1998 MSERA Proceedings

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PROCEEDINGS OF THE

TWENTY-SEVENTH ANNUAL MEETING

OF THE

MID-SOUTH EDUCATIONAL RESEARCH ASSOCIATION

CONTAINING THE ABSTRACTS OF DISCUSSION SESSIONS,

DISPLAY SESSIONS, SYMPOSIA,

AND TRAINING SESSIONS

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NOVEMBER 4-6, 1998

NEW ORLEANS, LOUISIANA

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1998

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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.

MSERA

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.

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.

Once again ***John Petry*** has published the **Proceedings of the Annual Meeting** for MSERA. Many thanks to John and those folks who support him at The University of Memphis.

The impossible task of putting the whole program together was done by ***Jim Flaitz*** from the University of Southwestern Louisiana. And what a task that was! Jim was responsible for receiving all submissions for the annual meeting, sending these out to reviewers in a blind review process, analyzing their returns, getting subsequent reviews when needed, determining the various sessions needed for this Annual Meeting, assigning papers to the various sessions, making the room assignments, getting presiders for the sessions, and producing the program for the conference. On behalf of MSERA, thanks, Jim, for planning this year's Annual Meeting. This organization is really indebted to all those who have served as program chair, as Jim's work shows.

Our secretary-treasurer this year is ***Cliff Hofwolt*** from Vanderbilt University. Cliff was program chair last year and instituted various database procedures which were replicated by Jim Flaitz this year.   As secretary-treasurer, Cliff has formalized the annual updating of the membership database. Many thanks to Cliff and the folks that support him at Peabody College at Vanderbilt University.

A feature of the Annual Meeting is the presentation of awards for the distinguished paper and outstanding dissertation. ***Gerald Halpin*** from Auburn University has chaired the awards committee and coordinated the reviewing of a number of outstanding submissions.

Betty Kersh of the University of Southern Mississippi has been the MSERA representative responsible for coordinating the arrangements for the Annual Meeting in New Orleans and at the Hotel Monteleone. Betty's insight and attention to detail have made this one well-planned conference.

Ira Bogotch and his colleagues at the University of New Orleans have also helped with local arrangements, particularly with information to guide us through New Orleans and helping to host the receptions.

The successful direction of MSERA will be determined in part by the future officers of the association.   ***Dot Reed*** from Air University Headquarters chaired the Nomination Committee and has produced a slate of nominees we can be proud of.

Finally, a conference can only be successful if people attend and participate in the various activities. Thanks, so much, for each of you for your contribution to the 1998 Annual Meeting of MSERA.

John M. Enger, Arkansas State University
MSERA President, 1998

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Wednesday, November 4, 1998

7:30 a.m. - 8:45 a.m.   **NEW MEMBER AND GRADUATE STUDENT**
                          BREAKFAST .... Queen Ann Parlor

9:00 a.m.-9:50 a.m.   **RESEARCH IN THE SCHOOL**
  (Training Session)   **Bienville Room**

TRAINER: Kenneth T. Clawson, Eastern Kentucky University

USING ACTION RESEARCH TO INFORM AND IMPROVE INSTRUCTION

Kenneth T. Clawson and Beverly M. Klecker, Eastern Kentucky University

Action research in public-school and higher-education classroom settings is a process of systematically evaluating the consequences of educational decisions and adjusting practice to maximize effectiveness. The author conducted a training session using a Power Point presentation to compare and contrast action research with more traditional research paradigms, and to offer concrete guidelines for teachers/professors seeking to use this structured inquiry approach to inform and improve their teaching. The session included the following topics: (a) framing a research question, (b) developing the question, (c) planning observations/data collection (validity and reliability issues), (d) data analysis, (e) reporting results, and (d) using results to improve practice.

Handouts included a brief review of related literature on action research and materials that the participants could use in their own research projects. It was an interactive discussion/participation session. The discussion session was used to help participants identify areas of their teaching where action research might be used to improve practice.

9:00 a.m.-9:50 a.m.   **DISPOSITIONAL MODES OF FUNCTIONING AND DOMAIN-COMPREHENSIVE ACHIEVEMENT**
                          (Symposium) ....Cathedral Salon

ORGANIZER: Christie S. Howell, The University of Alabama

An Overview of Dispositional Modes of Functioning and Domain-Comprehensive Achievement
Asghar Iran-Nejad and Christie S. Howell, The University of Alabama

College courses tend to focus on specific topics. Such domain-specific topics are covered in textbook chapters or different class presentations by the course instructor. Developments in biofunctional cognition suggest that students' dispositional modes of functioning can influence their course experiences, learning, and performance. For instance, it should make a difference if students approach the course in a creative versus habitual, dynamic versus active, or constructive versus unconstructive mode of functioning. This symposium explored the relationship between these modes of functioning and domain-comprehensive versus domain-specific achievement.

Dispositional Modes of Functioning and Authentic Learning
William Derryberry, The University of Alabama

This paper investigated how dispositional modes of functioning related to students' domain-comprehensive perspectives on authentic learning in an undergraduate educational psychology course. Course instructors rated students with regard to their dispositional modes of functioning. Also rated were students' written work for the course using whole-theme standards of authentic learning. The findings were reported and discussed.

Wednesday, November 4, 1998

Dispositional Modes of Functioning and the Development of Identity
Christopher Taylor, The University of Alabama

This paper explored how dispositional modes of functioning, as described in the biofunctional model, might relate to the development of identity as discussed in Marcia's Identity Status Model.

The Relationship Between Dispositional Modes of Self-Regulation and Experienced Affect
Mike Crowson, The University of Alabama

In this study, undergraduate educational psychology students were assessed in terms of their active and dynamic dispositions to self-regulate in class participation or coursework. Their level of self-reported affect related to the course was also assessed. This paper reported the results.

**Modes of Functioning, Reflective Thinking, and Achievement
in an Educational Psychology Course**
Christie S. Howell, The University of Alabama

The relationship between dispositional modes of functioning, reflective thinking, and achievement was explored. Course instructors rated students in an educational psychology course with regard to their modes of functioning dispositions and reflectiveness in thinking. The relationship between these ratings and achievement as measured by course grade was examined.

9:00 a.m.-9:50 a.m.　　　　**EARLY CHILDHOOD EDUCATION**
(Discussion Session)　　　**Gallier Salon**

PRESIDER:　　　　　　　　Kathy K. Franklin, University of Arkansas at Little Rock

THE PERCEPTIONS OF KINDERGARTEN TEACHERS AND HEAD START TEACHERS ON HOW WELL PREPARED HEAD START STUDENTS ARE FOR KINDERGARTEN

Deborah R. Lester, Milligan College

The purpose of this study was to investigate the perceptions of kindergarten teachers and Head Start teachers on how well Head Start students were prepared emotionally, socially, intellectually, and physically for kindergarten. The sample included 12 kindergarten teachers and 12 Head Start teachers in a county school system located in northeastern Tennessee. The teachers completed a survey written by the researcher using the Likert scale. The survey was administered at the beginning of the school year in order for the kindergarten teachers to observe their students who attended Head Start the year before. The data were then analyzed using a t-test for independent means. The data analysis showed a significant difference between the perceptions of kindergarten teachers and Head Start teachers on how well prepared Head Start students were emotionally, socially, intellectually, and physically for kindergarten. The Head Start teachers perceived their students as more prepared for kindergarten than did the kindergarten teachers in three areas of preparedness.

MOTIVATION IN THE PRESCHOOL YEARS: CAN DIFFERENCES AND MOTIVATIONAL PATTERNS BE IDENTIFIED IN YOUNG CHILDREN?

Martha P. Carlton, The University of Alabama

Motivation is seen by educators as a key component in successful achievement in later school years. But often, the importance of motivation is overlooked when referring to the success of preschool and

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kindergarten children. Past studies have linked the development of helplessness with motivational patterns, but the link in the preschool years, when this pattern is forming, has not be strongly established. This study looked at the latest version of the Intrinsic Motivation Scale for Young Children and its use for differentiating motivational levels within this critical age range.

Forty-four children (25 male, 19 female) attending a public school kindergarten program participated in this study. The students' ages ranged from 5 years, 8 months to 6 years, 4 months. They were given the Intrinsic Motivation Scale for Young Children consisting of 20 items, which was administered in a group setting within three separate classrooms. Items were presented orally, with transparencies shown for clarification.

Items were designed around four motivational variables: persistence, choice of challenge, self-evaluation, and curiosity. Item to total correlations, factor analysis, and structural equation modeling were run with the resulting data. Six items were dropped as indicated by the item to total correlations, resulting in strong reliability coefficients. A three-factor structure emerged from the resulting 14-item scale. The identified factors were: self-evaluation, challenge/curiosity, and persistence. Factor analysis using structural equation modeling confirmed this three-factor structure.

The difficulty many children experience in academic learning situations may be because of motivational difficulties rather than lack of ability. The remediation of such difficulties could benefit all educational levels, with early identification being essential for the success of such remediation. The Intrinsic Motivation Scale for Young Children provided a means for motivational identification, with motivational patterns in terms of persistence, self-evaluation, and challenge/curiosity also being described.

