of K-12 students. The purpose of this research was to study and analyze McCluskey's Corollary to Gresham's Law by examining the change in achievement test scores on reading, written expression, and math for two cohort samples of students (N=122). This was a four-year, longitudinal research study using students who were enrolled in a comprehensive computer theme curriculum. The instrument used for this study was the Test of Achievement and Proficiency (TAP).

Results of repeated measures analysis of variances statistical procedures revealed statistically significant declines in mean achievement test scores of cohort students from the ninth grade to the twelfth grade. Findings also revealed that minimum competency rates for reading and mathematics declined significantly in both cohort groups of students between the ninth and twelfth grades.

The conclusion of this research was that the comprehensive computer theme curriculum could have contributed to the decline in achievement test scores. The computer theme
curriculum may not have provided an equal emphasis on the acquisition of knowledge or reading, written expression, and math.

"IMPACT OF TECHNOLOGY ON CHILDREN: PERCEPTIONS OF ELEMENTARY SCHOOL TEACHERS AND PARENTS"

Charles Worthy Babb and Tracey R. Ring, Middle Tennessee State University

The purpose of the study was to examine the impact of computer technology used in elementary school classrooms on children as perceived by both teachers and parents. Data were collected from over 217 parents and 94 teachers from five different elementary schools representing grade levels one through six. A 15-item, Likert-type survey guide was constructed especially for the study as the primary means of data collection. The guide yielded information regarding how both teachers and parents perceived the impact that technology had made on selected work-related variables such as study habits, overall school motivation, and time-on-task activity of children. No attempt was made to examine relationships to student achievement.

Means were constructed for each item on the survey guide. A t-test for independent groups was performed to assess selected differences between parents and teachers.

Significant differences were observed between parents and teachers on five of the items. All item means, however, were judged to be positive. Overall, both groups perceived computer technology in the classrooms as being highly beneficial to children.

"MULTI-SAMPLE FACTOR ANALYSIS OF AN INTERACTIVE TELEVISION ATTITUDE SURVEY"

E. Lea Witta, University of Southern Mississippi

Since schools have begun to tap into the growing industry of Interactive Television (ITV), students in rural areas may take courses not ordinarily offered in their community. A survey containing 30 Likert-style questions is used by several ITV Centers to assess the perceived value of this program. Results are depicted as 30 bar charts or 30 means. This would imply that 30 constructs underlie the survey.

The purpose of this study was twofold: to determine the constructs underlying this attitude survey, and to ascertain if the model developed was appropriate for all surveyed groups (i.e., high school/college students, remote/homesite students). The survey was submitted to all students currently enrolled at a rural, southwest Virginia ITV center. A modified version of the survey was also submitted to parents and teachers.

Exploratory factor analysis in SPSS/PC+ was used to determine the initial survey constructs. Multi-sample confirmatory factor analysis in LISREL 7.2 was used to test the fit of each group to the model. Returned surveys included 187 students, 23 parents, and nine teachers.

"EDUCATIONAL TELECOMMUNICATION: DOES IT WORK? (AN ATTITUDE STUDY)"

Sylvere H. Coussment, The University of Alabama

The purpose of this study was to develop and evaluate an assessment component to measure student attitudes on subject matter presented via telecommunication. Use of technology to introduce varied, exciting, and effective education in a large number of schools is becoming commonplace. The assessment of student attitudes is important and essential to evaluating, updating, and refining curriculum. An attitude study of students who were engaged in a year-
long telecommunication course presented by a major southern university is discussed.

An instrument was developed to measure how students perceive the value of their educational experience and their attitudes towards the course. The Cronbach alpha coefficient of reliability was .92. A principle component analysis with an orthogonal rotation accounted for 69% of the variability. The results of the study are being used to revise the curriculum for an educational program that is being telecast to over 700 sites.
MSERA CONSTITUTION AND BYLAWS
CONSTITUTION

ARTICLE I

NAME AND MEMBERSHIP

The organization shall hereafter be known as the Mid-South Educational Research Association. Any person who supports the purposes of the Association shall be eligible for membership and shall be an active member in this organization upon payment of annual dues as provided in the bylaws.

ARTICLE II

PURPOSES

The Mid-South Educational Research Association shall be a non-profit incorporated educational organization whose purposes are to encourage quality educational research in the Mid-South and to promote the application of the results of quality educational research in the schools.

Said corporation is organized exclusively for educational and scientific purposes; i.e., as a non-profit educational organization whose purpose is to encourage and provide results of quality educational research in elementary and secondary schools and in institutions of higher learning, including, for such purposes, the receipt of donations and books to further educational research and the making of distributions to organizations that qualify as exempt organizations under section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provisions of any future United States Internal Revenue Law).

No substantial part of the activities of the corporation shall be the carrying on of propaganda, or otherwise attempting to influence legislation, and the corporation shall not participate in, or intervene in (including the publishing or distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these articles, the corporation shall not carry on any other activities not permitted to be carried on (a) by a corporation exempt from corresponding provision of any future United States Internal Revenue Law or (b) by a corporation, contributions to which are deductible under section 170 (c) (2) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).

In the event of dissolution of the corporation, any assets remaining after paying all liabilities shall revert to and become the property of an organization which is qualified under section 501 (c) (3) of the Internal Revenue Code of 1954 amended.

ARTICLE III

INCORPORATION

The Association shall be incorporated upon provision of the laws of the State of Mississippi.
ARTICLE IV
OFFICES AND TERMS OF OFFICE

Section 1.a. The governing body of the Association shall consist of a President, Vice-President/President-Elect, Secretary-Treasurer, Immediate Past-President, Directors, and Executive Secretary, who are members of the Association. These officials shall constitute the Board of Officers and Directors of the Association (hereafter called the Board of the Association). The term of office for each elected official shall begin on the first day of the calendar year following election to the Board of the Association.

b. The Directors shall consist of four members at large; one from among the representatives of elementary-secondary schools; one from among the representatives of the State Departments of Education; and one from each of the constituent states.

Section 2.a. The Officers of the Association who serve as Vice-President/President-Elect and Secretary-Treasurer shall be elected at the Annual Meeting of the Association to terms of one year for the Vice-President/President-Elect and two years for the Secretary-Treasurer. The Vice-President/President-Elect shall succeed automatically to the office of President for a term of one year upon completion of a term as a Vice-President/President-Elect or upon the occurrence of a vacancy in the office of President. Each officer shall serve until a successor assumes office except for the Vice-President/President-Elect who would succeed to the office of President due to a vacancy in the office.

b. The Directors of the Association shall be elected for a term of two years. The Directors elected at large, the Director representing the elementary-secondary schools, and the Director representing the State Departments of Education shall be elected at the Annual Meeting during odd-numbered years, and the Directors representing the states shall be elected at the Annual Meeting during even-numbered years. Each Director shall serve until a successor assumes office.

c. All elective Officers and Directors will be eligible for reelection to the offices that they hold for one additional term except the Vice-President/President-Elect, who is restricted to one term, and the Secretary-Treasurer, who is not restricted as to the number of terms served.

d. In case a vacancy occurs in the office of Secretary-Treasurer or among the Directors, the successor to fill the vacancy shall be named by a majority vote of the Board of the Association. If a vacancy occurs in the office of Vice-President/President-Elect, the office will be filled by election at the next Annual Meeting of the Association. Any person who is named to fill an unexpired term shall be eligible for election to the office to which the appointment is made.

Section 3. The Immediate Past-President of the Association shall be an ex officio voting member of the Board of the Association and shall serve during the term of office of the successor as President.

Section 4. The Board shall appoint an Executive Secretary of the Association who will be an ex officio non-voting member of the Board and will serve at the pleasure of the Board.

Section 5. The President, Vice-President/President-Elect, Secretary-Treasurer, and Immediate Past-President shall constitute the Executive Committee of the Board. The Executive Secretary will serve as an ex officio non-voting member of the Executive Committee.

Section 6. The Officers, Directors and Executive Secretary of the Association shall be residents of the constituent states during their terms of service on the Board. Any vacancy on the Board that occurs as a result of a failure to comply with this requirement shall be filled in the manner prescribed herein for the respective office.
ARTICLE V

MEETINGS OF THE BOARD OF THE ASSOCIATION

The Board of the Association shall hold at least two meetings per year at sites designated by the President. One meeting shall be held for the purpose of outlining and planning activities for the Association's Annual Meeting including the program for the Association, approving the annual budget, approving changes in the constitution and bylaws, and discussing such other matters of business that need to be addressed at that time. The second meeting shall be held prior to the Annual Meeting of the Association for the purpose of finalizing program plans, acting upon proposed changes in the constitution and bylaws, and conducting such other business as the President or other members of the Board may deem necessary.

ARTICLE VI

NOMINATION AND ELECTION OF OFFICERS AND DIRECTORS

Section 1.a. A slate of nominees for Officers and Directors to be elected at the Annual Meeting of the Association will be named by a committee appointed by the President and composed of equal representation from each of the constituent states.

b. Nominations for any position may be made to the committee by any active member of the Association, provided that the member secures (1) the written permission of the nominee and (2) the signatures of four other active members endorsing the nomination. The committee shall establish and announce a deadline for receiving nominations.

Section 2. The nominating committee shall announce the nominations for all positions, direct the preparation of ballots, and conduct the election. The President will announce the results of the election at the business session of the Annual Meeting of the Association.

Section 3. The elective Officers and Directors of the Association shall be named by secret ballot of the members attending and voting at the business session of the Annual Meeting of the Association. A majority of the votes cast shall be required to elect Officers and Directors except for the Directors elected at large. A plurality of the votes cast on ballots for Directors elected at large shall be required for election.

Section 4. Each Director representing a constituent state shall be elected by the members of the Association who are from the state represented by the respective Director.

ARTICLE VII

MEETINGS OF THE ASSOCIATION

The Association shall hold an annual meeting at such time and place as is designated by the Board of the Association.

ARTICLE VIII

BYLAWS

The Association may adopt such Bylaws as are necessary for its operation by a majority of the active members present and voting at any Annual Meeting of the Association. Such Bylaws shall not be in conflict with the provisions of this constitution. Bylaws or their modification may be proposed by an active member of the Board of Directors or any active member of the Association.
ARTICLE IX

AFFILIATIONS

A state research association whose members are desirous of promoting the purpose of this Association and sharing in its work may become affiliated with this organization as provided in the Bylaws.

ARTICLE X

AUTHORITY FOR CONDUCTING MEETINGS

Section 1. Robert's Rules of Order shall serve as the guide to be followed in conducting all regular and special meetings of the Association and the Board of the Association. At the beginning of each session, the President will name a parliamentarian to advise on all parliamentary questions during the meeting.

Section 2. This constitution shall go into effect immediately upon acceptance by a three-fourths majority vote of the members of the Board of the Association attending and voting at a regular Board meeting and by a three-fourths majority vote of the members attending and voting at a regular meeting of the Association.

ARTICLE XI

AMENDMENTS

Section 1. This constitution may be amended at any time by written recommendations of any active member, provided that (1) the member secures signatures of four other members to the proposed amendment, (2) the member submits this petition to the Board of the Association for action no less than six months prior to the Annual Meeting of the Association, (3) the amendment is approved by a two-thirds majority vote at a minimum of two meetings of the Board, and (4) the amendment is approved by a two-thirds majority vote of the active members attending and voting at the Annual Meeting of the Association.

Section 2. The activities of the Association shall be regulated by the Bylaws. These may be amended at any Annual Meeting by a majority vote of those present and voting, provided that written notification of the prospective amendment has been given to the members prior to the Annual Meeting.
BYLAWS

ARTICLE I

CONSTITUENT STATES OF THE ASSOCIATION

The constituent States of the Association include Alabama, Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee.

ARTICLE II

DUTIES OF THE OFFICERS AND DIRECTORS OF THE ASSOCIATION

Section 1.a. The President shall preside at all regular and special meetings of the Association and all regular and special meetings of the Board, or shall designate an individual to assume this responsibility.

b. The President shall ensure the coordination of all activities of the Association through cooperative efforts with the Executive Secretary, shall represent the Association at all regular and special functions, shall speak for the Association at all times while serving as President, and shall prepare the annual budget.

c. The President shall appoint committees of the Association as necessary to perform specific responsibilities with the chair of each committee serving as a non-voting representative to the Board.

d. The President shall appoint editors for the Proceedings of the Annual Meeting and any periodic publications of the Association with each editor serving as a non-voting representative to the Board.

Section 2.a. The Vice-President/President-Elect shall assist the President at all times. In the case of the resignation or incapacity of the President, the Vice-President/President-Elect shall assume the office of President and complete the unexpired term. In such case, the Vice-President/President-Elect shall also serve the subsequent full term as President that would have accrued by succession to the office.

b. The Vice-President/President-Elect shall be responsible for the preparation and dissemination of current revisions and additions to the Operations Manuals of the Association. These materials shall be distributed at biannual meetings of the Board and the committee chairpersons as appropriate.

Section 3.a. The Secretary-Treasurer shall conduct the correspondence for the Association, keep minutes and records for all regular and special meetings of the Association, keep minutes and records for all meetings of the Board, keep account of and report all monies received, write checks as authorized by the Board, and supervise registration at the Association’s Annual Meeting.

b. The Secretary-Treasurer shall prepare and distribute minutes to the Board Members for any regular and special meetings within six weeks after the conclusion of each meeting. Unless there is written notice from any Board Member within four weeks after the distribution of the minutes concerning errors in the minutes, these shall become the official record of the proceedings of the meeting upon approval by the Executive Committee of the Board.
c. The Secretary-Treasurer shall prepare and submit the books of the Association for an annual audit to be conducted after the close of the business year by an active member, other than the incoming or outgoing Secretary-Treasurer, appointed by the incoming President.

Section 4. The Directors elected at large shall attend all regular and special business meetings of the Board, stimulate interest in the membership of the Association and perform such responsibilities as are designated by the President.

Section 5. The Directors who represent the elementary-secondary schools and the State Departments of Education shall attend all regular and special meetings of the Board, coordinate activities within these groups, actively solicit memberships in the Association from their respective groups, and perform such responsibilities as are designated by the President.

Section 6. The Directors who represent the various states shall attend all regular and special meetings of the Board, solicit memberships in the Association from their states, and perform such responsibilities as are designated by the President.

Section 7.a. The Executive Secretary shall be responsible for coordinating the work of the Association and serving as advisor in all activities of the Association.

b. The Executive Secretary shall provide liaison with other professional organizations and entities on behalf of the Association.

c. The Executive Secretary shall provide a repository of historical documents and records of the Association.

d. The Executive Secretary shall maintain a current compilation of the policies and procedures approved by the Board.

e. The Executive Secretary shall maintain records of membership for the Association.

f. The Executive Secretary shall perform business and communication functions of the association as directed by the Board.

Section 8.a. The Executive Committee of the Board will meet on call of the President of the Association. The committee shall have general supervision of the affairs of the Association between meetings of the Board, shall make recommendations to the Board on any matters affecting the Association, and shall perform such other duties as the Board may assign to the Executive Committee.

b. Notice of all meetings of the Executive Committee and actions taken at these meetings shall be reported promptly to the entire membership of the Board. Actions of the Executive Committee shall be in conformity with these Bylaws and shall be subject to approval of the Board at its next meeting.

ARTICLE III

MEMBERSHIP DUES AND OTHER FEES

The Board of Directors has the authority during any budget year to establish the annual dues and also fees effective the subsequent year.
ARTICLE IV
BOARD OF DIRECTORS

The absence of a Board Member from two meetings during a term of office shall constitute grounds for declaring the office vacant. In such case, the Board shall determine the reasonableness of the absences. If the Board deems that the absences are without merit, it shall declare the office vacant. In the case of an elective office except for the office of Vice-President/President-Elect, the successor to fill the vacancy shall be named by a majority vote of the Board of the Association.

ARTICLE V
AFFILIATION WITH THE ASSOCIATION BY STATE RESEARCH ASSOCIATIONS

Section 1. The Association may establish affiliate relationships with state research associations in the Association's region that promote the purposes of the Association.

Section 2.a. The Association shall act on a request for affiliation by a state research association upon the submission to the President of the Association of a petition requesting affiliation which has been approved by the membership of the state research association and a copy of the constitution and bylaws of the state research association.

b. The establishment of an affiliate relationship between the Association and a state research association must be approved by a majority vote of the members of the Board of the Association attending and voting at a Board meeting and a majority vote of the members of the Association attending and voting at the Annual Meeting of the Association.

Section 3.a. The affiliate relationship between the Association and a state research association shall have as a provision that each organization may appoint a non-voting representative to serve on the board of its affiliate organization. The appointment of the Association's representative to an affiliated state research association shall be made by the President. The appointment of the state research association representative to the Board of the Association shall be made in the manner prescribed by the state research association.

b. The Association and an affiliated state research association shall advise their members of the activities of both organizations. Each organization shall encourage membership and participation in the other organization by persons from the state served by the state research association.

c. The Association and an affiliated state research association shall advise their members of the activities of both organizations. Each organization shall encourage membership and participation in the other organizations by persons from the state served by the state research association.

d. The Association and an affiliated state research association may cite their affiliation with each other where appropriate and desirable. The Association shall be identified as the senior organization because of its multi-state, regional scope.

e. The affiliation between the Association and a state research association shall not infringe upon the autonomy of either organization nor cause either organization to incur any responsibility for the financial obligations of the other organization.
f. The affiliation between the Association and a state research association may be terminated at any time by the decision of either organization. The decision by the Association to terminate the affiliation with a state research association must be approved by a majority vote of the members of the Board attending and voting at a Board meeting and a majority vote of the members of the Association attending and voting at the Annual Meeting of the Association.

g. Membership of an individual in either the Association or an affiliated state research association shall not constitute nor imply membership in the other organization.

ARTICLE VI

ARCHIVES OF THE ASSOCIATION

Section 1. The Board of the Association may designate one or more educational agencies and/or institutions to serve as official archives of the Association.

Section 2.a. The establishment of archives for the Association shall require approval by a majority vote of the members attending and voting at any regular Board meeting.

b. Archives shall be established by entering into a formal agreement between the Association and an educational agency or institution that includes specifications of the materials to be placed in the archives, the operational procedures for maintaining the archives, the services to be provided for users, and other matters as determined by the Board and the agency or institution.

c. Any educational agency or institution that maintains archives for the Association shall be located within the Association's region.

Section 3.a. An educational agency or institution that maintains archives of the Association shall comply fully with the specifications in the agreement with the Association. Failure to comply with these specifications will constitute cause for termination of the agreement by the Association.

b. The archives must be organized and maintained in such manner that the contents are readily identifiable, accessible, and retrievable to serve users.

c. A report on the status and operation of the archives shall be made at least annually to the Board by the agency or institution that maintains archives of the Association.

Section 4.a. The agreement between the Association and an educational agency or institution that maintains archives for the Association may be terminated by a decision of either party.

b. A decision by the Board of the Association to terminate such an agreement must be approved by a majority vote of the members attending and voting at any regular Board meeting.

c. Written notification of termination by either party shall be given to the other party and must include a delineation of the reason for the decision.
PAST PRESIDENTS OF MSERA
AND
AWARD WINNERS
<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>Diana Lancaster-Gardiner</td>
</tr>
<tr>
<td>1993</td>
<td>Robert L. Kennedy</td>
</tr>
<tr>
<td>1992</td>
<td>Judith A. Boser</td>
</tr>
<tr>
<td>1991</td>
<td>Gypsy Abbott Clayton</td>
</tr>
<tr>
<td>1990</td>
<td>John R. Petry</td>
</tr>
<tr>
<td>1989</td>
<td>Carl R. Martray</td>
</tr>
<tr>
<td>1988</td>
<td>Carolyn Williams</td>
</tr>
<tr>
<td>1987</td>
<td>William Deaton</td>
</tr>
<tr>
<td>1986</td>
<td>John Thornell</td>
</tr>
<tr>
<td>1985</td>
<td>Carolyn Reeves-Kazelskis</td>
</tr>
<tr>
<td>1984</td>
<td>Robert Rasmussen</td>
</tr>
<tr>
<td>1983</td>
<td>Ronald Adams</td>
</tr>
<tr>
<td>1982</td>
<td>James E. McLean</td>
</tr>
<tr>
<td>1981</td>
<td>Neil Amos</td>
</tr>
<tr>
<td>1980</td>
<td>Harry L. Bowman</td>
</tr>
<tr>
<td>1979</td>
<td>Bob Bills</td>
</tr>
<tr>
<td>1978</td>
<td>Charles Babb</td>
</tr>
<tr>
<td>1977</td>
<td>Doug McDonald</td>
</tr>
<tr>
<td>1976</td>
<td>Virginia Horns-Marsh</td>
</tr>
<tr>
<td>1975</td>
<td>Fred K. Bellott</td>
</tr>
<tr>
<td>1974</td>
<td>George Gaines</td>
</tr>
<tr>
<td>1973</td>
<td>Walter Matthews</td>
</tr>
</tbody>
</table>
OUTSTANDING RESEARCH PAPER AWARD WINNERS

1994........................................Yi-Cheng Wu and James E. McLean
1993.................................Alan S. Kaufman, Jane Ford-Richardson, and James E. McLean
1992........................................B. A. Nye, C. M.Achilles, J. Zahorias, D. Fulton,
1991.................................Robert L. Kennedy, Jianliang Wang and Gene Harryman
1990.................................Marion Dana, Anthony Scheffler, Mark Richmond,
                             Sandra Smith, and Howard Draper
1989.............................................................Jeffrey Gorrell
1988.............................................................James E. McLean and Alan S. Kaufman
1987.................................Larry Webber, Bruce Thompson, and Gerald S. Berenson
1986.................................Joan M. Butler, David DeRuzzo, John P. Wollenberg,
                             and Herbert M. Handley
1985......................................................Charles M. Achilles and M. Nan Lintz
1984.............................................................James Flaitz
1983.................................James M. Prater, Jr.
1982.............................................................Debra Joyce Steele
1981.............................................................Linda Newby
1980.............................................................Ruth Bragman
1979.................................Charles E. Standifer and Ernest G. Maples
1978.............................................................Robert E. Bills
1977.................................Robert H. Bradley and Bettye M. Caldwell

171
162
HERBERT HANDLEY DISSERTATION/THESIS AWARD
AND HARRY L. BOWMAN SERVICE AWARD WINNERS

Herbert Handley Dissertation/Thesis Award
1994.................................................................Jayne B. Zaharias
1993.................................................................Colleen C. Johnson
1992.................................................................Michele G. Jarrell
1991.................................................................Margaret L. Glowacki

Distinguished Dissertation/Thesis Award
1990.................................................................Kevin Hughes
1989.................................................................Gloria A. Turner
1988.................................................................Soo-Back Moon
1987.................................................................M. Nan Lintz
1986.................................................................Esther M. Howard
1985.................................................................Anne Hess

Harry L. Bowman Service Award
1994.................................................................John R. Petry
1993.................................................................Judith A. Boser
1992.................................................................Harry L. Bowman

MSERA Archives
Papers presented at the Annual Meeting of the Mid-South Educational Research Association are filed in the MSERA Archives at the Mitchell Memorial Library at Mississippi State University. Copies of papers may be obtained subsequently for a nominal fee by calling the Special Collections Room at the library at (601) 325-7680.
INDEX OF PARTICIPANTS
INDEX OF PARTICIPANTS

Achilles, Charles M........................................ 7, 8, 34, 82, 115, 139
Adams, Douglas L.......................................... 102
Addison, Clifton C........................................ 7, 103
Agee, Laine.................................................. 90
Alberg, Marty............................................... 90
Allen-Bradley, Janie..................................... 31
Allen, Ruth M............................................. 42, 129
Amos, Neil G............................................... 47, 95
Anderson, Kimberly P................................... 47
Anderson, Rebecca S..................................... 82
Anfara, Jr., Vincent A.................................. 129
Aper, Jeffery P............................................. 117
Armstrong, Anne-Marie................................. 50, 96
Armstrong, Joseph L.................................... 105
Arnold, Margery Ellen.................................. 110
Atkins, Kathleen......................................... 114
Avery, Jenny............................................... 146
Ayers, Mary............................................... 44
Babb, Charles Worthy.................................... 150
Baldwin, Charley Wade.................................. 135
Bailey, Gahan............................................. 59, 115
Balgopal, Ramsamy....................................... 51, 52, 116
Banks, Letitia............................................. 13
Barber-Freeman, Pamela T............................. 47
Barnes, Debbie........................................... 33
Barnette, J. Jackson.................................... 23, 71
Barron, Linda.............................................. 48
Barry, Nancy H........................................... 145
Bartell, Nancy Owens................................. 125
Bass, Jo Ann................................................ 10
Beanblosson, Cynthia L................................. 99
Becnel, Shirley.......................................... 10, 134
Belk, JoAnne.............................................. 97
Bell, David............................................... 78
Bellipanni, Lawrence John............................ 96
Benjamin, Victoria....................................... 69
Benton, Gary............................................... 97
Benton, Janet E........................................... 95
Berk, Ronald A........................................... 60
Billings, Ward H......................................... 134
Blackbourn, Joe.......................................... 10
Blendinger, Jack........................................ 3, 29, 55, 112, 143
Boakari, Francis.......................................... 40
Boals, Beverly G.......................................... 15
Bobbett, Gordon C....................................... 7, 8, 79
Bobbett, Nan C........................................... 79
Boes, Susan................................................ 145
Bogotch, Ira............................................... 28, 113
Bol, Linda.................................................. 90
Bolen, Laura................................................ 82, 130, 131, 144
Bond, Carole.............................................. 50
Bond, Stephanie.......................................... 100
Bosler, Judith A.......................................... 71, 73, 135
Bowman, Harry L......................................... 6
Boyd, Pamela C........................................... 9, 120
Boyd, Rossana R......................................... 79
Bradley, Mary............................................ 65
Bradley, Robert H......................................... 15, 93
Brenton, Camille......................................... 31
Breunig, Nancy Ann..................................... 116
Brown, Carla............................................... 3
Brown, G. Wayne.......................................... 6
Brown, Lon................................................ 103, 133
Brown, M. Mae........................................... 88
Bryan, Rita G.............................................. 5, 24
Bullard, Jerri H........................................... 126
Bullock, Mary Nell....................................... 115
Bunch, Fretta.............................................. 73
Burchfield, Michael Leonard.......................... 90
Burnett, Jr., I. Emett.................................... 146
Burr-McNeal, Blake...................................... 14, 97
Burry-Stock, Judith A................................... 45, 51, 144
Butler, E. Dean........................................... 14, 27, 66, 67, 97
Butler, Joan............................................... 144
Butler, Jr., James N..................................... 16
Butler, John M............................................ 44
Butler, Stephen L......................................... 84
Calvery, Robert........................................... 78
Carrigan, Sarah D........................................ 53, 113, 124, 125, 131
Carter, Alex............................................... 17
Carter, Kermit L.......................................... 127
Caruso, Michele E......................................... 38, 111
Casarena, Alex........................................... 22
Casbergue, Renee M...................................... 42
Casey, Jason P............................................ 90, 143
Cates, Mary Alice....................................... 9
Changas, Paul............................................. 73
Choron, Jeffrey.......................................... 123
Clark, Sheldon B......................................... 71
Clawson, Kenneth......................................... 30, 93, 96
Clement, Andrea.......................................... 63
Clemons, Renella.......................................... 15
Coad, Linda T............................................. 107
Cochran, Keith........................................... 62
Collier, Sunya E.......................................... 131
Colomb, Mark Anthony.................................. 70
Colvert, Gale C............................................ 22
Cornelious, Linda F...................................... 10, 35, 68, 142
Coud, Doug................................................ 123
Coussment, Sylvere H.................................... 150
Couvillion, Marion....................................... 22
Cox, Angela................................................ 92
Crawford, Melissa........................................ 147
Christenberry, Nolan.................................... 127
Conkler, Terry.......................................... 130
Counce, Beth H............................................ 146
Crone, Linda J............................................ 58, 88
Cross, John B............................................. 54
Crutcher, Addie.......................................... 146
INDEX OF PARTICIPANTS