CHILDREN'S CONCEPTUALIZATION OF FORCE: EXPERIMENTING AND PROBLEM SOLVING

Indranie Dharmadasa, Auburn University

This study examined the constructivist instruction on children's conceptualization of force as compared to the instruction based on text and demonstrations by the teacher. Constructivist instruction involves children's actions on objects, their observations of the reaction of the objects, and their reflection on the action and reaction of the objects.

The sample consisted of 67 third-grade children selected from four classrooms in two elementary schools in a southeastern state. The experimental group interacted with the designed materials, focusing on activities of push, pull, hit, slope, swing, and balance, which are closely bound to the development of the concept of force. The control group learned the same subject matter designed by the class teacher. Both groups were pretested and posttested on a task instrument, which was piloted with 22 children, aged 8-9 years. Classroom observations were conducted to ensure that the teachers were implementing the treatment correctly as expected and were keeping up with the time schedule.

Data were analyzed using descriptive statistics and qualitative research procedures. The results showed that more than half of the children in the experimental group moved to a higher level in the posttest than did the control group. Out of 32 children in the control group, 11 children advanced by at least one level, and five children moved backward by at least one level. Out of 35 children in the experimental group, 24 children advanced by at least one level, and one child moved backward. The chi-square value of change in children's levels of conceptualization of force was 9.66 (df=2), which was statistically significant $p<.01$. Conceptualization of force emerged through patterns identified in the reasoning processes of the children related to the levels IA, IB, IIA, IIB and IIIA. Findings of the study suggested implications for classroom practice and teacher educators.

9:00 a.m.-9:50 a.m.   **RESEARCH IN THE SCHOOL**
  (Discussion Session)   **Ursulines Salon**

PRESIDER: Dot Reed, Air University

AN ANALYSIS OF STUDENT ACHIEVEMENT USING DATA FROM THE ALABAMA STATE REPORT CARD: WHY SOME SCHOOLS ARE SUCCESSFUL AND OTHERS ARE NOT

Jerry G. Matthews, Margaret E. Ross, and William A. Spencer, Auburn University

Alabama newspapers have reported that school districts scoring in the caution and failure levels on the Stanford Achievement Test (SAT9) are in danger of intervention by the Alabama State Department of Education if no improvement is evident in subsequent years. The Alabama State Department of Education (SDE) assigned letter grades, e.g., A (superior) to F (failure), that reflect the student achievement rate of public schools on state and national standardized tests. The purpose of this study was to distinguish among mutually exclusive groups, for example, school districts with successful and unsuccessful SAT9 scores, based on Alabama report card variables such as socioeconomic status, financial factors, and demographic indicators. This study sought to develop a procedure for identifying variables that predicted successful student achievement on the SAT9.

Discriminant analysis was the analytical procedure employed to determine linear combinations of independent, or predictor, variables classifying school districts into either successful or unsuccessful SAT9 achievement levels. The findings indicated that some school districts in the lower socioeconomic levels and districts who spent fewer locally-generated dollars on instruction were successful on SAT9 achievement scores. Also, the discriminant analysis classified school districts differently across letter grade levels than the Alabama SDE method. These findings suggested the need for further studies on why some school districts with lower SES and financial resources scored higher on the SAT9 than other school districts with a similar demographic profile.

FACULTY STAGES OF CONCERN IN ADOPTING A NEW ASSESSMENT PROGRAM

Randall D. Parker, Louisiana Tech University

Louisiana's adoption of a new accountability system and the change from the California Achievement Test (CAT) to the use of the Iowa Test of Basic Skills (ITBS) to measure student achievement has led to concern from teachers and administrators about the effect this change may have on schools. Among the potential concerns of teachers are the: (1) effect on student achievement, (2) amount of time needed to make the change, and (3) proposed use of assessment data. In addition, change involves potential resistance, which can be attributed to: (1) fear of change, (2) fear of time commitment, and (3) fear of appearing incompetent. While faculty fears and concerns are affected by individual personalities and circumstances, it appears useful to measure faculty concerns regarding changes in the accountability program.

This study measured stages and levels of concern of 63 teachers in three north- central Louisiana districts regarding changes in the state accountability system. The Stages of Concern Questionnaire was administered prior to the change and again after the change was implemented. Of the seven stages of concern - (1) awareness, (2) informational, (3) personal, (4) management, (5) consequences, (6) collaboration, and (7) refocusing - the first four focus on the internal concerns of the individual, and the last three focus on external concerns relating to how the change may impact their associates and their students.

Two questions framed this research. At what stages were the faculty in their concerns about this change? What changes will occur in the faculty stages of concern over time? In addition, comparisons were made with regard to the grades taught and years of experience of the participants. Participants reported highest concern at the informational, personal, and management levels. Follow-up survey data (after the change) were reported as part of this presentation.

A SCHOOL ACCOUNTABILITY MODEL

James E. McLean, Scott W. Snyder, and Frank R. Lawrence,
The University of Alabama at Birmingham

The purpose of this paper was to describe the development and validation of a school accountability model. A common definition of "accountability" is that someone or some entity is held responsible for the performance of an organization. The accountability movement in this country has been driven primarily by

government officials. Often, both the methods and criteria used to hold schools accountable are the result of legislation or school board action. It is our belief that a school accountability model should have three characteristics: (1) provides for the external judgment of a school and its programs based on known standards (preferably, world class), (2) provides information to school personnel and parents for improvement, and (3) provides an opportunity for the school to communicate its goals and achievements to parents and the public. At best, most accountability systems accomplish only the first characteristic.

The school accountability model proposed in this study was based on the assumption that schools represent dynamic systems: if one element is changed, it will impact all other elements. The primary elements of the model were educational inputs, processes, and outcomes. The model was driven by the school's goals or desired outcomes. The first task was identifying the indicators for these three elements.

The model was piloted in two of the three largest school systems in the state. The data were analyzed using structural equation modeling. Structural equation modeling provides for a test of the fit of the data to the preconceived model and produces probabilities for associations among elements. The model provided input to school administrators and teachers about the impact of proposed changes.

9:00 a.m.-9:50 a.m.	**TEACHING AND LEARNING**
(Discussion Session)	**Beauregard Salon**

PRESIDER   Carolyn Reeves-Kazelskis, University of Southern Mississippi

A QUALITATIVE ANALYSIS OF DIVERGENT PRODUCTION TASK RESPONSES ACROSS THREE TIME-PRESS CONDITIONS

Gregg A. Johns, Mississippi State Hospital, and Linda W. Morse
and David T. Morse, Mississippi State University

Traditional assessments of creativity in the area of divergent production have employed standard time press conditions of three minutes for measures of fluency, flexibility, and originality. Recent studies have provided evidence that the traditional time press condition may impede both fluency and quality of responses. Other studies have shown differences in divergent production responses under a variety of creative prompting conditions.

The participants in the present study were 75 undergraduate students enrolled in educational psychology courses. There were 9 freshman, 16 sophomores, 26 juniors, and 24 seniors in the study of whom 63 were females and 12 were males. Ages ranged from 18 to 38 years with a mean of 21.67.

Participants were randomly assigned to one of six experimental groups. Each group was exposed to three vignettes that required participants to generate possible outcomes for situations involving human control of the weather, consequences of widespread organ transplants, and consequences for dealing with a large order of gloves in which the shipment contained two left-handed gloves in a pair. Each group was exposed to three time-press conditions, 2.5 minutes, 5.0 minutes, and 7.5 minutes, and three different prompt conditions (i.e., "Think of as many possible answers as you can," "Think of answers no one else will think of," and "Think of as many different answers as you can"). Each of the six groups was counterbalanced across the three vignette tasks in time-press requirements and creative prompt.

Responses were analyzed qualitatively across time-press conditions and across creative prompting conditions to examine process-oriented implications in regard to usefulness and uniqueness. Differences were found and described in terms of primacy and recency effects across conditions. Implications for future qualitative and quantitative analyses were discussed.

EFFECT OF SUPPLEMENTARY ADJUNCT DISPLAYS ON THE COMPREHENSION OF A COURSE-RELATED TEXT PASSAGE

Thomas A. DeVaney, Southeastern Louisiana University

The purpose of this study was to determine the effect of adjunct displays on the comprehension and recall of a course-related text passage. A between-subjects design was used to compare academic performance. The subjects for this study consisted of approximately 35 students enrolled in an introductory educational research course.

The subjects were given a packet containing a chapter-length text passage on single-subject research. Approximately half of the packets contained additional adjunct displays in the form of matrix organizers. For these subjects, the text was also modified by inserting statements referring the reader to the adjunct display. The subjects were given a predetermined length of time to read the passage and study the displays. The following day, the subjects were allowed to review the passages and displays for 10 minutes. Following the review of the passages, subjects completed a multiple choice test designed to measure comprehension and recall.

The assessment included items containing information that was contained in the text and adjunct displays as well as items containing information that was contained in the text only. Subjects received a total score indicating the number of items answered correctly. Subjects also received a score for the number of correctly answered items from those containing information found in the text and adjunct display and a score for the number of correctly answered items from those containing information found in the text only. A t-test for independent means was used to compare the scores for the two groups. An alpha level of .05 was used to determine statistical significance for all tests.

10:00 a.m.-10:50 a.m.   **PUBLICATION (Training Session)**... **Bienville Room**

TRAINER: Larry G. Daniel, University of Southern Mississippi

PLAYING THE PUBLICATION GAME--KNOWING THE RULES AND DEVELOPING A STRATEGY: ADVICE FOR GRADUATE STUDENTS AND PROFESSORS OF EDUCATION

Larry G. Daniel, University of Southern Mississippi

Professionals in academe exist in a "publish or perish" environment. Many universities and colleges require active scholarship as an important criterion in the tenure and promotion review process. Despite the importance of scholarly writing, many new and emerging scholars are either afraid of the publication process or else are unsure how to go about getting published.

This training session focused on (a) familiarizing participants with the logistics of the publication process, (b) enhancing participants' understanding of professional writing, and (c) increasing participants' motivation to write and publish. Participants were exposed to information and activities related to these three foci. More particularly, the session included an overview of publication ethics, suggestions for developing quality research ideas, procedures for developing a quality manuscript, strategies for selecting the correct publication outlet, and advice for working with editors to enhance one's opportunity for being successful in the publication process. In addition, procedures for effectively dealing with varying publication decisions (i.e., acceptance, revise and resubmit, rejection) were discussed.

Attention was given to the topic of publication productivity, and participants had an opportunity to set their own publication goals during the session. Useful handouts and copies of several different example publications were distributed to participants. These handouts and sample publications served to summarize workshop topics and illustrated successful publication strategies. Ample time was allowed during the session for participants' questions and comments regarding various issues relative to the publication process.

Wednesday, November 4, 1998

10:00 a.m.-10:50 a.m.   **AT-RISK STUDENTS (Symposium)**..Cathedral Salon

ORGANIZER: Jo Anne Hamrick, The Hamrick Group & Associates

FACTORS RELATED TO THE IDENTIFICATION OF ADOLESCENTS
AT RISK FOR SUICIDAL BEHAVIOR

Jo Anne Hamrick, The Hamrick Group & Associates, and Renitta L. Goldman
and Gary Sapp, The University of Alabama at Birmingham

In the United States, suicide among adolescents remains a major health hazard, being the third leading cause of death, following vehicle crashes and homicide. This trend is alarming because the actual numbers of adolescent suicides are considered to be underestimated, particularly among African American youth.

Assessment of indicators of adolescent suicide requires an extensive knowledge of relevant risk factors and observable symptoms. Given their intensive, yet long-term contacts with adolescents, educators are in an advantageous position to identify significant signs and symptoms of adolescents at risk for suicide. Hence, they may play a critical role in the dynamics of adolescent suicide. Unfortunately, there is little extant research focusing on educators' ability to identify these at-risk adolescents.

This study examined the knowledge and skills of professional educators in Alabama in relation to assessing adolescents at-risk for suicide. Primary purposes were to assess educators' ability to identify an adolescent at risk for suicidal behavior when influenced by the adolescent's race, gender, and socioeconomic status, and to examine how educators' characteristics predicted their ability to identify at risk adolescents.

Subjects were 882 educators of adolescents randomly-selected from five school districts in Alabama. They were divided into two groups: special educators and school counselors, and regular educators. Data were gathered using a Student Behavior Survey (SBS) developed for this study. The SBS was mailed to 1500 teachers, and a return rate of 58.8% was obtained. Respondents were presented with one of eight vignettes describing a hypothetical adolescent. Using a Likert-type scale, respondents rated 35 signs and symptoms of suicidal behavior. Demographic information also was collected to identify subject characteristics.

The data were analyzed using SAS. Three scales were developed: (1) overt symptoms of suicide, (2) covert symptoms of suicide, and (3) total scale. The Kruskal-Wallis test was used to compare the three scale scores for significance across selected demographic variables of the subjects. To determine the degree to which subject characteristics predicted their ability to identify indicators of adolescent suicide, a multiple regression procedure using a backward elimination model was conducted.

The major outcomes of the study were: (1) the respondents' overall capability to identify indicators of adolescent suicide was poor, (2) there was little difference among school counselors and special educators and regular educators in their ability to identify indicators of adolescent suicide, (3) female educators were more skilled than male educators in identifying at- risk adolescents, (4) graduate training facilitated educators' ability to identify at-risk students, and (5) comparisons of males and females by race indicated that African American females were more effective than their male counterparts in identifying covert symptoms of at-risk adolescents.

The current study answered key questions but raised more: What makes women better at recognizing adolescents at risk for suicide? Do factors such as cultural expectations affect the results? Should women be trained differently than men? Should educators be trained to be better listeners and/or more approachable? Regardless, students present salient needs and educators are in a critical position to attempt meaningful intervention.

10:00 a.m.-10:50 a.m.   **COUNSELING (Discussion Session)**...Gallier Salon

PRESIDER: Nola Christenberry, Arkansas State University

A COMPARISON OF SUPERVISOR CONTACT WITH INDIVIDUALS WITH DISABILITIES AND SUPERVISOR RATINGS OF COUNSELOR TRAINEES WITH DISABILITIES

Amy L. Skinner and Craig S. Cashwell, Mississippi State University

In the literature, counselors with disabilities have often enjoyed positive competency ratings by both clients and counselors. They have been rated as having more empathy, genuineness, and positive regard than counselors who do not have disabilities. Also, the frequency of contact an individual has *with* people with disabilities has been correlated with positive attitudes *toward* people with disabilities in the literature. The more frequent the contact an individual has with people with disabilities, the more favorable attitudes are toward people with disabilities. However, no such research has been conducted on supervisor ratings of counselor trainees with disabilities. The purpose of this study was to examine the relationship of amount of supervisor contact with people with disabilities and their ratings of counseling trainees with disabilities.

One videotaped counseling vignette was shown to master's and doctoral counseling students at Mississippi State University. Participants were randomly assigned to one of two conditions: they either viewed a vignette with a trainee in a wheelchair or the same vignette with a different camera angle that showed the trainee not in a wheelchair. Participants completed a Counselor Rating Form - Short Form (CRF-S) to measure competency variables (i.e., expertness, attractiveness, and trustworthiness) and a demographics form to measure frequency of contact (i.e., daily, weekly, monthly, every three months, less often). Group ratings and frequency of contact reports were then compared.

Results indicated that the counselor trainee in the disability condition (i.e. in the wheelchair) was rated more favorably in areas of competency as measured by the CRF-S than the counselor in the non-disabled condition. Results also indicated that the more frequent the contact participants had with individuals with disabilities (e. g., daily and weekly), the more positively they rated the trainee in the disability condition.

THE IMPACT OF RELIGIOUS PROSCRIPTIVENESS ON THE ALCOHOL USE OF HIGH SCHOOL STUDENTS

Hae-Seong Park and Lauri M. Ashton, University of New Orleans

The purpose of this study was to determine the relationship between religious proscriptiveness and the alcohol use of high school students. A sample of high school seniors (n=7,692) was drawn using the data of the NELS 88: second follow-up study. One-way ANOVA and post hoc tests using the Scheffé test were employed to determine the impact of religious proscriptiveness on alcohol use.

Religious proscriptiveness was measured through nine denominations: Baptist, Methodist, Lutheran, Presbyterian, Episcopal, Pentecostal, Roman Catholic, Mormon, and Jewish. A significant ($p<.0001$) difference of religious proscriptiveness was found on the alcohol use of high school students. Specifically, Mormon, Pentecostal, and Baptist (i.e., a proscriptive group) reported lower rates of alcohol use, while Lutheran, Episcopal, Jewish, and Roman Catholic (i.e., a nonproscriptive group) showed higher rates of alcohol use.

In addition, the impacts of gender and ethnicity on alcohol use were analyzed using three-way ANOVA. Significant ($p<.0001$) difference emerged showing girls and African Americans as less likely to use alcohol. Suggestions for future research were offered.

10:00 a.m.-10:50 a.m.   **MATHEMATICS EDUCATION**
                          (Discussion Session) ....**Pontalba Salon**

PRESIDER: Sonya Carr, Southeastern Louisiana University

HOW MUCH DO ACADEMIC SELF-ESTEEM AND MATH ANXIETY INFLUENCE MATHEMATICS PERFORMANCE?

Gary L. Cates, Katrina N. Rhymer, Stephanie L. Smith, and Christopher H. Skinner, Mississippi State University

Educators have become increasingly aware of the impact of student motivation, anxiety, and self-esteem on academic performance. These factors have influenced the way students approach new classes and assignments in the classroom. Students have preconceived ideas regarding their abilities that ultimately affect their performance. The purpose of this research was to empirically investigate college students' mathematics anxiety and academic self-esteem and analyze the relationship of these factors to actual mathematics performance. It was hypothesized that students who struggle with mathematics (i.e., not fluent) have high mathematics anxiety and low academic self-esteem, whereas students who are fluent in mathematics have low mathematics anxiety and high academic self-esteem.

College students were asked to complete a demographic questionnaire, the Coopersmith Self-Esteem Inventory, the Fennema-Sherman Mathematics Anxiety Scale, and mathematics sheets. A correlation was conducted to identify whether this inverse relationship existed in fluency between self-esteem and mathematics anxiety. Results and discussion focused on the implications for educational psychologists.