Dabit, Jean S............................................ 38
Dagnese, Donna........................................... 78
Dai, Yong.................................................. 6, 70, 103
Daley, Christine E..................................... 58, 137
Dana, Marion E.......................................... 1, 64
Daniel, Larry G......................................... 20, 76, 100
Daniel, Patricia L....................................... 87, 95
Darch, Craig............................................... 1, 2
DaRos, Denise A......................................... 18
Daughenbaugh, Richard L.............................. 81
Davenport, Mark A....................................... 4, 120
Davidson, Betty M...................................... 27
Davidson, Charles W.................................... 22, 104, 133
Davidson, Gayle V...................................... 117
Davis, James E........................................... 16
Davis, Louise E........................................... 10, 25
Davis-Wiley, Patricia.................................. 52, 138
Deaton, William......................................... 31
deCassia Lima Pereira, Rita............................ 40
Dell, Geralyn L........................................... 34
DeMeulle, Lisa........................................... 52
DeMoulin, Donald........................................ 108
Dempsey, John V......................................... 41, 84, 98
DeVaney, Thomas A...................................... 70
Dhalaiwal, Sookham..................................... 12
Dharmadasa, Indranie................................... 40
Dharmadasa, K. H........................................ 40, 68
Dickerson, Larry......................................... 147
Dietrich, Amy P.......................................... 87, 90
Diket, Read M............................................. 101
Dinan, Robert L........................................... 81
Dogoni, Cisse............................................ 137
Dooley, Kathy............................................ 38, 110, 111
Dorothy, Wayne.......................................... 79
Downing, Jan E........................................... 17
Draper, Nancy M.......................................... 69
Duchart, Barbara A...................................... 26
Dueitt, Patricia.......................................... 54
Duncan, Janice Elaine Lewis........................... 55
Dunn, Linda W............................................ 19
Dyson, Yvonne........................................... 56
Easterday, Norman E.................................... 64
Easterly, Kenneth E...................................... 116
Edirisooriya, Gunapala................................. 86
Egea-Kuehne, Denise................................... 130
Ellis, Edwin S............................................ 23
Enger, John M............................................ 15, 59, 134
Etheridge, Carol Plata.................................. 12, 119
Evans, Cay................................................ 47
Faghihi, Faroozandeheh................................. 19
Fan, Ai-Chun............................................. 2, 77
Fasko, Daniel............................................ 134
Ferguson, William F..................................... 22, 132
Firek, Cara Kim.......................................... 39
Fisher, III, Samuel H.................................... 41
Flaitz, Jim R............................................. 11, 65
Fontenot, Dan............................................ 115
Forde, John E............................................ 144
Fortune, Jimmie C....................................... 36, 72
Foxworth, Randell....................................... 3, 29, 132
Franklin, Bobby J........................................ 29, 91
Franklin, Kathy Kramer................................. 72, 103, 124
Franks, Melvin E......................................... 32, 70
Furness, Marquita....................................... 146
French, Russell L........................................ 7, 8, 73
Gardner, Duane.......................................... 90
Gee, Jerry Brookshire................................... 21, 102
George, Marshall........................................ 22
George, Yvetta........................................... 78
Gettys, Cynthia M........................................ 20
Ghose, Chhanda.......................................... 26
Gieseman, John.......................................... 16
Gifford, Vernon D....................................... 66, 80, 101
Gilhool, Mick............................................ 115
Gillaspie, Lynn C........................................ 100, 126, 139
Gillespie, J. Harvey..................................... 133
Gipe, Joan P.............................................. 62
Glascock, Catherine H................................... 91
Glowacki, Margaret L.................................. 93, 96
Goodson-Espy, Tracy J.................................. 135
Gorrell, Jeffrey......................................... 39, 40, 68, 100
Gray, Nanci.............................................. 46
Greene, Katherine........................................ 5, 126
Gregg, Madeleine......................................... 23
Grierson, Sirpa T........................................ 20, 115
Griffin, Harold.......................................... 55
Grigsby, Donald L....................................... 66
Groves, Fred H........................................... 66
Groves, Robin A.......................................... 61, 121
Grubb, Deborah.......................................... 134
Grymes, Joanna M....................................... 45
Guillory, Margaret...................................... 38
Gunter, Glenda A......................................... 33, 142, 149
Gunter, Randolph E..................................... 149
Gynther, Malcolm D..................................... 126
Hacker, Douglas......................................... 90
Hackett, Deborah H...................................... 113
Hackett, E. Raymond.................................... 63, 113, 124, 131
Halcomb, Ann............................................ 30
Hale, Judith B........................................... 41
Hale, Judy A.............................................. 74
Hale, Rosalind............................................ 108
Hall, Genifer M.......................................... 94
Hall, Lew J............................................... 94
Halpin, Gerald.......................................... 51, 106
Halpin, Glennelle........................................ 60, 78, 106, 114, 127, 129
Halpin, Regina F......................................... 47, 116
Hamilton, Cathy H....................................... 127
Hanik, Mike.............................................. 89
Hanson, Richard.......................................... 147
<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harlan, Joan C</td>
<td>128</td>
</tr>
<tr>
<td>Harmon, Michelle G</td>
<td>137, 138</td>
</tr>
<tr>
<td>Harpole, Sandra H</td>
<td>101</td>
</tr>
<tr>
<td>Harrington, Sonja Y</td>
<td>4</td>
</tr>
<tr>
<td>Harris, Jimmye</td>
<td>140</td>
</tr>
<tr>
<td>Hashway, Robert M</td>
<td>140</td>
</tr>
<tr>
<td>Hawkey, Vicki P</td>
<td>113</td>
</tr>
<tr>
<td>Hayden, Michael A</td>
<td>32</td>
</tr>
<tr>
<td>Haynes, Linda</td>
<td>84</td>
</tr>
<tr>
<td>Head, L. Quinn</td>
<td>26</td>
</tr>
<tr>
<td>Hebbler, Stephen W</td>
<td>56, 116</td>
</tr>
<tr>
<td>Heflich, David A</td>
<td>123</td>
</tr>
<tr>
<td>Heffin, John F</td>
<td>29</td>
</tr>
<tr>
<td>Heineke, Sally</td>
<td>23</td>
</tr>
<tr>
<td>Henry, Doris A</td>
<td>55</td>
</tr>
<tr>
<td>Herman, Jerry R</td>
<td>27</td>
</tr>
<tr>
<td>Hetterich, Mark</td>
<td>50</td>
</tr>
<tr>
<td>Higgs, Graham E</td>
<td>104, 105</td>
</tr>
<tr>
<td>Hill, Doreen H</td>
<td>75</td>
</tr>
<tr>
<td>Hill, Paulette P</td>
<td>50</td>
</tr>
<tr>
<td>Hinton, Sam</td>
<td>21</td>
</tr>
<tr>
<td>Hodge, R. Lewis</td>
<td>73</td>
</tr>
<tr>
<td>Hofwolt, Clifford A</td>
<td>42, 80</td>
</tr>
<tr>
<td>Holcombe, Betty</td>
<td>69</td>
</tr>
<tr>
<td>Holliday, Dwight C</td>
<td>75</td>
</tr>
<tr>
<td>Holt, Mary Ann</td>
<td>20</td>
</tr>
<tr>
<td>Homan, Evelyn B</td>
<td>36</td>
</tr>
<tr>
<td>Hong, Gun-Pyo</td>
<td>41</td>
</tr>
<tr>
<td>Hoover, Susan P</td>
<td>82</td>
</tr>
<tr>
<td>Hopkins, Scott</td>
<td>138</td>
</tr>
<tr>
<td>Horgan, Dianne</td>
<td>90</td>
</tr>
<tr>
<td>Horne, Jr., Herbert R</td>
<td>32, 60</td>
</tr>
<tr>
<td>House, Joetta F</td>
<td>96</td>
</tr>
<tr>
<td>Houston-Coleman, Marilyn</td>
<td>121</td>
</tr>
<tr>
<td>Howard, W. Gary</td>
<td>117</td>
</tr>
<tr>
<td>Howe, Mary E</td>
<td>20, 57</td>
</tr>
<tr>
<td>Howerton, D. Lynn</td>
<td>50</td>
</tr>
<tr>
<td>Hubbard, Susan S</td>
<td>50</td>
</tr>
<tr>
<td>Hunt, Lori V</td>
<td>140</td>
</tr>
<tr>
<td>Huser, Cathryn A</td>
<td>85</td>
</tr>
<tr>
<td>Hutchison, Robert N</td>
<td>29, 91, 107, 144</td>
</tr>
<tr>
<td>Hutto, Melanie D</td>
<td>39</td>
</tr>
<tr>
<td>Hwang, Young Suk</td>
<td>40</td>
</tr>
<tr>
<td>Inoue, Yukiko</td>
<td>13</td>
</tr>
<tr>
<td>Iran-Nejad, Asghar</td>
<td>23, 122, 123, 131</td>
</tr>
<tr>
<td>Jackson, Debra W</td>
<td>101</td>
</tr>
<tr>
<td>Jackson, Elizabeth L</td>
<td>135</td>
</tr>
<tr>
<td>Jackson, Gary</td>
<td>17</td>
</tr>
<tr>
<td>James, Ann S</td>
<td>49</td>
</tr>
<tr>
<td>James, Hollis E</td>
<td>122</td>
</tr>
<tr>
<td>Jarrell, Michele G</td>
<td>56, 98</td>
</tr>
<tr>
<td>Jenkins, Robert L</td>
<td>95</td>
</tr>
<tr>
<td>Jiao, Qun G</td>
<td>103</td>
</tr>
<tr>
<td>Johns, Gregg A</td>
<td>143</td>
</tr>
<tr>
<td>Johnson, Gary P</td>
<td>36</td>
</tr>
<tr>
<td>Johnson, Holly</td>
<td>26</td>
</tr>
<tr>
<td>Johnson, James T</td>
<td>132</td>
</tr>
<tr>
<td>Johnson, W. C</td>
<td>68, 142</td>
</tr>
<tr>
<td>Johnston, James D</td>
<td>42</td>
</tr>
<tr>
<td>Johnston, Susanna</td>
<td>55</td>
</tr>
<tr>
<td>Jolly, Sue</td>
<td>36</td>
</tr>
<tr>
<td>Jones, Craig H</td>
<td>16</td>
</tr>
<tr>
<td>Jones, J. Reid</td>
<td>8</td>
</tr>
<tr>
<td>Jones, Linda T</td>
<td>3, 15, 43, 55, 77, 112, 143</td>
</tr>
<tr>
<td>Jones, Louise Jackson</td>
<td>55, 58, 70</td>
</tr>
<tr>
<td>Jones, Ola Mae</td>
<td>122</td>
</tr>
<tr>
<td>Jones, R. Lynn</td>
<td>102</td>
</tr>
<tr>
<td>Karivki, Patrick N</td>
<td>117</td>
</tr>
<tr>
<td>Karst, Ralph</td>
<td>132</td>
</tr>
<tr>
<td>Katayama, Andrew D</td>
<td>2, 77</td>
</tr>
<tr>
<td>Kaufman, Alan S</td>
<td>51, 52</td>
</tr>
<tr>
<td>Kazelskis, Richard</td>
<td>115</td>
</tr>
<tr>
<td>Keiter, Joel</td>
<td>78</td>
</tr>
<tr>
<td>Kelly, Susan M</td>
<td>87</td>
</tr>
<tr>
<td>Kemp, Marilyn</td>
<td>67</td>
</tr>
<tr>
<td>Kennedy, Robert L</td>
<td>31, 64, 141</td>
</tr>
<tr>
<td>Kennedy, Rosa L</td>
<td>90</td>
</tr>
<tr>
<td>Kersh, Mildred E</td>
<td>38, 115</td>
</tr>
<tr>
<td>Kerstiens, Jennifer</td>
<td>13</td>
</tr>
<tr>
<td>Keyes, Marie</td>
<td>57</td>
</tr>
<tr>
<td>Kher-Durlabhji, Neelam</td>
<td>38, 65, 69, 89</td>
</tr>
<tr>
<td>Kiick, Ann</td>
<td>70</td>
</tr>
<tr>
<td>Kilcrease, Annie M</td>
<td>55</td>
</tr>
<tr>
<td>Kim, Jwa K</td>
<td>19, 85</td>
</tr>
<tr>
<td>Kim, Soobang Ch</td>
<td>121</td>
</tr>
<tr>
<td>Kirk, John</td>
<td>124</td>
</tr>
<tr>
<td>Kirk, Pamela</td>
<td>46</td>
</tr>
<tr>
<td>Knight, Janie</td>
<td>145</td>
</tr>
<tr>
<td>Knight, W. Hal</td>
<td>72, 125</td>
</tr>
<tr>
<td>Knowlton, Dave S</td>
<td>47, 82</td>
</tr>
<tr>
<td>Kochan, Frances K</td>
<td>13, 28, 83</td>
</tr>
<tr>
<td>Kronick, Robert F</td>
<td>105</td>
</tr>
<tr>
<td>Kumar, David D</td>
<td>42</td>
</tr>
<tr>
<td>Lacina-Gifford, Lorna J</td>
<td>65</td>
</tr>
<tr>
<td>Lancaster-Gardiner, Diana</td>
<td>142</td>
</tr>
<tr>
<td>Land, Elizabeth R</td>
<td>5</td>
</tr>
<tr>
<td>Land, Warren A</td>
<td>5, 76</td>
</tr>
<tr>
<td>Larkin, Martha J</td>
<td>23, 76</td>
</tr>
<tr>
<td>Larmorn, Marilyn L</td>
<td>120</td>
</tr>
<tr>
<td>LaVergne-Pinkett, Elizabeth E</td>
<td>54</td>
</tr>
<tr>
<td>Lawler-Prince, Dianne</td>
<td>16, 44, 45</td>
</tr>
<tr>
<td>Leake, Cindy P</td>
<td>41</td>
</tr>
<tr>
<td>Leung, Jupian J</td>
<td>120</td>
</tr>
<tr>
<td>Lewis, Barbara</td>
<td>113</td>
</tr>
<tr>
<td>Lewis, Tracy</td>
<td>90</td>
</tr>
<tr>
<td>Light, John D</td>
<td>100, 126</td>
</tr>
<tr>
<td>Lind, Al N</td>
<td>105</td>
</tr>
<tr>
<td>Lindsey, Jimmy D</td>
<td>126</td>
</tr>
<tr>
<td>Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Lockwood, Robert</td>
<td>7, 51</td>
</tr>
<tr>
<td>Logan, Patricia</td>
<td>143</td>
</tr>
<tr>
<td>Long, Noel</td>
<td>67</td>
</tr>
<tr>
<td>Lott, Willis</td>
<td>17</td>
</tr>
<tr>
<td>Lovell, Ned B</td>
<td>29, 107, 144</td>
</tr>
<tr>
<td>LoVette, Otis</td>
<td>132</td>
</tr>
<tr>
<td>Lowe, Carole</td>
<td>32</td>
</tr>
<tr>
<td>Lucassen, Barbara</td>
<td>84</td>
</tr>
<tr>
<td>Lumpkins, Bob</td>
<td>55</td>
</tr>
<tr>
<td>MacGuire, Susanne</td>
<td>20, 71, 114</td>
</tr>
<tr>
<td>Magg, Alexander A</td>
<td>86, 124</td>
</tr>
<tr>
<td>Mainord, James C</td>
<td>114</td>
</tr>
<tr>
<td>Martin, Martha V</td>
<td>46</td>
</tr>
<tr>
<td>Martin, Oneida L</td>
<td>29, 111</td>
</tr>
<tr>
<td>Martray, Carl</td>
<td>37</td>
</tr>
<tr>
<td>Masztal, Nancy</td>
<td>34</td>
</tr>
<tr>
<td>Mathews, Jerry G</td>
<td>56, 69</td>
</tr>
<tr>
<td>McBride, Terri R</td>
<td>17</td>
</tr>
<tr>
<td>McCabe, Susan</td>
<td>24</td>
</tr>
<tr>
<td>McCurry, Patricia S</td>
<td>118</td>
</tr>
<tr>
<td>McFadden, Anna C</td>
<td>93</td>
</tr>
<tr>
<td>McGrath, Vincent R</td>
<td>18</td>
</tr>
<tr>
<td>McHaney, Jane H</td>
<td>9</td>
</tr>
<tr>
<td>McKay, Dakin</td>
<td>2, 21</td>
</tr>
<tr>
<td>McKelson, Keith</td>
<td>8</td>
</tr>
<tr>
<td>McLean, James E</td>
<td>49, 51, 52, 100, 116</td>
</tr>
<tr>
<td>McMahon, Rebecca</td>
<td>35</td>
</tr>
<tr>
<td>McMillan, Catherine</td>
<td>99</td>
</tr>
<tr>
<td>McNelis, Mary J</td>
<td>92</td>
</tr>
<tr>
<td>McSwain, Rinsey</td>
<td>122</td>
</tr>
<tr>
<td>Middleton, Renee A</td>
<td>94, 146</td>
</tr>
<tr>
<td>Miller, Edith</td>
<td>46</td>
</tr>
<tr>
<td>Mills, Lynn</td>
<td>99</td>
</tr>
<tr>
<td>Mims, Nancy</td>
<td>108</td>
</tr>
<tr>
<td>Minchew, Sue S</td>
<td>22</td>
</tr>
<tr>
<td>Minder, Carolyn</td>
<td>12</td>
</tr>
<tr>
<td>Miron, Louis</td>
<td>113</td>
</tr>
<tr>
<td>Molstad, Susan</td>
<td>89</td>
</tr>
<tr>
<td>Montgomery, Mark</td>
<td>11</td>
</tr>
<tr>
<td>Moody, M. Suzanne</td>
<td>137, 149</td>
</tr>
<tr>
<td>Moore, Kenneth D</td>
<td>138</td>
</tr>
<tr>
<td>Moore, Ramona C</td>
<td>62</td>
</tr>
<tr>
<td>Morris, Nancy T</td>
<td>26</td>
</tr>
<tr>
<td>Morris, Vivian G</td>
<td>145</td>
</tr>
<tr>
<td>Morse, David T</td>
<td>10, 106, 137, 138, 147</td>
</tr>
<tr>
<td>Morse, Linda W</td>
<td>10, 21, 44, 137, 138</td>
</tr>
<tr>
<td>Moss, Vel</td>
<td>138</td>
</tr>
<tr>
<td>Mueting, Barbara</td>
<td>55</td>
</tr>
<tr>
<td>Munsiar, Jeff</td>
<td>8</td>
</tr>
<tr>
<td>Murry, Joseph</td>
<td>113</td>
</tr>
<tr>
<td>Myhan, Janice</td>
<td>100</td>
</tr>
<tr>
<td>Napier, Georgia</td>
<td>60, 121</td>
</tr>
<tr>
<td>Napier, T. Lee</td>
<td>18, 121</td>
</tr>
<tr>
<td>Naylor, David L</td>
<td>114</td>
</tr>
<tr>
<td>Nejad, Mahmoud A</td>
<td>48</td>
</tr>
<tr>
<td>Nelson, J. Gordon</td>
<td>43, 74</td>
</tr>
<tr>
<td>Newbill, Sharon L</td>
<td>63</td>
</tr>
<tr>
<td>Newman, E. Jean</td>
<td>109</td>
</tr>
<tr>
<td>Newman, Michael</td>
<td>17</td>
</tr>
<tr>
<td>Nichols, Teresa M</td>
<td>43, 112</td>
</tr>
<tr>
<td>Niebuhr, Katherine E</td>
<td>136</td>
</tr>
<tr>
<td>Nolan, Rebecca F</td>
<td>6, 70, 103</td>
</tr>
<tr>
<td>Noland, Janie L</td>
<td>82</td>
</tr>
<tr>
<td>Norman, Antony D</td>
<td>37</td>
</tr>
<tr>
<td>Norton, Scott M</td>
<td>96, 99, 136</td>
</tr>
<tr>
<td>Nunnery, John</td>
<td>14, 90</td>
</tr>
<tr>
<td>Nweke, Winifred C</td>
<td>82</td>
</tr>
<tr>
<td>Nye, Barbara</td>
<td>139</td>
</tr>
<tr>
<td>O'Connell, Ann</td>
<td>90</td>
</tr>
<tr>
<td>Ogdon, Darlene</td>
<td>117</td>
</tr>
<tr>
<td>O'Neal, E.C.</td>
<td>11, 46</td>
</tr>
<tr>
<td>O'Neal, Marcia R</td>
<td>23</td>
</tr>
<tr>
<td>Obringer, Marsha S</td>
<td>37</td>
</tr>
<tr>
<td>Obringer, S. John</td>
<td>37</td>
</tr>
<tr>
<td>Onwuegbuzie, Anthony J</td>
<td>18, 58, 103, 137</td>
</tr>
<tr>
<td>Osborne, Jeanne</td>
<td>134</td>
</tr>
<tr>
<td>Ossont, Dawn M</td>
<td>42, 105, 145</td>
</tr>
<tr>
<td>Ouder, Cliff</td>
<td>25, 74</td>
</tr>
<tr>
<td>Owen, Dean</td>
<td>81</td>
</tr>
<tr>
<td>Owens, Emma Nan</td>
<td>94</td>
</tr>
<tr>
<td>Packard, Abbot L</td>
<td>72</td>
</tr>
<tr>
<td>Painter, John</td>
<td>145</td>
</tr>
<tr>
<td>Park, Hae-Seong</td>
<td>96</td>
</tr>
<tr>
<td>Parker, Ered</td>
<td>86</td>
</tr>
<tr>
<td>Parmer, Lavada J</td>
<td>119</td>
</tr>
<tr>
<td>Patrick, Lynne</td>
<td>32, 35, 111</td>
</tr>
<tr>
<td>Pautz, Roland F</td>
<td>65</td>
</tr>
<tr>
<td>Payne, Ruby</td>
<td>104</td>
</tr>
<tr>
<td>Person, William A</td>
<td>36, 95</td>
</tr>
<tr>
<td>Petry, John R</td>
<td>34, 58, 104</td>
</tr>
<tr>
<td>Phillips, Jeanne</td>
<td>13, 14, 97</td>
</tr>
<tr>
<td>Phillipsen, Leslie</td>
<td>99</td>
</tr>
<tr>
<td>Pittman, Kathleen</td>
<td>78</td>
</tr>
<tr>
<td>Plett, Shelley L</td>
<td>142</td>
</tr>
<tr>
<td>Pope, Sandra K</td>
<td>15</td>
</tr>
<tr>
<td>Portis, Sarah C</td>
<td>99</td>
</tr>
<tr>
<td>Powell, Jody</td>
<td>104</td>
</tr>
<tr>
<td>Price, Barrie Jo</td>
<td>93</td>
</tr>
<tr>
<td>Pugh, Ava</td>
<td>66, 142</td>
</tr>
<tr>
<td>Rabren, Karen J</td>
<td>1</td>
</tr>
<tr>
<td>Rakow, Ernest A</td>
<td>14, 19, 85</td>
</tr>
<tr>
<td>Ramasamy, Rangasamy</td>
<td>26</td>
</tr>
<tr>
<td>Ramsay, Shula</td>
<td>37</td>
</tr>
<tr>
<td>Rasmussen, Karen L</td>
<td>117</td>
</tr>
<tr>
<td>Raven, Matt</td>
<td>17</td>
</tr>
<tr>
<td>Reeves, Angie M</td>
<td>55</td>
</tr>
<tr>
<td>Reeves-Kazelskis, Carolyn</td>
<td>35, 114, 115</td>
</tr>
<tr>
<td>Reynolds, Mary Ruth</td>
<td>72</td>
</tr>
<tr>
<td>Richards, Janet C</td>
<td>82</td>
</tr>
<tr>
<td>Richmond, Mark G</td>
<td>20</td>
</tr>
<tr>
<td>Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Rieck, William A</td>
<td>4</td>
</tr>
<tr>
<td>Ring, Tracey R</td>
<td>150</td>
</tr>
<tr>
<td>Roberts, Julia</td>
<td>37</td>
</tr>
<tr>
<td>Roberts, Mark A</td>
<td>96</td>
</tr>
<tr>
<td>Robinson, Daniel H</td>
<td>2, 77</td>
</tr>
<tr>
<td>Robinson, Evan T</td>
<td>34</td>
</tr>
<tr>
<td>Robinson, Felicia H</td>
<td>57</td>
</tr>
<tr>
<td>Robinson, Jacquelyn P</td>
<td>52, 60</td>
</tr>
<tr>
<td>Robinson, Sheri L</td>
<td>2, 143</td>
</tr>
<tr>
<td>Robinson, Terry C</td>
<td>19</td>
</tr>
<tr>
<td>Roos, Marie C</td>
<td>33</td>
</tr>
<tr>
<td>Rose, Lucinda H</td>
<td>18</td>
</tr>
<tr>
<td>Ross, Steven M</td>
<td>89, 90, 143</td>
</tr>
<tr>
<td>Ross, Lisa</td>
<td>9</td>
</tr>
<tr>
<td>Rotta, Laura M</td>
<td>85, 141</td>
</tr>
<tr>
<td>Rountree, Barbara S</td>
<td>23</td>
</tr>
<tr>
<td>Rowland, Sidney</td>
<td>128</td>
</tr>
<tr>
<td>Rushing, Ben</td>
<td>115</td>
</tr>
<tr>
<td>Rushton, Ann</td>
<td>122</td>
</tr>
<tr>
<td>Ryan, Joseph M</td>
<td>18</td>
</tr>
<tr>
<td>Saarnio, David A</td>
<td>45, 51</td>
</tr>
<tr>
<td>Sabo, Dennis J</td>