COMPARISON OF STUDENT ATTITUDE IN MATHEMATICS AND SCIENCE IN JAPAN AND THE U.S.A. TIMSS STUDY

Ming Lei and Judith A. Burry-Stock,
The University of Alabama

Achievement results from the Third International Mathematics and Science Study (TIMMS) indicated that Japan did better in both mathematics and science than the U.S. across the elementary, middle school, and high school levels. Since Japan consistently outscores the U.S., many questions arise concerning why Japan does better than the US in mathematics and science. Since a positive attitude assists in promoting achievement, attitudinal differences may provide a clue as to the answer. Attitudinal items from the TIMSS middle school study (population 2) were pooled together into one instrument to investigate similarities and differences in attitudes between the two countries. The total sample size was 20,851.

Separate factor analyses were done using principal factor solution with varimax rotation. A five-factor solution was found for the U.S., and a four-factor solution was found for Japan. Similar patterns were noted with differences lying in factor structures noting that Japanese students felt that it is important to succeed in school, whereas U.S. students feel that success is important in school. Both countries feel that success is a function of luck and ability. U.S. students separate math and science attitudes, whereas Japanese students combine their attitudes. Japanese students have a separate factor where the enjoyment of math and science is a separate dimension.

The U.S. reform movement, with an emphasis on constructivism, captures many of these aspects; however, they have not been stated as the results of attitudinal data analysis. It appears that we in the U.S. are on the right track. It would be advantageous if we could be a more willing to work harder, be more internally motivated, and be more "we" oriented. These points might assist us in teaching science and math for all Americans.

A TRADITIONALLY TAUGHT HIGH SCHOOL PRECALCULUS CLASS COMPARED TO CEEB PACESETTER MATHEMATICS: PRECALCULUS THROUGH MODELING

Causaundra O. Bradley and Ernest A. Rakow, The University of Memphis

This study compared attitudes and achievement of students in a traditionally taught precalculus class to that of similar students in a class taught using the CEEB Pacesetter Mathematics: Precalculus Through Modeling. The NCTM (1993) Curriculum and Evaluation Standards for School Mathematics recommend that technology be integrated into the curriculum and that there be an increased emphasis on application. The CEEB Pacesetter Mathematics reform is an example of implementing these standards into the precalculus curriculum.

All eleventh- and twelfth-grade students enrolled in precalculus in an urban high school were the subjects for this research. Students were initially assigned via a computer registration program to two sections of a

precalculus class with the counselor making final adjustment to resolve schedule conflicts. Complete data were available on 15 students in each class.

The Mathematics Classroom Learning Environment Survey was used to measure attitudes regarding mathematics during the first and last weeks of the school year. Prior mathematics ability was measured by a 30-item, teacher-constructed test of concepts from Algebra I, Algebra II, and Geometry. The outcome achievement measure was a 70-item final examination constructed jointly by the teachers of these two sections of precalculus.

Cronbach's alphas for pre-measures and post-measures ranged from .51 for the achievement pretest to .90 for the attitude posttest. A multivariate analysis of covariance was used to compare the scores on the post-measures while controlling for the pre-measures. There were no statistically significant differences between the means on either post-measure. The effect size was .15 for post-achievement, favoring students in the traditional class. The effect size was .96 for the post-attitudes, favoring students in the CEEB Pacesetter class. The difference in post- attitudes was explainable by differences in pre-attitudes.

10:00 a.m.-10:50 a.m. **STATISTICAL METHOD (Discussion Session)** ....**Ursulines Salon**

PRESIDER: Dot Reed, Air University

UNDERSTANDING INTERACTION EFFECTS AND TYPE IV ERRORS

Jeffrey L. Dodds, Texas A&M University

In 1957, Lee J. Cronbach, the developer of Cronbach's alpha, the generalizability coefficient, and other important statistics, presented his American Psychological Association presidential address. In that address, Cronbach argued that too few researchers were addressing the important question, "Does a given educational or psychological intervention work best for everybody, and, if not, what interventions work best for which types of people?" Cronbach labeled such inquiries aptitude-treatment interaction (or ATI) studies.

In the ensuing years, ATI designs have been employed with some frequency because most researchers have presumed that few educational interventions are ideal for everyone. Thus, the interpretation of interaction effects is important in many research studies. Yet, many researchers do not fully understand what interaction effects are.

For example, all ANOVA effects in a balanced design are uncorrelated. This means that knowledge of main effects does not typically provide any information regarding the magnitudes of interaction effects, since the effects are uncorrelated in balanced designs.

As another example, because the means for interactions involve fewer persons per mean, power to detect interaction effects is typically smallest for the highest-order interaction in a given design. This phenomenon has been formalized by some methodologists as the Type IV error--the failure to detect statistical significance for interaction null hypotheses that really should be rejected.

This paper reviewed the basics of understanding the elusive but important concept of the interaction effect. Small heuristic data sets were employed to make the discussion more concrete.

THE DEVELOPMENT OF STATISTICS

Gail Coblick, and Gerald Halpin and Glennelle Halpin,
Auburn University

The study reported on the development of statistics from the time of Aristotle to the twentieth century, emphasizing the development of statistical concepts of alpha, beta, power, effect size, sample size, and sampling variability.

Aristotle was the first known philosopher to write about chance occurrences. Throughout the centuries scientists and mathematicians expanded on the early philosophers' discussions of chance occurrences resulting in methods of statistical inferences used today by researchers in a variety of disciplines. Some of those making significant contributions to the development of statistical inference included: Nicholas Bernoulli's theorem on the Law of Large Numbers, Aldolphe Quetelet's work on the applications of the normal curve, Charles

Darwin's theory of evolution, Karl Pearson's development of the product moment correlation and the chi-square test, William Gosset's development of the *t*-test, and Ronald Fisher's work on the analysis of variance. Around 1940 researchers in a variety of disciplines eager to provide mathematical proof for their theories quickly adapted to methods of statistical inference developed from a combination of statistical inference concepts popularized at the time by mathematical staticians, textbook writers, and researchers.

The study reported on the interplay of events that has provided us with methods of statistical inference popularized in the twentieth century and current issues relating to concepts of alpha, beta, power, effect size, sample size, and sampling variability.

THE TUKEY HONESTLY SIGNIFICANT DIFFERENCE PROCEDURE
AND ITS CONTROL OF THE TYPE I ERROR-RATE

J. Jackson Barnette, University of Iowa, and James E. McLean,
The University of Alabama at Birmingham

Tukey's HSD is probably the most recommended and used procedure for controlling Type I error-rate when making multiple pairwise comparisons as follow-up to a significant omnibus *F* test. The purpose of this study was to compare observed Type I errors with nominal alphas of .01, .05, and .10 for various sample sizes and numbers of groups.

Monte Carlo methods were used to generate replications expected to provide .95 confidence intervals of +/-.001 around the nominal alphas of .10, .05, and .01 for 42 combinations of n (5, 10, 15, 20, 30, 60, and 100) and numbers of groups (3, 4, 5, 6, 8, and 10). Means and standard deviations of observed Type I error-rates and percentages of observed Type I errors falling below, within, and above the .95 CI's were determined for total number of Type I errors.

The results indicated that HSD is conservative relative to finding at least one Type I error per experiment across all alpha levels, sample sizes, and number of groups. However when total number of Type I errors is of interest, HSD was liberal at alpha of .10 and .05, but was very conservative when alpha was .01. The mean number of Type I errors when alpha was .10 was .12795 and in 100% of the sample size/number of groups configurations the observed Type I error-rate was above the .95 CI. At alpha of .05, the mean number of Type I errors per experiment was .05531 with 97.6% of the sample size/number of groups observed Type I errors above the .95 CI and only 2.4% within the .95 CI. When alpha was .01, the mean number of Type I errors per experiment was .00877 with 57.1% of the observed Type I errors below the .95 CI and 42.9% within the .95 CI.

10:00 a.m.-10:50 a.m. **TEACHER EDUCATION (Discussion Session)** .... **Beauregard Salon**

PRESIDER:Judith A. Burry-Stock, The University of Alabama

ESTABLISHING RESEARCH-BASED KNOWLEDGE IN TEACHER
EDUCATION THROUGH PROGRAM EVALUATION

Kaye Pepper, Louisiana Tech University

Limited research-based knowledge exists on teacher education that emphasizes the most effective approaches of training teacher candidates. Teacher education program evaluations could provide excellent opportunities to refine the research-based knowledge on the most effective methods of preparing teachers. The evaluation of the Senior Block Field Experience Program (Block) at Mississippi State University was conducted in such a manner as to further the research-based knowledge in teacher education.

The evaluation of the Block was a descriptive study based on both naturalistic inquiry and a goal-oriented approach. The theoretical model used was based on Stake's Countenance Model of Educational Evaluation. NCATE Standards were used as guidelines. Data were collected from seven groups that directly or indirectly participated in the Block program. Information was collected through interviews with administrators and

previous Block faculty as well. Archival documents also served as data sources. Open-ended question results and interview transcripts were analyzed for emerging themes. Results on the Likert-scale items from the questionnaire and ratings on various assessment instruments were totaled and percentages of responses calculated for each item.

Participants agreed that the Block program met some standards; however, they also agreed that some standards were not met. Strengths of the program were determined by those standards that were met and weaknesses by those standards not met. Recommendations were developed for the Administration, as well as the Block Director and faculty, based on weaknesses found.

This evaluation was carried out in the manner suggested in the literature to assist in the development of research-based knowledge in teacher education. This research-based knowledge provided empirical evidence related to the most effective ways to structure programs in certain situations, with certain populations, and under certain conditions. It provided program developers with important information that they can relate to their own program in order to make well-informed decisions.

A DECADE OF TEACHER INTERNS: WHERE ARE THEY NOW?

Judith A. Boser, The University of Tennessee, Knoxville

The primary purpose of this study was to determine the extent to which individuals who had completed the fifth-year teacher internship program at The University of Tennessee, Knoxville over the first 10 years of its implementation were employed as teachers. The internship program began in 1985-86 with an externally-funded program for selected individuals who were already professionals in other areas but wished to teach. In 1988-89, three individuals who were not part of the funded program were the first to complete internships as part of their regular teacher preparation program. Currently, student teaching is part of only two program areas; all others have adopted the fifth-year internship program.

A mail survey was conducted in an attempt to contact all 1102 individuals who had completed year-long teaching internships at UTK from 1985-86 through 1994-95. An explanatory letter was accompanied by a stamped and addressed reply postcard. Information requested included current address, occupation, employer, number of years teaching experience, and, if not teaching, whether they planned to return to teaching. Because of the size of the population, it had been determined that there would be only one mailing. Those who responded were given the opportunity to obtain a summary of the results by sending a self-addressed, stamped return envelope or providing an e-mail address. Also, they were given the option of not being included in the summary if they so requested.

Of the 1102 who had completed internships, mail was returned as undeliverable for 232, leaving 870 potential respondents. There was a return rate of 53%. Analyses consisted of descriptive statistics for the total group of respondents and for subpopulations by year of internship and by group (funded versus non-funded). The major finding was that most respondents were teaching.

A STUDY OF TEACHER INTERNS' CHANGING PERCEPTIONS DURING INTERNSHIPS

Dana Lynn Key, The University of Alabama

This study described the changing perceptions of two English language arts teacher interns in their five-month internship. The study was intended to emphasize both the emic issues (those of the participants) and the etic (those of the inquirer) concerning teaching, best practice, and the meaning of the experiences of the internship.

The interns were the participants in a phenomenological qualitative study. The researcher collected data from focus groups, structured and unstructured interviews, reflective journals, field notes, documents, and supervisory evaluations. The interviews were taped, transcribed, and collapsed into themes for analyzing. As is customary in qualitative research, the researcher was the instrument of the study in interpretation, but there were numerous validity and reliability controls such as member checks, triangulation, and peer debriefing. The researcher was a participant/observer and served as the university supervisor during the internship.

The nature of qualitative research being very personal was important to this educational study because it was based on the humanistic value and truth of each participant's experience. The huge amounts of data collected and analyzed pointed to underlying themes that greatly affected the participants and their perceptions of teaching. Four major themes emerged from the study as being instrumental to the successful completion of the internship and greatly affecting the teaching methodologies and perceptions of the participants: (1) theory into practice, (2) students, (3) cooperating teachers, and (4) school atmosphere.

While the study did not have implications for every college of education or university, it revealed insight into the internship experience; therefore, it would be of interest to and would benefit teacher educators and faculty who are involved in field experiences. In addition, it possibly could be helpful to cooperating teachers and interns before and during the internship.

10:00 a.m.-10:50 a.m. **TESTS (Discussion Session)**.. **Cabildo Salon**

PRESIDER: Randall D. Parker, Louisiana Tech University

REVIEW AND CRITIQUE OF THE CHILDREN'S APPERCEPTION TEST

Charla P. Lewis, Texas A&M University

The Children's Apperception Test (CAT) is an oral response, projective test that is used by school psychologists and counselors with children ages 3 to 10 years. Based in psychoanalytic theory, the 10 pictures intend to elicit responses from the child about her/his personality, problems of development, coping mechanisms, and interactions with the environment. The CAT is a descendant of the Thematic Apperception Test (TAT) and the 10 picture plates depict animals in various situations. The purpose of the present position paper was to review the literature regarding this educationally important tool, and to formulate a critique of the measure and some of its uses.

The test is individually administered, and the 10 pictures serve as test items. The test is scored using various scoring templates to evaluate diverse personality/educational dynamics.

The CAT has been controversial from its beginning for several reasons. First and foremost, it is a projective measure, and the reliability and validity of scores on these types of measures are sometimes attenuated by the measurement format. The CAT, in particular, has no real norms that anchors its interpretations of perceptions and behaviors. Next, the CAT uses animals to provoke stories from children about their lives and attitudes. This is a real concern regarding test validity. The literature review revealed no definitive evidence proving animals vs. people in test pictures to be superior in evoking stories from children. However, empirical studies with children from ages 3 to 7 have shown greater success and richer responses with the original version of the CAT. The literature also indicated that children ages 7 to 10 and those with higher IQs seemed to do better with the CAT-H, the human forms version of the CAT.

REVIEW AND CRITIQUE OF THE DAS-NAGLIERI COGNITIVE ASSESSMENT SYSTEM

Brigitte N. Frederick, Texas A&M University

The Das-Naglieri Cognitive Assessment System (CAS) is a new, norm-referenced approach to measuring intelligence in individuals aged 5 to 17. The CAS is based on the PASS theory of intelligence proposed by Soviet neuropsychologist A.R. Luria. The PASS theory of intelligence has four main components: planning, attention, simultaneous processing, and successive processing. The PASS theory postulates that the brain's cognitive processes can be divided into three units, all of which function together as a system. The first unit is associated with the upper brain stem and the limbic system and is used for attention tasks. The second system, associated with the posterior parts of the brain hemispheres, is used for simultaneous and successive processing and encoding. The third part of the functional system is responsible for planning processes and is associated with the anterior portion of the brain. The CAS is administered individually as either a Basic Battery, which incorporates eight subtests, or as a Standard Battery, which utilizes 12 subtests.

On its face the CAS appears to have considerable utility for use in education. The purpose of this paper was to review the literature on which the measure is based, and to critique the apparent strengths and weaknesses of the measure with a view toward evaluating the measure's usefulness.

It appears that the test offers a worthwhile alternative to traditional intelligence tests. Extensive reliability and validity studies have shown that the CAS is psychometrically very strong. The focus on linking assessment to intervention in the formulation of the CAS is a valuable component of the test, going above and beyond traditional intelligence tests. Also, the special attention that was given to exceptional populations may make this test an invaluable tool for use in the schools.

RELATIONSHIPS AMONG SCORES ON THE GRADUATE RECORD EXAMINATIONS, MILLER ANALOGIES TEST, NATIONAL TEACHER EXAMINATIONS, ADVANCED LEVEL OF THE OTIS-LENNON MENTAL ABILITY TEST, AGE, AND GENDER

Charles W. Davidson, University of Southern Mississippi

Standards for admitting students to graduate programs is a perennial problem for university faculty and administrators. Frequently, persons are conditionally admitted to a master's or doctoral program, receive high grades in courses for below average work, and eventually graduate with deficiencies in both knowledge and ability. This situation is not unavoidable. If the decision makers were more aware of persons' standings within the general population in dealing with abstract manipulation of the verbal, numerical, and figural symbol systems of our culture, they may be better able to decide on admissions policies.

The purpose of this study was to determine the relationships among the following scores: GRE verbal, GRE quantitative, NTE General Knowledge, NTE Professional Knowledge, NTE Communicative Skills, MAT and Otis-Lennon Mental Ability Test, and to develop prediction equations that would allow conversions across tests.

The Otis-Lennon Mental Ability Test (OLMAT) was administered to approximately 100 master's degree students in four classes during the spring and summer of 1998. The subjects were given a small number of bonus points in the course for participating in the study. The subjects obtained their scores from their records on the other instruments that they had taken and reported them on the answer sheets of the OLMAT.

Significant and substantial relationships were found between GRE scores and NTE scores, between GRE scores and scores on the MAT. Lower correlations were found between GRE/MAT scores and scores on the OLMAT. Prediction equations were developed for OLMAT scores in percentile ranks.

The ability to relate scores on various admissions tests to one's likely percentile rank in academic potential within the general population could be a valuable tool for those entrusted with admissions decisions.

11:00 a.m.-11:50 a.m.   **EDUCATION POLICY (Training Session)**.................................. **Bienville Room**

PRESIDER: Debbie McDonald, Eastern Kentucky University

KENTUCKY CONSOLIDATED PLANNING: A FOCUS ON RESULTS

Debbie McDonald, Kentucky Department of Education, and
Kenneth T. Clawson, Eastern Kentucky University

Researchers often collect data about schools and districts, but are researchers aware of how districts and schools use data to plan? Kentucky Department of Education personnel, local educators, business partners, parents, and others dedicated to improving education in Kentucky collaboratively developed a systemic data-driven, research-based process that will focus all district/school resources on student learning. After a careful analysis of all appropriate data, a limited number of high priority goals are selected to become school-wide, learning-centered initiatives. All federal and state resources--along with human resources--are integrated in a manner that allows a more strategic financial approach. Discussion or written peer reviews are available as an option to provide qualitative feedback for districts/schools.