<td>111, 144</td>
</tr>
<tr>
<td>Saleh, Amany</td>
<td>123</td>
</tr>
<tr>
<td>Sanford, Nancy K</td>
<td>75</td>
</tr>
<tr>
<td>Samders, Stephen W</td>
<td>68</td>
</tr>
<tr>
<td>Santana, Ronnie</td>
<td>12</td>
</tr>
<tr>
<td>Saul, Charles E</td>
<td>30</td>
</tr>
<tr>
<td>Schlchter, Carol L</td>
<td>23</td>
</tr>
<tr>
<td>Seagraves, Margaret C</td>
<td>45</td>
</tr>
<tr>
<td>Second, Georgia</td>
<td>60</td>
</tr>
<tr>
<td>Sewell, Angela Maynard</td>
<td>81, 124</td>
</tr>
<tr>
<td>Shapiro, Marsha Chusmir</td>
<td>4</td>
</tr>
<tr>
<td>Shaw, Jr., Edward L</td>
<td>64, 81</td>
</tr>
<tr>
<td>Sheets, Glenn</td>
<td>78</td>
</tr>
<tr>
<td>Shelton, Aubrey W</td>
<td>89</td>
</tr>
<tr>
<td>Shepard, Richard</td>
<td>81</td>
</tr>
<tr>
<td>Shemwell, Donald J</td>
<td>124</td>
</tr>
<tr>
<td>Simpson, Debra</td>
<td>67</td>
</tr>
<tr>
<td>Simpson, F. Morgan</td>
<td>90</td>
</tr>
<tr>
<td>Simpson, Robert G</td>
<td>51</td>
</tr>
<tr>
<td>Singleton, Dorothy L</td>
<td>94</td>
</tr>
<tr>
<td>Skinner, Christopher H</td>
<td>2, 111, 143</td>
</tr>
<tr>
<td>Slate, John R</td>
<td>44, 45, 51, 96</td>
</tr>
<tr>
<td>Smith, Cheri</td>
<td>146</td>
</tr>
<tr>
<td>Sledge, Alinda</td>
<td>9</td>
</tr>
<tr>
<td>Smith, David</td>
<td>7</td>
</tr>
<tr>
<td>Smith, Dennie L</td>
<td>32</td>
</tr>
<tr>
<td>Smith, Gwendolyn N</td>
<td>6</td>
</tr>
<tr>
<td>Smith, Jimmie N</td>
<td>103</td>
</tr>
<tr>
<td>Smith, Lana J</td>
<td>89, 90, 143</td>
</tr>
<tr>
<td>Smith, Mary Susan</td>
<td>90</td>
</tr>
<tr>
<td>Smith, Richard</td>
<td>50</td>
</tr>
<tr>
<td>Smith, Roben W</td>
<td>4, 41</td>
</tr>
<tr>
<td>Snipes, Gail</td>
<td>143</td>
</tr>
<tr>
<td>Snyder, Vaughn</td>
<td>19</td>
</tr>
<tr>
<td>Sorrels, Susan</td>
<td>26</td>
</tr>
<tr>
<td>Sparrow, Emily</td>
<td>9</td>
</tr>
<tr>
<td>Speed, Sallie K</td>
<td>127</td>
</tr>
<tr>
<td>Spencer, William A</td>
<td>12, 92, 94</td>
</tr>
<tr>
<td>Springer, Eric</td>
<td>50</td>
</tr>
<tr>
<td>Stallion, Brenda K</td>
<td>87</td>
</tr>
<tr>
<td>Stallworth, Joyce</td>
<td>101</td>
</tr>
<tr>
<td>Stanley, Patricia D</td>
<td>70</td>
</tr>
<tr>
<td>Steinmiller, Georgine</td>
<td>26</td>
</tr>
<tr>
<td>Steitz, Jean A</td>
<td>46</td>
</tr>
<tr>
<td>Stewart, Billy</td>
<td>29, 107, 124</td>
</tr>
<tr>
<td>Stringfield, Samuel C</td>
<td>90</td>
</tr>
<tr>
<td>Strodl, Peter</td>
<td>108, 108</td>
</tr>
<tr>
<td>Sultana, Qaisar</td>
<td>39, 74</td>
</tr>
<tr>
<td>Sumrall, Carol M</td>
<td>80</td>
</tr>
<tr>
<td>Sumrall, Malenaa A</td>
<td>148</td>
</tr>
<tr>
<td>Sumrall, William J</td>
<td>80</td>
</tr>
<tr>
<td>Sunal, Dennis W</td>
<td>102</td>
</tr>
<tr>
<td>Sunal, Cynthia S</td>
<td>102</td>
</tr>
<tr>
<td>Sutton, Joseph P</td>
<td>49</td>
</tr>
<tr>
<td>Tarsi, Nancy L</td>
<td>105</td>
</tr>
<tr>
<td>Talley, Marian</td>
<td>119</td>
</tr>
<tr>
<td>Taylor, Satomi Izumi</td>
<td>145</td>
</tr>
<tr>
<td>Tedford, Brenda</td>
<td>67</td>
</tr>
<tr>
<td>Thaller, Eva A</td>
<td>91, 148</td>
</tr>
<tr>
<td>Thames, Dana G</td>
<td>57, 120</td>
</tr>
<tr>
<td>Thomas, George M</td>
<td>34, 75, 95, 141</td>
</tr>
<tr>
<td>Thomas, J. Ressler</td>
<td>61</td>
</tr>
<tr>
<td>Thomas, Lee</td>
<td>88, 110</td>
</tr>
<tr>
<td>Thompson, Bruce</td>
<td>25, 85, 100, 110, 148</td>
</tr>
<tr>
<td>Thompson, Kay</td>
<td>13</td>
</tr>
<tr>
<td>Tindell, Marsha Butler</td>
<td>118</td>
</tr>
<tr>
<td>Tishler, Anne G</td>
<td>87</td>
</tr>
<tr>
<td>Troiani, Valerie</td>
<td>56</td>
</tr>
<tr>
<td>Turner, Catana</td>
<td>68</td>
</tr>
<tr>
<td>Turner, James S</td>
<td>89</td>
</tr>
<tr>
<td>Twillie, Less Doll</td>
<td>104</td>
</tr>
<tr>
<td>Vance, Mildred B</td>
<td>15</td>
</tr>
<tr>
<td>Vaughn-Neely, Elizabeth L</td>
<td>99</td>
</tr>
<tr>
<td>Vescovo, Vic</td>
<td>88</td>
</tr>
<tr>
<td>Vinson, Beth McCulloch</td>
<td>109</td>
</tr>
<tr>
<td>Wadsworth, Donna E. Dugger</td>
<td>61</td>
</tr>
<tr>
<td>Waggener, Anna T</td>
<td>147</td>
</tr>
<tr>
<td>Walker, Linda K</td>
<td>34, 75, 97, 125, 141</td>
</tr>
<tr>
<td>Walley, Oscar</td>
<td>12</td>
</tr>
<tr>
<td>Wallis, Terry</td>
<td>36</td>
</tr>
<tr>
<td>Walsh, Beverly Dolenz</td>
<td>148</td>
</tr>
<tr>
<td>Walsh, B. E.</td>
<td>90</td>
</tr>
<tr>
<td>Walsh, Julie B</td>
<td>68</td>
</tr>
<tr>
<td>Walters, Linda</td>
<td>87</td>
</tr>
<tr>
<td>Walthall, Joe E</td>
<td>33</td>
</tr>
<tr>
<td>Wang, Lei Weiping</td>
<td>12, 119</td>
</tr>
<tr>
<td>Ward, Cynthia A</td>
<td>57</td>
</tr>
<tr>
<td>Ware, Cynthia</td>
<td>112</td>
</tr>
<tr>
<td>Wasson, Rebecca W</td>
<td>145</td>
</tr>
</tbody>
</table>
## INDEX OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watkins, Regina M</td>
<td>126</td>
</tr>
<tr>
<td>Wear, Stella Brown</td>
<td>5</td>
</tr>
<tr>
<td>Weare, Jane L</td>
<td>30, 31, 53</td>
</tr>
<tr>
<td>Wesley, Jr., Marion T</td>
<td>32</td>
</tr>
<tr>
<td>West, Joan K</td>
<td>77</td>
</tr>
<tr>
<td>West, Russell</td>
<td>27</td>
</tr>
<tr>
<td>Westbrook, June</td>
<td>54</td>
</tr>
<tr>
<td>Whang, Patricia A</td>
<td>120</td>
</tr>
<tr>
<td>White, Ronnie</td>
<td>16</td>
</tr>
<tr>
<td>Whiteside, Leanne</td>
<td>15, 95, 147</td>
</tr>
<tr>
<td>Whittington, Mary</td>
<td>9</td>
</tr>
<tr>
<td>Whorton, James</td>
<td>114</td>
</tr>
<tr>
<td>Wilbourn, Leslie (Robin)</td>
<td>110, 111</td>
</tr>
<tr>
<td>Wilder, Milton R</td>
<td>8</td>
</tr>
<tr>
<td>Williams, Cardell</td>
<td>30</td>
</tr>
<tr>
<td>Williams, Rebecca G</td>
<td>3, 43</td>
</tr>
<tr>
<td>Wilson, Russell C</td>
<td>60</td>
</tr>
<tr>
<td>Winchester, Katherine A</td>
<td>1</td>
</tr>
<tr>
<td>Winsler, Adam</td>
<td>106, 127, 128</td>
</tr>
<tr>
<td>Wotta, E. Lea</td>
<td>53, 150</td>
</tr>
<tr>
<td>Wonycott, Angel</td>
<td>28</td>
</tr>
<tr>
<td>Woodall, Frederick</td>
<td>8, 53</td>
</tr>
<tr>
<td>Woodall, Jesse</td>
<td>8</td>
</tr>
<tr>
<td>Woodbury, Jacqueline M</td>
<td>149</td>
</tr>
<tr>
<td>Wulff, Mary Beth</td>
<td>46</td>
</tr>
<tr>
<td>Wyrick, Amy</td>
<td>99</td>
</tr>
<tr>
<td>Young, Jerry L</td>
<td>31</td>
</tr>
<tr>
<td>Zaharias, Jayne B</td>
<td>139</td>
</tr>
<tr>
<td>Zhang, Zhicheng</td>
<td>12</td>
</tr>
<tr>
<td>Zuelke, Dennis C</td>
<td>43, 112</td>
</tr>
<tr>
<td>Name</td>
<td>Page(s)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Achilles, Charles M</td>
<td>7,8,34,82,115,139</td>
</tr>
<tr>
<td>Adams, Douglas L</td>
<td>102</td>
</tr>
<tr>
<td>Addison, Clifton C</td>
<td>7,103</td>
</tr>
<tr>
<td>Agee, Laine</td>
<td>90</td>
</tr>
<tr>
<td>Alberg, Marty</td>
<td>90</td>
</tr>
<tr>
<td>Allen-Bradley, Janie</td>
<td>31</td>
</tr>
<tr>
<td>Allen, Ruth M</td>
<td>42,129</td>
</tr>
<tr>
<td>Amos, Neil G</td>
<td>47,95</td>
</tr>
<tr>
<td>Anderson, Kimberly P</td>
<td>47</td>
</tr>
<tr>
<td>Anderson, Rebecca S</td>
<td>82</td>
</tr>
<tr>
<td>Anfara, Jr., Vincent A</td>
<td>129</td>
</tr>
<tr>
<td>Aper, Jeffery P</td>
<td>117</td>
</tr>
<tr>
<td>Armstrong, Anne-Marie</td>
<td>50,98</td>
</tr>
<tr>
<td>Armstrong, Joseph L</td>
<td>105</td>
</tr>
<tr>
<td>Arnold, Margery Ellen</td>
<td>110</td>
</tr>
<tr>
<td>Atkins, Kathleen</td>
<td>114</td>
</tr>
<tr>
<td>Avery, Jenny</td>
<td>146</td>
</tr>
<tr>
<td>Ayers, Mary</td>
<td>44</td>
</tr>
<tr>
<td>Babb, Charles Worthy</td>
<td>150</td>
</tr>
<tr>
<td>Baldwin, Charley Wade</td>
<td>135</td>
</tr>
<tr>
<td>Bailey, Gahan</td>
<td>59,115</td>
</tr>
<tr>
<td>Balgopal, Ramswamy</td>
<td>51,52,116</td>
</tr>
<tr>
<td>Banks, Letitia</td>
<td>13</td>
</tr>
<tr>
<td>Barber-Freeman, Pamela T</td>
<td>47</td>
</tr>
<tr>
<td>Barnes, Debbie</td>
<td>33</td>
</tr>
<tr>
<td>Barnette, J. Jackson</td>
<td>23,71</td>
</tr>
<tr>
<td>Barron, Linda</td>
<td>48</td>
</tr>
<tr>
<td>Barry, Nancy H</td>
<td>145</td>
</tr>
<tr>
<td>Bartell, Nancy Owens</td>
<td>125</td>
</tr>
<tr>
<td>Bass, Jo Ann</td>
<td>10</td>
</tr>
<tr>
<td>Beanblosson, Cynthia L</td>
<td>99</td>
</tr>
<tr>
<td>Becnel, Shirley</td>
<td>10,134</td>
</tr>
<tr>
<td>Bell, JoAnne</td>
<td>97</td>
</tr>
<tr>
<td>Bell, David</td>
<td>78</td>
</tr>
<tr>
<td>Bellipanni, Lawrence John</td>
<td>66</td>
</tr>
<tr>
<td>Benjamin, Victoria</td>
<td>69</td>
</tr>
<tr>
<td>Benton, Gary</td>
<td>97</td>
</tr>
<tr>
<td>Benton, Janet E</td>
<td>95</td>
</tr>
<tr>
<td>Berk, Ronald A</td>
<td>60</td>
</tr>
<tr>
<td>Billings, Ward H</td>
<td>134</td>
</tr>
<tr>
<td>Blackburn, Joe</td>
<td>10</td>
</tr>
<tr>
<td>Blendinger, Jack</td>
<td>3,29,55,112,143</td>
</tr>
<tr>
<td>Boakari, Francis</td>
<td>40</td>
</tr>
<tr>
<td>Boals, Beverly G</td>
<td>15</td>
</tr>
<tr>
<td>Bobbett, Gordon C</td>
<td>7,8,79</td>
</tr>
<tr>
<td>Bobbett, Nan C</td>
<td>79</td>
</tr>
<tr>
<td>Boes, Susan</td>
<td>145</td>
</tr>
<tr>
<td>Bogotch, Ira</td>
<td>28,113</td>
</tr>
<tr>
<td>Bol, Linda</td>
<td>50</td>
</tr>
<tr>
<td>Bolen, Laura</td>
<td>62,130,131,144</td>
</tr>
<tr>
<td>Bond, Carole</td>
<td>90</td>
</tr>
<tr>
<td>Bond, Stephanie</td>
<td>100</td>
</tr>
<tr>
<td>Boser, Judith A</td>
<td>71,73,135</td>
</tr>
<tr>
<td>Bowman, Harry L</td>
<td>6</td>
</tr>
<tr>
<td>Boyd, Pamela C</td>
<td>9,120</td>
</tr>
<tr>
<td>Boyd, Rossana R</td>
<td>79</td>
</tr>
<tr>
<td>Bradley, Mary</td>
<td>65</td>
</tr>
<tr>
<td>Bradley, Robert H</td>
<td>15,93</td>
</tr>
<tr>
<td>Brenton, Camille</td>
<td>31</td>
</tr>
<tr>
<td>Breunig, Nancy Ann</td>
<td>116</td>
</tr>
<tr>
<td>Brown, Carla</td>
<td>3</td>
</tr>
<tr>
<td>Brown, G. Wayne</td>
<td>6</td>
</tr>
<tr>
<td>Brown, Lon</td>
<td>103,133</td>
</tr>
<tr>
<td>Brown, M. Mae</td>
<td>88</td>
</tr>
<tr>
<td>Bryan, Rita G</td>
<td>5,24</td>
</tr>
<tr>
<td>Bullard, Jerri H</td>
<td>126</td>
</tr>
<tr>
<td>Bullock, Mary Nell</td>
<td>115</td>
</tr>
<tr>
<td>Bunch, Fretta</td>