This training session presented perception data that established why this process has been perceived to be a "model which could be used by other states." A comparative analysis was presented to illustrate what statewide and regional priorities were identified by districts. Kentucky educators believe this process will shift the measurement of success to student results, not school processes. A district-wide focus on results, with all partners committed to a common goal, will certainly improve student learning.

11:00 a.m.-11:50 a.m.   **BRAIN RESEARCH AND EDUCATION**
                                    (Symposium) ....**Cathedral Salon**

ORGANIZER: Asghar Iran-Nejad, The University of Alabama

DISCUSSANT: Jenefer Husman, The University of Alabama

THE BRAIN AND EDUCATION CONTROVERSY

An Overview of Formative Postnatal Development
Asghar Iran-Nejad, The University of Alabama

Brain-based educational research has a relatively long history. However, in recent years, there has been a widespread surge of interest among educators, politicians, educational task forces, funding agencies, and popular media regarding the implications of neuroscience for educational practice. In a November 1997 article, John Bruer, the president of James S. McDonnell Foundation, questioned the wisdom behind the brain and education alliance. The papers in the symposium discussed the two sides of the controversy surrounding this important educational development.

What is Critical About Formative Postnatal Development?
Asghar Iran-Nejad, The University of Alabama

Education is sometimes viewed conservatively as the direct instruction of culturally-transmitted knowledge. Reform-oriented educators, on the other hand, maintain that education must do much more. This paper discussed how recent developments in brain research have little to offer conservative education and a great deal to offer reform-oriented education.

Beyond the Caution Sign on the Causeway
Beverly Wallace, The University of Alabama

Are educational policy makers, researchers, and teachers making unfounded claims based on simplistic understanding or misunderstanding of neuroscience research findings? Do educators need the guidance from cognitive science to be able to apply brain research to education? This paper discussed these and similar questions in order to identify ways that educators could use neuroscientific research to become shareholders in the badly needed reform of public education.

Music as a Vehicle for the Enhancement of Cognitive Neural Development
Wende Anderson, The University of Alabama

Current research in music has uncovered links between music and brain functioning. This paper described these findings and suggested that brain research in the area of music should be used as a model for future research and developments in all fields with potential links to education.

Wednesday, November 4, 1998

Reciprocal Interaction and the Brain-Education Dilemma
Mike Crowson, The University of Alabama

This paper argued that the fields of education and neuroscience have much to offer one another. Specifically, it was argued that educators benefit from neuroscience research to better understand normal and abnormal behavior, child development, and the creation of innovative paradigms of learning and instruction. In addition, it was proposed that brain researchers might be able to draw from education toward a better understanding of brain functioning.

11:00 a.m.-11:50 a.m.   **EARLY CHILDHOOD EDUCATION**
    (Discussion Session) ....**Gallier Salon**

PRESIDER: Deborah L. Adler, University of Central Arkansas

AUTHENTIC LEARNING AND TEACHING IN THE INFANT CARE CLASSROOM

Christie S. Howell and Grace Long, The University of Alabama

As we approach a new century in the United States, the schooling of our children is a critical issue that must be addressed. Children today are entering formal school situations at a younger age each year. Consequently, much authentic learning and several opportunities for natural learning activities typically experienced in the home environment during the preschool years is being replaced by strict contextual curriculum and teacher planning in day care centers. This trend in our educational system has many early childhood experts watchful. Are we moving too quickly from the natural, authentic early learning experiences to a much more nonauthentic approach in the day care during our children's early years? Many children will experience outside care as soon as six weeks. Can we train our early childhood teachers to approach each day as mothers and other family members did in the not too recent past when children were an integral part of family activities and family life? Can we reverse the trend moving us toward a day full of objectives to one full of learning experiences?

In this paper we considered the infant classroom in a day care setting. Day care teachers can be trained more in the direction of authentic teaching and learning and steered away from the tendency to try to teach specific abilities to infants. We discussed several methods of teaching and learning and how a natural environment could be beneficial to the teacher as well as the children.

MODELING OF PROSOCIAL BEHAVIOR BY KINDERGARTEN TEACHERS

Sharon W. Hutchinson and Mary Cronin, University of New Orleans

Exposure to violent acts often occurs early in the lives of many American children. These acts occur in their communities, homes, and schools. Though early childhood educators cannot completely resolve the violence within American society, they can model those behaviors that promote positive social interactions for themselves and their students. As such, this field experience explored whether kindergarten teachers modeled prosocial behaviors, and if their students generated the modeled behaviors.

Two schools in a major metropolitan city were selected based on their geographical locations. The schools, locations were as follows: (1) School A, in an affluent area of the city, and (2) school B, in a lower socioeconomic area of the city. Identification of teacher participants occurred by word-of-mouth and with the schools' principals' approval. Three teachers, all of whom had more than eight years of teaching experience, participated in the field experience.

Observations for two of the teachers occurred for two consecutive days. The third teacher's observation was only one day (she was not available for the second observational day). Each observation occurred over a three-hour duration during morning instructional time. The Social Skills Observation Sheet was used to record the teachers' use of prosocial behavior and inductive discipline. Classroom environments were also assessed to determine opportunities for the students to generate prosocial behaviors. Area demographics were obtained from the city's 1991 Census Tract Reports. Findings from this field experience provided further evidence that modeling and teaching strategies were effective means of promoting prosocial skills during early childhood.

A NATIONAL SURVEY ON FAMILY INVOLVEMENT IN EARLY INTERVENTION SERVICES PROVIDED BY PHYSICAL THERAPISTS

Janet D. Filer, University of Central Arkansas

This study examined the perceptions of physical therapists to determine the degree to which they were family-centered in the intervention they provided for children with disabilities.

Surveys were mailed to 1000 physical therapists who were members of the American Physical Therapy Association Pediatric Section. Of the 622 surveys that were returned, 397 were completed by physical therapists who treated children between the ages of 0 to 3 years. The survey consisted of 25 questions (with several sub-parts) divided into four sections. Part One requested information about the therapists' background (e.g., educational preparation). Part Two dealt with program characteristics (e.g., type of program, diagnoses of clients). Part Three requested information about determining goals for intervention and the role that families played during and after intervention sessions. Part Four asked the therapists to rate the importance of treatment objectives based on frequency of use and their overall effectiveness in achieving the objectives. This last part contained both family-focused and child-focused items. A Likert-type scale was used to quantify responses.

Physical therapists in this study generally involved families in activities that could be considered traditional therapy practices, such as having families present during sessions, teaching others to use therapeutic strategies, and giving home programs to families. They involved families less frequently in activities that were family-focused and less traditional, such as evaluating the child in the context of the family situation. This was further documented by the low reported rate of inclusion of family services in Individual Family Service Plans. Therapists selected lack of time and personnel as the most significant barriers to the development of therapy services that involve the family.

Findings from this study supported the national belief that shortages of physical therapists have had an effect on the availability of services and the quality of services to certain population.

11:00 a.m.-11:50 a.m.	**MINORITY ISSUES AND DIVERSITY**
	(Discussion Session) ....**Pontalba Salon**

PRESIDER: Hae-Seong Park, University of New Orleans

MULTICULTURAL STUDENTS' PERSPECTIVES OF AMERICAN COLLEGES AND UNIVERSITIES

Emma T. Pitts, Southern University

The study involved first-, second- and third-year college students who attended a four-year, predominantly African American university in the state of Louisiana and spoke English as a second language.

Information was sought about students' prior knowledge of American colleges and universities, treatment in the classrooms, and comparisons of non-American colleges and universities. A 27-item questionnaire written in English was randomly distributed to 75 students. Thirty of the students were in a Freshman Seminar class. The remaining 45 were polled throughout the university. Each item consisted of a direct question with three options and sometimes four when additional comments were needed. Participants were interviewed ten minutes prior to completion of the questionnaire to determine the following: fluency of English language, nationality, college status, length of time in the United States, place of birth, and number of American colleges and universities attended. The subjects involved in the study were Hispanics and Asian Americans. A compilation of the responses on each item yielded the percentages of participants for each of the three or four options.

The results of this study indicated that the majority of the students were satisfied with American universities and felt that they were receiving equal treatment in the classrooms. The implications were that teachers and American students needed to become more sensitive, knowledgeable, and appreciative of the various international cultures.

IMPROVING THE ACADEMIC PERFORMANCE OF HISPANIC
YOUTH: A COMMUNITY EDUCATION MODEL

Gary G. Aspiazu, Jefferson Parish (LA) Public Schools
and University of New Orleans, and Scott
C. Bauer, University of New Orleans

The purpose of this study was to describe and analyze the creation of the Oakwood Family Education Center, a community-based education center that seeks to address the educational needs of Hispanic youth. The creation of the center was a collaborative effort among teachers, parents, and business leaders, who selected the principles of liberation theology as a culturally appropriate change strategy for a primarily Central American Hispanic community. This qualitative study investigated the perceptions of 21 Hispanic parents who answered the following questions associated with outcomes predicted by liberation theology: (1) How did the Center contribute to the development of lay leaders? (2) How did the Center contribute to building a sense of community? and (3) What changes occurred relating to the academic improvement of students attending the Center?

Results indicated that the Center was having a positive impact on the educational achievement of students. Lay leaders emerged; however, parents became involved primarily because of family and personal benefit. Non-leader participants lacked a sense of community needs; pressures of American life resulted in a more individualized sense of community than liberation theology would predict.

One interesting outcome revealed was the subtlety and complexity of the educational improvement model used by parents. They described a school improvement model with homework as the central issue affecting student success. Homework, they felt, was linked to improved grades, discipline, self-confidence, and change in attitudes toward school.

Traditional school system strategies have seldom been effective means for promoting parental involvement in Hispanic communities. These data suggested, however, that parents embraced the opportunity to become involved in a community-based mechanism that could help their children at school. Those who had leadership skills become actively involved, and others took advantage of center services.

EVALUATION OF THE BRIDGE BUILDERS PROGRAM: STUDENTS
INVOLVED IN MULTICULTURAL LEADERSHIP ACTIVITIES

John R. Petry and Herbert L. McCree,
The University of Memphis

Evaluators analyzed responses on a 30-item instrument from 151 former Bridge Builders program participants that were related to five areas of the program content: (1) leadership, (2) community service, (3) communications, (4) human relations, and (5) activities. Statistical analyses were the independent t-test, pooled variance estimate t-tests, paired t-tests, chi-square, and analysis of variance. When comparing questions using the t-test at the.05 level, there were 51 significant differences.

Data revealed that there were no differences between the groups on the items dealing with racial matters. There were significant differences involving some of the other seven demographic variables: age groups, time in the program, and type of vocation. African American high school students in this two-year leadership development protocol reported significantly greater gains than European Americans on many of the 15 Likert-type items. Respondents who were younger were more likely to seek social contact with other races and to develop friendships with members of other races than those who were in the older group of participants. Respondents in the program during the last five years were significantly different from those in the first five years on items relating to race, community involvement, goals, teamwork, and leadership. Those with specific choices for their careers had higher levels of satisfaction with the program than those who did not.

Comments from eight questions revealed that the program was highly effective and that it brought about positive changes in the participants. One of the most effective program areas was community service, which informed participants about municipal problems and helped them to become concerned about them and dedicated to their resolution.

It was suggested that the program participant base be broadened to include younger students, that the program last into the college years, and that the program be replicated in other settings.

11:00 a.m.-11:50 a.m.	**RESEARCH METHODOLOGY**
	(Discussion Session) ....**Ursulines Salon**

PRESIDER: Gerald Halpin, Auburn University

FACTORS INFLUENCING PURSUIT OF HIGHER EDUCATION: VALIDATING A QUESTIONNAIRE

Sandra M. Harris, Auburn University

This study investigated the construct validity of the literature-based, researcher-developed Factors Influencing Pursuit of Higher Education Questionnaire. Participants were college students enrolled in general studies classes at two southeastern universities. Of the 650 questionnaires distributed, 487 questionnaires were returned; 53 questionnaires were not used in data calculations because of missing or unusable information.

Of the 453 respondents, 255 were female and 177 were male. The racial composition of the sample included 311 whites, 54 blacks, 8 Hispanics, 4 Asians, and 4 who responded to the "other" category. Participants were recruited through course instructors who read an announcement about the study in class. Questionnaires were coded to maintain participant confidentiality. Participants were granted extra credit for returning completed questionnaires, and they were given the opportunity to enter their names into a drawing for $75.00. Participants recorded their responses on the literature-based, researcher-developed Factors Influencing Pursuit of Higher Education Questionnaire (FIPHE) questionnaire, which contained 115 closed-ended statements distributed among 10 scales.

Results indicated that the questionnaire has a high degree of internal consistency. The reliability estimates for the 10 scales range from adequate to excellent. Coefficient alpha for the scales ranged from .57 to .90. The data indicated that the questionnaire was a construct valid instrument that could be used to conduct further investigations of the factors that influence individuals to pursue higher education.

Implications were that the questionnaire could be used to conduct a multicultural study to investigate whether there were cultural differences in the factors that influence individuals to pursue higher education. The questionnaire could also be used to investigate whether there are differences in responses between college-bound and non-college-bound high school students. Data from such research could subsequently be used to address the recruitment and retention issues of specific populations.

THURSTONE AND GUTTMAN SCALES: OLD BUT NOT FORGOTTEN

John Kyle Roberts, Texas A&M University

Educational researchers have long been interested in the study of attitudes. It seems only reasonable that people's attitudes should have some effect on their behaviors (e.g., attitudes toward learning should be correlated to some degree with actual learning outcomes). There are several scale forms that can be employed to measure attitudes. This paper reviewed literature regarding the pluses and minuses of two less frequently used scales: Thurstone equal-appearing interval scales and cumulative, or Guttman, scales.

Thurstone and Guttman scales are not used as frequently as more commonly used summated scales, such as Likert scales, but nevertheless can be useful in measuring attitudes. Thurstone scales require that items be ordered as typical item ratings, and then series of items that are roughly equidistant from each other are identified.

Guttman scales are useful in measuring unidimensional attitudes. When a Guttman scale can be successfully constructed for a given attitude domain, item hierarchies are constructed such that persons with a given response (e.g., "true") for a given item always or almost always respond in a predictable fashion (e.g., "true") to all items lower in the scale hierarchy.

The reliability of validity characteristics of scores for the various scales was briefly reviewed. Small heuristic data sets were employed to illustrate the scale construction process for these old, but still potentially useful, measurement methods.

11:00 a.m.-11:50 a.m.   **SCHOOL ADMINISTRATION**
                               (Discussion Session) ....**Beauregard Salon**

PRESIDER: Scott C. Bauer, University of New Orleans

THE PRINCIPAL'S ROLE IN SPECIAL EDUCATION

James E. Whorton, University of Southern Mississippi; David L. Naylor, James C. Mainord,
and Kathleen R. Atkins, University of Central Arkansas; Robert L. Morgan, University
of Nebraska at Kearney; and Patricia A. Cruzeiro, Chadron State College

Efforts to educate students with disabilities in general education classrooms continue to present an ongoing challenge for educators today. Principals may be the key in determining whether these efforts succeed. The extent to which administrators without formal knowledge and/or coursework in special education can be supportive of, and actually, lead schools and their faculty in today's inclusive environment was one of the concerns of the researchers. In order to address this concern, more than 300 school principals and other school administrators were surveyed.

A questionnaire consisting of 42 items requiring school administrators to indicate their agreement or disagreement with special education leadership roles was utilized in this investigation. Other data collected included answers to questions regarding the percentage of time spent on regular and special education tasks, the percentage of time spent on other administrative tasks, and the number of courses completed in special education. Demographic data (highest degree earned, years of school experience, gender, etc) were also collected. The data were analyzed with SPSS for Windows (Ver 8.0) and were presented in graphic and narrative formats.

The conclusions focused on principals' facilitating change through collaborative planning and problem solving between general and special education professionals and family members. Barriers included administrative constraints, teacher preparation, and funding patterns. It was concluded that the administrators who saw special education as an opportunity would have had fewer problems and a higher rate of success.

USING FIELD-BASED INQUIRY TO PREPARE FUTURE SCHOOL
PRINCIPALS FOR PARENT INVOLVEMENT

Jack Blendinger and Linda T. Jones,
Mississippi State University

Preparing future school administrators to work with families involves moving from an understanding of the importance of the teacher's role in working with parents at the classroom level to learning the principal's role in encouraging and supporting parent involvement throughout the school. This paper focused on the use of field-based research in preparing school principals. As an integral part of their preparation programs, students studying educational administration examined what schools were actually doing to involve families in their children's education. Working in research teams, students put their knowledge to work in examining parent involvement practices in selected schools. A framework focusing attention on the principal's role in orientation activities, parent-teacher organizations, school-home newsletters, parent conferences, and use of volunteers provided direction for school site visits.

Feedback from students using the framework to investigate parent involvement practices in school settings was positive. As a culminating activity students shared: (1) how the field-based research either changed or reinforced their beliefs about parent involvement, (2) specific parent involvement strategies that they found to be successful, and (3) how they will use the information gained in their first administration job.

The framework used to guide the students' research efforts, data collected, and students responses to the assignment was shared with participants attending this session. National education standards and essential

research findings on the benefits of parent involvement were also highlighted in the presentation. The Interstate School Leaders Licensure Consortium of the Council of Chief State School Officers, whose purpose is to develop model standards and assessments for licensing educational leaders, has called attention to the importance of parent involvement in preparation programs by stating as one of six standards that "a school administrator is an educational leader who promotes the success of all students by collaborating with families."

MANAGING DISCRETIONARY SCHOOL FUNDS: FISCAL PRACTICES OF HIGH SCHOOL PRINCIPALS

Kathleen J. Gonzales, St. Bernard Parish (LA) Schools,
and Ira E. Bogotch, University of New Orleans

This study examined the preparation and practices of high school principals in managing discretionary school funds. The study went beyond newspaper headlines trumpeting rampant mismanagement and indictments. The data from this national study of 1300 principals revealed the existence of a "hidden economy," with millions of dollars collected and handled annually by principals (and other school personnel) as they routinely engaged in fund-raising, athletics, concession sales, and business partnerships.