<td>73</td>
</tr>
<tr>
<td>Burchfield, Michael Leonard</td>
<td>90</td>
</tr>
<tr>
<td>Burnett, Jr., I. Emett</td>
<td>146</td>
</tr>
<tr>
<td>Burr-McNeal, Blake</td>
<td>14,97</td>
</tr>
<tr>
<td>Burry-Stock, Judith A</td>
<td>45,61,144</td>
</tr>
<tr>
<td>Butler, E. Dean</td>
<td>14,27,66,67,97</td>
</tr>
<tr>
<td>Butler, Jr., James N</td>
<td>16</td>
</tr>
<tr>
<td>Butler, Joan</td>
<td>144</td>
</tr>
<tr>
<td>Butler, John M</td>
<td>44</td>
</tr>
<tr>
<td>Butler, Stephen L</td>
<td>84</td>
</tr>
<tr>
<td>Calvery, Robert</td>
<td>73</td>
</tr>
<tr>
<td>Carpenter, Rebecca B</td>
<td>122</td>
</tr>
<tr>
<td>Carrigan, Sarah D</td>
<td>53,113,124,125,131</td>
</tr>
<tr>
<td>Carter, Alex</td>
<td>17</td>
</tr>
<tr>
<td>Carter, Kermit L</td>
<td>127</td>
</tr>
<tr>
<td>Caruso, Michele E</td>
<td>38,111</td>
</tr>
<tr>
<td>Casareno, Alex</td>
<td>23</td>
</tr>
<tr>
<td>Casbergue, Renee M</td>
<td>42</td>
</tr>
<tr>
<td>Casey, Jason P</td>
<td>90,143</td>
</tr>
<tr>
<td>Cates, Mary Alice</td>
<td>9</td>
</tr>
<tr>
<td>Changas, Paul</td>
<td>73</td>
</tr>
<tr>
<td>Chorion, Jeffrey</td>
<td>123</td>
</tr>
<tr>
<td>Clark, Sheldon B</td>
<td>71</td>
</tr>
<tr>
<td>Clawson, Kenneth</td>
<td>30,93,96</td>
</tr>
<tr>
<td>Clements, Andrea</td>
<td>63</td>
</tr>
<tr>
<td>Clemmons, Renella</td>
<td>15</td>
</tr>
<tr>
<td>Coats, Linda T</td>
<td>107</td>
</tr>
<tr>
<td>Cochran, Keith</td>
<td>62</td>
</tr>
<tr>
<td>Collier, Sunya E</td>
<td>131</td>
</tr>
<tr>
<td>Colomb, Mark Anthony</td>
<td>70</td>
</tr>
<tr>
<td>Colvert, Gale C</td>
<td>23</td>
</tr>
<tr>
<td>Cornelious, Linda F</td>
<td>10,35,68,142</td>
</tr>
<tr>
<td>Cound, Doug</td>
<td>123</td>
</tr>
<tr>
<td>Coussement, Sylvere H</td>
<td>150</td>
</tr>
<tr>
<td>Couvillion, Marion</td>
<td>22</td>
</tr>
<tr>
<td>Cozart, Angela</td>
<td>92</td>
</tr>
<tr>
<td>Crawford, Melissa</td>
<td>147</td>
</tr>
<tr>
<td>Christenberry, Nolan</td>
<td>127</td>
</tr>
<tr>
<td>Conkle, Terry</td>
<td>130</td>
</tr>
<tr>
<td>Counce, Beth H</td>
<td>146</td>
</tr>
<tr>
<td>Crane, Linda J</td>
<td>58,88</td>
</tr>
<tr>
<td>Cross, John B</td>
<td>54</td>
</tr>
<tr>
<td>Crutcher, Addie</td>
<td>146</td>
</tr>
<tr>
<td>Name</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Dabit, Jean S</td>
<td>38</td>
</tr>
<tr>
<td>Dagnese, Donna</td>
<td>78</td>
</tr>
<tr>
<td>Dai, Yong</td>
<td>6, 70, 103</td>
</tr>
<tr>
<td>Daley, Christine E</td>
<td>58, 137</td>
</tr>
<tr>
<td>Dana, Marion E</td>
<td>1, 64</td>
</tr>
<tr>
<td>Daniel, Larry G</td>
<td>20, 76, 100</td>
</tr>
<tr>
<td>Daniel, Patricia L</td>
<td>87, 95</td>
</tr>
<tr>
<td>Darch, Craig</td>
<td>1, 2</td>
</tr>
<tr>
<td>DaRos, Denise A</td>
<td>98</td>
</tr>
<tr>
<td>Davenport, Mark A</td>
<td>4, 120</td>
</tr>
<tr>
<td>Davidson, Betty M</td>
<td>27</td>
</tr>
<tr>
<td>Davidson, Charles W</td>
<td>22, 104, 133</td>
</tr>
<tr>
<td>Davis, James E</td>
<td>16</td>
</tr>
<tr>
<td>Davis, Louise E</td>
<td>10, 25</td>
</tr>
<tr>
<td>Davis-Wiley, Patricia</td>
<td>92, 138</td>
</tr>
<tr>
<td>Deaton, William</td>
<td>31</td>
</tr>
<tr>
<td>deCassia Lima Pereira, Rita</td>
<td>40</td>
</tr>
<tr>
<td>Dell, Geralyn L</td>
<td>27</td>
</tr>
<tr>
<td>DeMeule, Lisa</td>
<td>82</td>
</tr>
<tr>
<td>DeMoulin, Donald</td>
<td>108</td>
</tr>
<tr>
<td>Dempsey, John V</td>
<td>41, 84, 98</td>
</tr>
<tr>
<td>DeVaney, Thomas A</td>
<td>70</td>
</tr>
<tr>
<td>Dhaliwal, Sookham</td>
<td>12</td>
</tr>
<tr>
<td>Dharmadasa, Indranie</td>
<td>40</td>
</tr>
<tr>
<td>Dharmadasa, K. H</td>
<td>40, 68</td>
</tr>
<tr>
<td>Dickerson, Larry</td>
<td>147</td>
</tr>
<tr>
<td>Dietrich, Amy P</td>
<td>87, 90</td>
</tr>
<tr>
<td>Diket, Read M</td>
<td>101</td>
</tr>
<tr>
<td>Doan, Robert L</td>
<td>81</td>
</tr>
<tr>
<td>Dogoni, Cisse</td>
<td>137</td>
</tr>
<tr>
<td>Dooley, Kathy</td>
<td>38, 110, 111</td>
</tr>
<tr>
<td>Dorothy, Wayne</td>
<td>79</td>
</tr>
<tr>
<td>Downing, Jan E</td>
<td>17</td>
</tr>
<tr>
<td>Draper, Nancy M</td>
<td>69</td>
</tr>
<tr>
<td>Duchardt, Barbara A</td>
<td>26</td>
</tr>
<tr>
<td>Dueitt, Patricia</td>
<td>54</td>
</tr>
<tr>
<td>Duncan, Janice Elaine Lewis</td>
<td>58</td>
</tr>
<tr>
<td>Dunn, Linda W</td>
<td>19</td>
</tr>
<tr>
<td>Dyson, Yvonne</td>
<td>56</td>
</tr>
<tr>
<td>Easterday, Norman E</td>
<td>64</td>
</tr>
<tr>
<td>Easterly, Kenneth E</td>
<td>116</td>
</tr>
<tr>
<td>Edirisooriya, Gunapala</td>
<td>86</td>
</tr>
<tr>
<td>Egea-Kuehne, Denise</td>
<td>130</td>
</tr>
<tr>
<td>Ellis, Edwin S</td>
<td>23</td>
</tr>
<tr>
<td>Enger, John M</td>
<td>15, 59, 134</td>
</tr>
<tr>
<td>Etheridge, Carol Plata</td>
<td>12, 119</td>
</tr>
<tr>
<td>Evans, Cay</td>
<td>47</td>
</tr>
<tr>
<td>Faghahi, Faroozandeh</td>
<td>19</td>
</tr>
<tr>
<td>Fan, Ai-Chun</td>
<td>2, 77</td>
</tr>
<tr>
<td>Fasko, Daniel</td>
<td>134</td>
</tr>
<tr>
<td>Ferguson, William F</td>
<td>22, 132</td>
</tr>
<tr>
<td>Fireison, Cara Kim</td>
<td>39</td>
</tr>
<tr>
<td>Fisher, III, Samuel H</td>
<td>41</td>
</tr>
<tr>
<td>Flaitz, Jim R</td>
<td>11, 65</td>
</tr>
<tr>
<td>Fontenot, Dan</td>
<td>115</td>
</tr>
<tr>
<td>Forde, John E</td>
<td>144</td>
</tr>
<tr>
<td>Fortune, Jimmie C</td>
<td>36, 72</td>
</tr>
<tr>
<td>Foxworth, Randell</td>
<td>3, 29, 132</td>
</tr>
<tr>
<td>Franklin, Bobby J</td>
<td>29, 91</td>
</tr>
<tr>
<td>Franklin, Kathy Kramer</td>
<td>72, 103, 124</td>
</tr>
<tr>
<td>Franks, Melvin E</td>
<td>32, 70</td>
</tr>
<tr>
<td>French, Russell L</td>
<td>7, 8, 73</td>
</tr>
<tr>
<td>Furness, Marquita</td>
<td>146</td>
</tr>
<tr>
<td>Gardner, Duane</td>
<td>90</td>
</tr>
<tr>
<td>Gee, Jerry Brookshire</td>
<td>21, 102</td>
</tr>
<tr>
<td>George, Marshall</td>
<td>92</td>
</tr>
<tr>
<td>George, Yvetta</td>
<td>78</td>
</tr>
<tr>
<td>Gethys, Cynthia M</td>
<td>20</td>
</tr>
<tr>
<td>Ghose, Chhanda</td>
<td>26</td>
</tr>
<tr>
<td>Gieseman, John</td>
<td>16</td>
</tr>
<tr>
<td>Gifford, Vernon D</td>
<td>66, 80, 101</td>
</tr>
<tr>
<td>Gilhool, Mick</td>
<td>115</td>
</tr>
<tr>
<td>Gilaspie, Lynn C</td>
<td>100, 126, 139</td>
</tr>
<tr>
<td>Gillespie, J. Harvey</td>
<td>133</td>
</tr>
<tr>
<td>Gipe, Joan P</td>
<td>62</td>
</tr>
<tr>
<td>Glascock, Catherine H</td>
<td>91</td>
</tr>
<tr>
<td>Glowacki, Margaret L</td>
<td>93, 96</td>
</tr>
<tr>
<td>Goodson-Espy, Tracy J</td>
<td>135</td>
</tr>
<tr>
<td>Gorrell, Jeffrey</td>
<td>39, 40, 68, 100</td>
</tr>
<tr>
<td>Gray, Nanci</td>
<td>46</td>
</tr>
<tr>
<td>Greene, Katherine</td>
<td>5, 126</td>
</tr>
<tr>
<td>Gregg, Madeleine</td>
<td>23</td>
</tr>
<tr>
<td>Grierson, Sirpa T</td>
<td>20, 115</td>
</tr>
<tr>
<td>Griffin, Harold</td>
<td>55</td>
</tr>
<tr>
<td>Grigsby, Donald L</td>
<td>86</td>
</tr>
<tr>
<td>Groves, Fred H</td>
<td>66</td>
</tr>
<tr>
<td>Groves, Robin A</td>
<td>61, 121</td>
</tr>
<tr>
<td>Grubb, Deborah</td>
<td>134</td>
</tr>
<tr>
<td>Grymes, Joanna M</td>
<td>45</td>
</tr>
<tr>
<td>Guillory, Margaret</td>
<td>38</td>
</tr>
<tr>
<td>Gunter, Glenda A</td>
<td>33, 124, 149</td>
</tr>
<tr>
<td>Gunter, Randolph E</td>
<td>149</td>
</tr>
<tr>
<td>Gyntäer, Malcolm D</td>
<td>126</td>
</tr>
<tr>
<td>Hacker, Douglas</td>
<td>90</td>
</tr>
<tr>
<td>Hackett, Deborah H</td>
<td>113</td>
</tr>
<tr>
<td>Hackett, E. Raymond</td>
<td>93, 113, 124, 131</td>
</tr>
<tr>
<td>Halcomb, Ann</td>
<td>30</td>
</tr>
<tr>
<td>Hale, Judith B</td>
<td>41</td>
</tr>
<tr>
<td>Hale, Judy A</td>
<td>74</td>
</tr>
<tr>
<td>Hale, Rosalind</td>
<td>108</td>
</tr>
<tr>
<td>Hall, Genifer M</td>
<td>94</td>
</tr>
<tr>
<td>Hall, Lew J</td>
<td>94</td>
</tr>
<tr>
<td>Halpin, Gerald</td>
<td>51, 106</td>
</tr>
<tr>
<td>Halpin, Glennelle</td>
<td>60, 78, 106, 114, 127, 129</td>
</tr>
<tr>
<td>Halpin, Regina F</td>
<td>47, 116</td>
</tr>
<tr>
<td>Hamilton, Cathy H</td>
<td>127</td>
</tr>
<tr>
<td>Hanik, Mike</td>
<td>89</td>
</tr>
<tr>
<td>Hanson, Richard</td>
<td>147</td>
</tr>
</tbody>
</table>
INDEX OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harlan, Joan C.</td>
<td>128</td>
</tr>
<tr>
<td>Harmon, Michelle G.</td>
<td>137, 138</td>
</tr>
<tr>
<td>Harpole, Sandra H.</td>
<td>101</td>
</tr>
<tr>
<td>Harrington, Sonja Y.</td>
<td>4</td>
</tr>
<tr>
<td>Harris, Jimmye</td>
<td>140</td>
</tr>
<tr>
<td>Hashway, Robert M.</td>
<td>140</td>
</tr>
<tr>
<td>Hawley, Vicki P.</td>
<td>113</td>
</tr>
<tr>
<td>Hawkes, Brent B.</td>
<td>63</td>
</tr>
<tr>
<td>Hayden, Michael A.</td>
<td>32</td>
</tr>
<tr>
<td>Haynes, Linda</td>
<td>84</td>
</tr>
<tr>
<td>Head, L. Quinn</td>
<td>26</td>
</tr>
<tr>
<td>Hearl, Lee</td>
<td>141</td>
</tr>
<tr>
<td>Hebbler, Stephen W.</td>
<td>56, 116</td>
</tr>
<tr>
<td>Heffich, David A.</td>
<td>123</td>
</tr>
<tr>
<td>Hefflin, John F.</td>
<td>29</td>
</tr>
<tr>
<td>Heineke, Sally</td>
<td>23</td>
</tr>
<tr>
<td>Henry, Doris A.</td>
<td>55</td>
</tr>
<tr>
<td>Herman, Jerry R.</td>
<td>27</td>
</tr>
<tr>
<td>Hetterich, Mark</td>
<td>50</td>
</tr>
<tr>
<td>Higgs, Graham E.</td>
<td>104, 105</td>
</tr>
<tr>
<td>Hill, Doreen H.</td>
<td>75</td>
</tr>
<tr>
<td>Hill, Paulette P.</td>
<td>50</td>
</tr>
<tr>
<td>Hinton, Sam</td>
<td>21</td>
</tr>
<tr>
<td>Hodge, R. Lewis</td>
<td>73</td>
</tr>
<tr>
<td>Hofwolt, Clifford A.</td>
<td>42, 80</td>
</tr>
<tr>
<td>Holcombe, Betty</td>
<td>69</td>
</tr>
<tr>
<td>Holiday, Dwight C.</td>
<td>76</td>
</tr>
<tr>
<td>Holt, Mary Ann</td>
<td>20</td>
</tr>
<tr>
<td>Homan, Evelyn B.</td>
<td>36</td>
</tr>
<tr>
<td>Hong, Gun-Pyo</td>
<td>41</td>
</tr>
<tr>
<td>Hoover, Susan P.</td>
<td>82</td>
</tr>
<tr>
<td>Hopkins, Scott</td>
<td>138</td>
</tr>
<tr>
<td>Horgan, Diannée</td>
<td>90</td>
</tr>
<tr>
<td>Horne, Jr., Herbert R.</td>
<td>52, 60</td>
</tr>
<tr>
<td>House, Joetta F.</td>
<td>56</td>
</tr>
<tr>
<td>Houston-Coleman, Marilyn</td>
<td>121</td>
</tr>
<tr>
<td>Howard, W. Gary</td>
<td>117</td>
</tr>
<tr>
<td>Howe, Mary E.</td>
<td>20, 57</td>
</tr>
<tr>
<td>Howerton, D. Lynn</td>
<td>59</td>
</tr>
<tr>
<td>Hubbard, Susan S.</td>
<td>50</td>
</tr>
<tr>
<td>Hunt, Lori V.</td>
<td>140</td>
</tr>
<tr>
<td>Huser, Cathryn A.</td>
<td>95</td>
</tr>
<tr>
<td>Hutchison, Robert N.</td>
<td>29, 91, 107, 144</td>
</tr>
<tr>
<td>Hutto, Melanie D.</td>
<td>39</td>
</tr>
<tr>
<td>Hwang, Young Suk</td>
<td>40</td>
</tr>
<tr>
<td>Inoue, Yukiko</td>
<td>13</td>
</tr>
<tr>
<td>Iran-Nejad, Asghar</td>
<td>23, 122, 123, 131</td>
</tr>
<tr>
<td>Jackson, Debra W.</td>
<td>101</td>
</tr>
<tr>
<td>Jackson, Elizabeth L.</td>
<td>135</td>
</tr>
<tr>
<td>Jackson, Gary</td>
<td>17</td>
</tr>
<tr>
<td>James, Ann S.</td>
<td>49</td>
</tr>
<tr>
<td>James, Hollis E.</td>
<td>122</td>
</tr>
<tr>
<td>Jarrell, Michele G.</td>
<td>56, 98</td>
</tr>
<tr>
<td>Jenkins, Robert L.</td>
<td>95</td>
</tr>
<tr>
<td>Jiao, Qun G.</td>
<td>103</td>
</tr>
<tr>
<td>Johns, Gregg A.</td>
<td>143</td>
</tr>
<tr>
<td>Johnson, Gary P.</td>
<td>56</td>
</tr>
<tr>
<td>Johnson, Holly</td>
<td>26</td>
</tr>
<tr>
<td>Johnson, James T.</td>
<td>132</td>
</tr>
<tr>
<td>Johnson, W. C.</td>
<td>68, 142</td>
</tr>
<tr>
<td>Johnston, James D.</td>
<td>42</td>
</tr>
<tr>
<td>Johnston, Susanna</td>
<td>55</td>
</tr>
<tr>
<td>Jolly, Sue</td>
<td>36</td>
</tr>
<tr>
<td>Jones, Craig H.</td>
<td>16</td>
</tr>
<tr>
<td>Jones, J. Reid</td>
<td>8</td>
</tr>
<tr>
<td>Jones, Linda T.</td>
<td>3, 15, 43, 55, 77, 112, 143</td>
</tr>
<tr>
<td>Jones, Louise Jackson</td>
<td>55, 58, 70</td>
</tr>
<tr>
<td>Jones, Ola Mae</td>
<td>122</td>
</tr>
<tr>
<td>Jones, R. Lynn</td>
<td>102</td>
</tr>
<tr>
<td>Karviki, Patrick N.</td>
<td>117</td>
</tr>
<tr>
<td>Karst, Ralph</td>
<td>132</td>
</tr>
<tr>
<td>Katayama, Andrew D.</td>
<td>2, 77</td>
</tr>
<tr>
<td>Kaufman, Alan S.</td>
<td>51, 52</td>
</tr>
<tr>
<td>Kazelskis, Richard</td>
<td>115</td>
</tr>
<tr>
<td>Keiter, Joel</td>
<td>78</td>
</tr>
<tr>
<td>Kelly, Susan M.</td>
<td>87</td>
</tr>
<tr>
<td>Kemp, Marilyn</td>
<td>67</td>
</tr>
<tr>
<td>Kennedy, Robert L.</td>
<td>31, 64, 141</td>
</tr>
<tr>
<td>Kennedy, Rosa L.</td>
<td>99</td>
</tr>
<tr>
<td>Kersh, Mildred E.</td>
<td>38, 115</td>
</tr>
<tr>
<td>Kerstiens, Jennifer</td>
<td>13</td>
</tr>
<tr>
<td>Keyes, Marie</td>
<td>57</td>
</tr>
<tr>
<td>Kher-Durlabhji, Neelam</td>
<td>38, 65, 69, 89</td>
</tr>
<tr>
<td>Kiick, Ann</td>
<td>70</td>
</tr>
<tr>
<td>Kilcrease, Annie M.</td>
<td>55</td>
</tr>
<tr>
<td>Kim, Jwa K.</td>
<td>19, 85</td>
</tr>
<tr>
<td>Kim, Soobang Ch.</td>
<td>121</td>
</tr>
<tr>
<td>Kirk, John</td>
<td>124</td>
</tr>
<tr>
<td>Kirk, Pamela</td>
<td>46</td>
</tr>
<tr>
<td>Knight, Janie</td>
<td>145</td>
</tr>
<tr>
<td>Knight, W. Hal.</td>
<td>72, 125</td>
</tr>
<tr>
<td>Knowlton, Dave S.</td>
<td>47, 82</td>
</tr>
<tr>
<td>Kochan, Frances K.</td>
<td>13, 28, 83</td>
</tr>
<tr>
<td>Kronick, Robert F.</td>
<td>105</td>
</tr>
<tr>
<td>Kumar, David D.</td>
<td>42</td>
</tr>
<tr>
<td>Lacina-Gifford, Lorna J.</td>
<td>65</td>
</tr>
<tr>
<td>Lancaster-Gardiner, Diana</td>
<td>142</td>
</tr>
<tr>
<td>Land, Elizabeth R.</td>
<td>5</td>
</tr>
<tr>
<td>Land, Warren A.</td>
<td>5, 76</td>
</tr>
<tr>
<td>Larkin, Martha J.</td>
<td>23, 76</td>
</tr>
<tr>
<td>Larmont, Marilyn L.</td>
<td>120</td>
</tr>
<tr>
<td>LaVergne-Pinkett, Elizabeth E.</td>
<td>54</td>
</tr>
<tr>
<td>Lawler-Prince, Dianne</td>
<td>16, 44, 45</td>
</tr>
<tr>
<td>Leake, Cindy P.</td>
<td>41</td>
</tr>
<tr>
<td>Leung, Jupian J.</td>
<td>120</td>
</tr>
<tr>
<td>Lewis, Barbara</td>
<td>113</td>
</tr>
<tr>
<td>Lewis, Tracy</td>
<td>90</td>
</tr>
<tr>
<td>Light, John D.</td>
<td>100, 126</td>
</tr>
<tr>
<td>Lind, Al N.</td>
<td>105</td>
</tr>
<tr>
<td>Lindsey, Jimmy D.</td>
<td>26</td>
</tr>
<tr>
<td>Participant</td>
<td>Pages</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Lockwood, Robert</td>
<td>7, 51</td>
</tr>
<tr>
<td>Logan, Patricia</td>
<td>143</td>
</tr>
<tr>
<td>Long, Noel</td>
<td>67</td>
</tr>
<tr>
<td>Lott, Willis</td>
<td>17</td>
</tr>
<tr>
<td>Lovell, Ned B</td>
<td>29, 107, 144</td>
</tr>
<tr>
<td>LoVette, Otis</td>
<td>132</td>
</tr>
<tr>
<td>Lowe, Carole</td>
<td>82</td>
</tr>
<tr>
<td>Lucassen, Barbara</td>
<td>84</td>
</tr>
<tr>
<td>Lumpkins, Bob</td>
<td>25</td>
</tr>
<tr>
<td>MacGuire, Susanne</td>
<td>20, 71, 114</td>
</tr>
<tr>
<td>Magg, Alexander A</td>
<td>86, 124</td>
</tr>
<tr>
<td>Mainord, James C</td>
<td>114</td>
</tr>
<tr>
<td>Martin, Martha V</td>
<td>48</td>
</tr>
<tr>
<td>Martin, Oneida L</td>
<td>29, 111</td>
</tr>
<tr>
<td>Martray, Carl</td>
<td>37</td>
</tr>
<tr>
<td>Masztal, Nancy</td>
<td>34</td>
</tr>
<tr>
<td>Mathews, Jerry G</td>
<td>56, 69</td>
</tr>
<tr>
<td>McBride, Terri R</td>
<td>17</td>
</tr>
<tr>
<td>McCabe, Susan</td>
<td>24</td>
</tr>
<tr>
<td>McCurry, Patricia S</td>
<td>118</td>
</tr>
<tr>
<td>McFadden, Anna C</td>
<td>93</td>
</tr>
<tr>
<td>McGrath, Vincent R</td>
<td>18</td>
</tr>
<tr>
<td>McHaney, Jane H</td>
<td>9</td>
</tr>
<tr>
<td>McKay, Dakin</td>
<td>2, 21</td>
</tr>
<tr>
<td>McKelso, Keith</td>
<td>8</td>
</tr>
<tr>
<td>McLean, James E</td>
<td>49, 51, 52, 100, 116</td>
</tr>
<tr>
<td>McMahon, Rebecca</td>
<td>35</td>
</tr>
<tr>
<td>McMillan, Catherine</td>
<td>89</td>
</tr>
<tr>
<td>McNelis, Mary J</td>
<td>92</td>
</tr>
<tr>
<td>McSwain, Rinsey</td>
<td>122</td>
</tr>
<tr>
<td>Middleton, Rene A</td>
<td>94, 146</td>
</tr>
<tr>
<td>Miller, Edith</td>
<td>46</td>
</tr>
<tr>
<td>Mills, Lynn</td>
<td>99</td>
</tr>
<tr>
<td>Mims, Nancy</td>
<td>108</td>
</tr>
<tr>
<td>Minchew, Sue S</td>
<td>22</td>
</tr>
<tr>
<td>Minder, Carolyn</td>
<td>12</td>
</tr>
<tr>
<td>Miron, Louis</td>
<td>113</td>
</tr>
<tr>
<td>Molstad, Susan</td>
<td>89</td>
</tr>
<tr>
<td>Montgomery, Mark</td>
<td>11</td>
</tr>
<tr>
<td>Moody, M. Suzanne</td>
<td>137, 149</td>
</tr>
<tr>
<td>Moore, Kenneth D</td>
<td>138</td>
</tr>
<tr>
<td>Moore, Ramona C</td>
<td>62</td>
</tr>
<tr>
<td>Morris, Nancy T</td>
<td>28</td>
</tr>
<tr>
<td>Morris, Vivian G</td>
<td>145</td>
</tr>
<tr>
<td>Morse, David T</td>
<td>10, 106, 137, 138, 147</td>
</tr>
<tr>
<td>Morse, Linda W</td>
<td>10, 21, 44, 137, 138</td>
</tr>
<tr>
<td>Moss, Vel</td>
<td>138</td>
</tr>
<tr>
<td>Mueting, Barbara</td>
<td>55</td>
</tr>
<tr>
<td>Munsier, Jeff</td>
<td>8</td>
</tr>
<tr>
<td>Murry, Joseph</td>
<td>113</td>
</tr>
<tr>
<td>Myhan, Janice</td>
<td>100</td>
</tr>
<tr>
<td>Napier, Georgia</td>
<td>60, 121</td>
</tr>
<tr>
<td>Napier, T. Lee</td>
<td>18, 121</td>
</tr>
<tr>
<td>Naylor, David L</td>
<td>114</td>
</tr>
<tr>
<td>Nejad, Mahmoud A</td>
<td>48</td>
</tr>
<tr>
<td>Nelson, J. Gordon</td>
<td>43, 74</td>
</tr>
<tr>
<td>Newbill, Sharon L</td>
<td>63</td>
</tr>
<tr>
<td>Newman, E. Jean</td>
<td>109</td>
</tr>
<tr>
<td>Newman, Michael</td>
<td>17</td>
</tr>
<tr>
<td>Nichols, Teresa M</td>
<td>43, 112</td>
</tr>
<tr>
<td>Niebuhr, Katherine E</td>
<td>136</td>
</tr>
<tr>
<td>Nolan, Rebecca F</td>
<td>6, 70, 103</td>
</tr>
<tr>
<td>Noland, Juanie L</td>
<td>82</td>
</tr>
<tr>
<td>Norman, Antony D</td>
<td>37</td>
</tr>
<tr>
<td>Norton, Scott M</td>
<td>96, 99, 136</td>
</tr>
<tr>
<td>Nunnery, John</td>
<td>14, 90</td>
</tr>
<tr>
<td>Nweke, Winifred C</td>
<td>82</td>
</tr>
<tr>
<td>Nye, Barbara</td>
<td>139</td>
</tr>
<tr>
<td>O'Connell, Ann</td>
<td>90</td>
</tr>
<tr>
<td>Ogdon, Darlene</td>
<td>117</td>
</tr>
<tr>
<td>O'Neal, E.C.</td>
<td>11, 46</td>
</tr>
<tr>
<td>O'Neal, Marcia R</td>
<td>23</td>
</tr>
<tr>
<td>Obringer, Marsha S</td>
<td>37</td>
</tr>
<tr>
<td>Obringer, S. John</td>
<td>37</td>
</tr>
<tr>
<td>Onwuegbuzie, Anthony J</td>
<td>18, 58, 103, 137</td>
</tr>
<tr>
<td>Osborne, Jeanne</td>
<td>134</td>
</tr>
<tr>
<td>Ossont, Dawn M</td>
<td>42, 105, 145</td>
</tr>
<tr>
<td>Ouden, Cliff</td>
<td>25, 74</td>
</tr>
<tr>
<td>Owen, Dean</td>
<td>81</td>
</tr>
<tr>
<td>Owens, Emma Nan</td>
<td>94</td>
</tr>
<tr>
<td>Packard, Abbot L</td>
<td>72</td>
</tr>
<tr>
<td>Painter, John</td>
<td>145</td>
</tr>
<tr>
<td>Park, Hae-Seong</td>
<td>96</td>
</tr>
<tr>
<td>Parker, Ered</td>
<td>26</td>
</tr>
<tr>
<td>Parmer, Lavada J</td>
<td>119</td>
</tr>
<tr>
<td>Patrick, Lynne</td>
<td>32, 35, 111</td>
</tr>
<tr>
<td>Pautz, Roland F</td>
<td>65</td>
</tr>
<tr>
<td>Payne, Ruby</td>
<td>104</td>
</tr>
<tr>
<td>Person, William A</td>
<td>36, 95</td>
</tr>
<tr>
<td>Petry, John R</td>
<td>34, 88, 104</td>
</tr>
<tr>
<td>Phillips, Jeanne</td>
<td>13, 14, 97</td>
</tr>
<tr>
<td>Phillipson, Leslie</td>
<td>90</td>
</tr>
<tr>
<td>Pittman, Kathleen</td>
<td>73</td>
</tr>
<tr>
<td>Plett, Shelley L</td>
<td>142</td>
</tr>
<tr>
<td>Pope, Sandra K</td>
<td>15</td>
</tr>
<tr>
<td>Portis, Sarah C</td>
<td>99</td>
</tr>
<tr>
<td>Powell, Jody</td>
<td>104</td>
</tr>
<tr>
<td>Price, Barrie Jo</td>
<td>36</td>
</tr>
<tr>
<td>Pugh, Ava</td>
<td>66, 142</td>
</tr>
<tr>
<td>Rabren, Karen J</td>
<td>1</td>
</tr>
<tr>
<td>Rakow, Ernest A</td>
<td>14, 19, 85</td>
</tr>
<tr>
<td>Ramasamy, Rangasamy</td>
<td>23</td>
</tr>
<tr>
<td>Ramsay, Shula</td>
<td>37</td>
</tr>
<tr>
<td>Rasmussen, Karen L</td>
<td>117</td>
</tr>
<tr>
<td>Raven, Matt</td>
<td>17</td>
</tr>
<tr>
<td>Reeves, Angie M</td>
<td>55</td>
</tr>
<tr>
<td>Reeves-Kazelskis, Carolyn</td>
<td>35, 114, 115</td>
</tr>
<tr>
<td>Reynolds, Mary Ruth</td>
<td>72</td>
</tr>
<tr>
<td>Richards, Janet C</td>
<td>62</td>
</tr>
<tr>
<td>Richmond, Mark G</td>
<td>20</td>
</tr>
</tbody>
</table>
INDEX OF PARTICIPANTS

<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rieck, William A</td>
<td>4</td>
</tr>
<tr>
<td>Ring, Tracey R</td>
<td>150</td>
</tr>
<tr>
<td>Roberts, Julia</td>
<td>37</td>
</tr>
<tr>
<td>Roberts, Mark A</td>
<td>96</td>
</tr>
<tr>
<td>Robinson, Daniel H</td>
<td>277</td>
</tr>
<tr>
<td>Robinson, Evan T</td>
<td>84</td>
</tr>
<tr>
<td>Robinson, Felicia II</td>
<td>37</td>
</tr>
<tr>
<td>Robinson, Jacquelyn P</td>
<td>52, 60</td>
</tr>
<tr>
<td>Robinson, Sheri L</td>
<td>2, 143</td>
</tr>
<tr>
<td>Robinson, Terry C</td>
<td>19</td>
</tr>
<tr>
<td>Roos, Marie C</td>
<td>33</td>
</tr>
<tr>
<td>Rose, Lucinda H</td>
<td>18</td>
</tr>
<tr>
<td>Ross, Steven M</td>
<td>89, 90, 143</td>
</tr>
<tr>
<td>Ross, Lisa</td>
<td>9</td>
</tr>
<tr>
<td>Rotta, Laura M</td>
<td>85, 141</td>
</tr>
<tr>
<td>Rountree, Barbara S</td>
<td>23</td>
</tr>
<tr>
<td>Rowland, Sidney</td>
<td>128</td>
</tr>
<tr>
<td>Rushing, Ben</td>
<td>115</td>
</tr>
<tr>
<td>Rushton, Ann</td>
<td>122</td>
</tr>
<tr>
<td>Ryan, Joseph M</td>
<td>18</td>
</tr>
<tr>
<td>Sarnio, David A</td>
<td>45, 51</td>
</tr>
<tr>
<td>Second, Georgia</td>
<td>9</td>
</tr>
<tr>
<td>Sewell, Angela Maynard</td>
<td>81, 124</td>
</tr>
<tr>
<td>Shapiro, Marsha Chusmir</td>
<td>4</td>
</tr>
<tr>
<td>Shaw, Jr., Edward L</td>
<td>64, 81</td>
</tr>
<tr>
<td>Sheets, Glenn</td>
<td>78</td>
</tr>
<tr>
<td>Shelton, Aubrey W</td>
<td>69</td>
</tr>
<tr>
<td>Shepard, Richard</td>
<td>81</td>
</tr>
<tr>
<td>Shemwell, Donald J</td>
<td>124</td>
</tr>
<tr>
<td>Simpson, Debra</td>
<td>67</td>
</tr>
<tr>
<td>Simpson, F. Morgan</td>
<td>99</td>
</tr>
<tr>
<td>Simpson, Robert G</td>
<td>51</td>
</tr>
<tr>
<td>Singleton, Dorothy L</td>
<td>34</td>
</tr>
<tr>
<td>Skinner, Christopher H</td>
<td>2, 111, 143</td>
</tr>
<tr>
<td>Slate, John R</td>
<td>44, 45, 51, 96</td>
</tr>
<tr>
<td>Smith, Cheri</td>
<td>146</td>
</tr>
<tr>
<td>Sledge, Alinda</td>
<td>9</td>
</tr>
<tr>
<td>Smith, David</td>
<td>7</td>
</tr>
<tr>
<td>Smith, Dennie L</td>
<td>92</td>
</tr>
<tr>
<td>Smith, Gwendolyn N</td>
<td>6</td>
</tr>
<tr>
<td>Smith, Jimmie N</td>
<td>103</td>
</tr>
<tr>
<td>Smith, Jena J</td>
<td>89, 90, 143</td>
</tr>
<tr>
<td>Smith, Mary Susan</td>
<td>69</td>
</tr>
<tr>
<td>Smith, Richard</td>
<td>60</td>
</tr>
<tr>
<td>Smith, Roben W</td>
<td>4, 41</td>
</tr>
<tr>
<td>Snipes, Gail</td>
<td>143</td>
</tr>
<tr>
<td>Snyder, Vaughn</td>
<td>99</td>
</tr>
<tr>
<td>Sorrels, Susan</td>
<td>26</td>
</tr>
<tr>
<td>Sparrow, Emily</td>
<td>9</td>
</tr>
<tr>
<td>Speed, Sallie K</td>
<td>127</td>
</tr>
<tr>
<td>Spencer, William A</td>
<td>12, 92, 94</td>
</tr>
<tr>
<td>Springer, Eric</td>
<td>50</td>
</tr>
<tr>
<td>Stallion, Brenda K</td>
<td>87</td>
</tr>
<tr>
<td>Stallworth, Joyce</td>
<td>101</td>
</tr>
<tr>
<td>Stanley, Patricia D</td>
<td>70</td>
</tr>
<tr>
<td>Steinmiller, Georgine</td>
<td>25</td>
</tr>
<tr>
<td>Steitz, Jean A</td>
<td>46</td>
</tr>
<tr>
<td>Stewart, Billy</td>
<td>29, 107, 124</td>
</tr>
<tr>
<td>Stringfield, Samuel C</td>
<td>90</td>
</tr>
<tr>
<td>Strodl, Peter</td>
<td>108, 108</td>
</tr>
<tr>
<td>Sultana, Qaisar</td>
<td>39, 74</td>
</tr>
<tr>
<td>Sumrall, Carrol M</td>
<td>80</td>
</tr>
<tr>
<td>Sumrall, Maureen A</td>
<td>148</td>
</tr>
<tr>
<td>Sumrall, William J</td>
<td>80</td>
</tr>
<tr>
<td>Sunal, Cynthia S</td>
<td>102</td>
</tr>
<tr>
<td>Sunal, Dennis W</td>
<td>102</td>
</tr>
<tr>
<td>Sutton, Joseph P</td>
<td>49</td>
</tr>
<tr>
<td>Tarsi, Nancy L</td>
<td>105</td>
</tr>
<tr>
<td>Talley, Marian</td>
<td>119</td>
</tr>
<tr>
<td>Taylor, Satomi Izumi</td>
<td>145</td>
</tr>
<tr>
<td>Tedford, Brenda</td>
<td>67</td>
</tr>
<tr>
<td>Thaller, Eva A</td>
<td>91, 148</td>
</tr>
<tr>
<td>Thames, Dana G</td>
<td>57, 120</td>
</tr>
<tr>
<td>Thomas, George M</td>
<td>34, 75, 95, 141</td>
</tr>
<tr>
<td>Thomas, J. Ressler</td>
<td>61</td>
</tr>
<tr>
<td>Thomas, Lee</td>
<td>88, 110</td>
</tr>
<tr>
<td>Thompson, Bruce</td>
<td>25, 85, 100, 110, 148</td>
</tr>
<tr>
<td>Thompson, Kay</td>
<td>13</td>
</tr>
<tr>
<td>Tindell, Marsha Butler</td>
<td>118</td>
</tr>
<tr>
<td>Tishler, Anne G</td>
<td>87</td>
</tr>
<tr>
<td>Troiani, Valerie</td>
<td>56</td>
</tr>
<tr>
<td>Turner, Catana</td>
<td>68</td>
</tr>
<tr>
<td>Turner, James S</td>
<td>99</td>
</tr>
<tr>
<td>Twillie, Less Doll</td>
<td>104</td>
</tr>
<tr>
<td>Vance, Mildred B</td>
<td>15</td>
</tr>
<tr>
<td>Vaughn-Neely, Elizabeth I</td>
<td>99</td>
</tr>
<tr>
<td>Vescovo, Vic</td>
<td>88</td>
</tr>
<tr>
<td>Vinson, Beth McCulloch</td>
<td>109</td>
</tr>
<tr>
<td>Wadsworth, Donna E. Dugger</td>
<td>61</td>
</tr>
<tr>
<td>Waggner, Anna T</td>
<td>147</td>
</tr>
<tr>
<td>Walker, Linda K</td>
<td>34, 75, 97, 125, 141</td>
</tr>
<tr>
<td>Walley, Oscar</td>
<td>12</td>
</tr>
<tr>
<td>Wallis, Terry</td>
<td>25</td>
</tr>
<tr>
<td>Walsh, Beverly Dolenz</td>
<td>148</td>
</tr>
<tr>
<td>Walsh, E. J.</td>
<td>90</td>
</tr>
<tr>
<td>Walsh, Julie B</td>
<td>83</td>
</tr>
<tr>
<td>Walters, Linda</td>
<td>57</td>
</tr>
<tr>
<td>Walthall, Joe E</td>
<td>33</td>
</tr>
<tr>
<td>Wang, Lei Weiping</td>
<td>12, 119</td>
</tr>
<tr>
<td>Ward, Cynthia A</td>
<td>57</td>
</tr>
<tr>
<td>Ware, Cynthia</td>
<td>112</td>
</tr>
<tr>
<td>Wasson, Rebecca W</td>
<td>145</td>
</tr>
</tbody>
</table>
INDEX OF PARTICIPANTS

Watkins, Regina M..........................126
Wear, Stella Brown..........................5
Weare, Jane L..............................30,31,53
Wesley, Jr., Marion T.......................32
West, Joan K...............................77
West, Russell...............................27
Westbrook, June............................54
Whang, Patricia A..........................120
White, Ronnie...............................16
Whiteside, Leanne.........................15,95,147
Whittington, Mary...........................9
Whorton, James.............................114
Wilbourn, Leslie (Robin)..................110,111
Wilder, Milton R...........................8
Williams, Cardell..........................30
Williams, Rebecca G........................3,43
Wilson, Russell C..........................60
Winchester, Katherine A....................1
Winsler, Adam.............................106,127,128
Witta, E. Lea...............................53,150
Wonycott, Angel............................28
Woodall, Frederick.........................8,53
Woodall, Jesse.............................8
Woodbury, Jacqueline M...................149
Wulff, Mary Beth...........................46
Wyrick, Amy.................................99
Young, Jerry L.............................31
Zaharias, Jayne B...........................139
Zhang, Zhicheng...........................12
Zuelke, Dennis C..........................43,112