Over 1300 high school principals from across the United States responded to questions on a 76-item survey instrument developed by the authors to describe, measure, and analyze the fiscal management of discretionary school funds. The data were reported both descriptively [i.e., frequencies and percentages] and inferentially in order to describe pertinent "facts" of the "hidden economy," related to: (1) what principals know and understand about fiscal management, (2) district and state policies governing its spending, and (3) national reform trends influencing school fiscal management. The findings brought to light the responsibilities, constraints, and opportunities associated with these non-dedicated (i.e., discretionary) funds.

The findings suggested that in spite of trends in local, state, and national reforms urging increased governance responsibilities for school principals, there were more powerful countervailing pressures and constraints placed upon principals to comply with state and district "accountability" policies. When these pressures are coupled with principals' own lack of fiscal knowledge, especially related to the investment of carryover funds, it seems unlikely that the majority of principals will be able to take full entrepreneurial advantage of the hidden economy inside our nation's public high schools. Given these contradictory influences, we would conclude that most high school principals were unable to fully utilize a potent response (i.e., discretionary budgeting practices) to inadequate state and local school funding levels.

11:00 a.m.-11:50 a.m.   **SCHOOL VIOLENCE (Discussion Session)**.................................... **Cabildo Salon**

PRESIDER: Beverly M. Klecker, Eastern Kentucky University

ATTRIBUTIONS TOWARDS VIOLENCE: A COMPARISON OF MALE AND FEMALE HIGH SCHOOL STUDENTS

Christine E. Daley, Georgia Public Schools, and Anthony
J. Onwuegbuzie, Valdosta State University

Violence among youth has reached epidemic proportions. However, despite a plethora of research, we still do not understand why adolescents become involved in violent acts. Despite considerable research about youthful aggression, few studies have examined the role of social cognitive factors, such as attributions, in placing children at risk for involvement in acts of violence. Of those which have, even fewer have attempted to approximate experimental conditions by manipulating situational or contextual information. These methodological flaws may have culminated in inaccurate predictions of violence.

This study compared male and female high schools students with respect to the causal attributions they have made for others' behavior, and the salient pieces of information they utilized in arriving at their attributions.

Whereas prior research has focused on immutable antecedents of violent behavior (e.g., genetic, biological, familial characteristics), this study examined more permeable factors (i.e., attributions) that are susceptible to change. Thus, this investigation attempted to gather practical information that could be utilized to formulate cognitive intervention strategies targeted toward reducing levels of violence among youth.

Eighty females and 73 males were administered a 12-item questionnaire designed to assess attributions made by juveniles for the behavior of others involved in various violent acts. Each item consisted of a vignette, followed by three possible attributions (person, stimulus, and circumstance) presented in multiple-choice format, and an open-ended question asking the subjects' reason for their choice.

Females tended to make significantly fewer attributional errors than did males in 7 of the 12 scenarios. However, disturbingly, for 6 of the 12 scenarios, 45% of more of the females made attributional errors, with 80% or more females making attributional errors on three occasions.

Findings suggested that a significant proportion of females made attributional errors when evaluating the behavior of others by ascribing external explanations to individuals' violent actions. Implications were discussed.

EFFECTS OF LIMITED DEVELOPMENTAL EXPERIENCES ON MORAL REASONING

Rebecca Begley, Carol Jones, Darrell Degraw, and John Thornell, Delta State University,
and O. Edward Jack and Reid Jones, Mississippi Valley State University

Well-known theories and research (Piaget, Kohlberg, and Rest) on moral reasoning place substantial emphasis on the importance of cognitive developmental experiences. However, high school students have very limited cognitive developmental experiences with recent biomedical progress on issues such as cloning, gene-splicing, and organ harvesting. As adults, those same students will be involved in decisions on the morality and legality of these procedures.

A bibliography was distributed to the audience, based on sources from ERIC, PsychLIT, Internet, and a summer institute on the Human Genome Project. On the basis of this literature review, it was concluded that existing theory and research rely heavily on cognitive developmental experiences. In that regard, theory and research do not provide an appropriate basis for developing a pedagogy that will prepare current students for decisions they will need to make as informed and educated adults.

An exploratory study was conducted on 63 high school students. Four moral dilemmas were constructed from issues related to recent biomedical advances. The well-known Heinz dilemma from Kohlberg's work was added to provide a traditional scenario for comparison. Kohlberg's methodology and framework were used by five judges to categorize responses. Significant ($p < .05$) inter-rater reliability was obtained for responses to the biomedical dilemmas. However, consistent evidence for the role of cognitive developmental experiences was not found among responses to the dilemmas. Suggestions for how to proceed with the study of this problem were presented.

12:00 p.m.-12:50 p.m.   **SIGNIFICANCE TESTING (Symposium)**....................................**Cathedral Salon**

ORGANIZER: James E. McLean, The University of Alabama at Birmingham

STATISTICAL SIGNIFICANCE TESTING-WHAT SHOULD
RESEARCH IN THE SCHOOLS' POSITION BE?

James E. McLean, The University of Alabama
at Birmingham

The use and misuse of statistical significance testing may be the greatest methodological issue to confront the current generation of educational researchers. Positions have been expressed that range from recommendations for the total abandonment of statistical significance testing as a research methodology option to those who choose to ignore the controversy entirely and use significance testing following traditional practice. The Fall 1998 issue of *Research in the Schools* 5(2) is devoted to this issue. It includes three articles addressing

various aspects of the statistical significance testing issue, three invited critiques of the articles, and rejoinders by the original authors.

While individual reviewers and the editors of *Research in the Schools* have exercised their own judgments in this matter in carrying out their duties, a more formal statement of policy regarding this issue is needed to provide guidance to prospective authors and reviewers alike. The editors and editorial board of *Research in the Schools*, MSERA's research journal, invited all members of MSERA to participate in an open discussion of the issue and how the journal should respond. It was hoped that discussion and input from the membership of MSERA would assist the editors and editorial board in the development of an appropriate policy for the journal.

1:00 p.m.-2:50 p.m.   **HIGHER EDUCATION (Training Session)**.................................. **Bienville Room**

PRESIDER: Neelam Kher, Northwestern State University

EXCELLENCE IN TEACHING: RESOURCES FOR FACULTY IN HIGHER EDUCATION

Neelam Kher and Susan Molstad, Northwestern State University of Louisiana,
and Roberta Donahue, The University of Alabama

One of the most elusive and controversial issues in higher education today surfaces when academicians attempt to answer the question, "What makes a good college teacher?" Most universities purport that teaching is valued, and evidence for such is provided through student evaluations of instruction, peer evaluations and observations of faculty by department heads.

There is considerable agreement among experts that, on the one hand, faculty are expected to have skills and knowledge to be effective teachers, and, on the other hand, the only credentials they are required to possess are graduate or terminal degrees in an academic discipline. In recent years, several well-respected scholars have highlighted the need for instructional improvement in postsecondary education.

An extensive review of literature suggests that the instructional characteristics of effective teachers include deliberate plans for classroom management and learning, alternatives for delivering instruction, and a variety of teaching styles for providing explanations and demonstrations.

The purpose of this session was to provide pedagogical training that would enhance teaching effectiveness at the postsecondary level. Through the use of presentation materials and hands-on activities, the authors addressed issues of concern both to beginning teachers and those who would like to enhance their teaching through innovative practices.

The following topics were addressed in the training session: (1) creating a positive learning environment, (2) teaching a course for the first time, (3) techniques for enhancing learning, (4) managing the classroom environment, and (5) using formative feedback to improve course ratings.

Because of the renewed interest in teacher effectiveness and assessment and the goal of offering students instructional excellence, this training session provided a foundation for fostering quality teaching.

1:00 p.m.-1:50 p.m.   **EDUCATION REFORM (Symposium)** ....**Cathedral Salon**

ORGANIZER: Rodney R. J. Uzat, University of Southern Mississippi

TOWARD DEVELOPMENT OF A DIVERSIFIED SUPERVISION MODEL: SHAPING INSTRUCTIONAL LEADERSHIP FOR THE TWENTY-FIRST CENTURY

Overview

The culture of American schools is changing rapidly as the nation prepares for the twenty-first century. Increases in youth violence, children born into poverty homes, and disruption of family structures pose new demands on schools, while advances in technology offer teachers enhanced opportunities to deliver instruction. In the midst of this multifaceted educational environment exists a system of instructional supervision

that is outmoded. Too often, educational supervisors hurriedly observe instruction, fill out checklists, and hustle teachers through post-evaluation conferences. Consequently, teacher professional development and student learning may suffer, and schools may settle for mediocrity rather than reaching their potential.

This symposium featured: (1) a paper proposing a model for "diversified" supervision responsive to a number of the social, cultural, and political realities of today's schools; (2) two additional papers offering examples of how innovative supervisory practices can fit within the context of this model; and, finally, (3) a critique of the ideas offered by an experienced professor of educational administration.

Supervisory Behaviors That Reflect Reality: A Diversified Supervision Model
Rodney R. J. Uzat, University of Southern Mississippi

Several scholars have proposed "developmental" or "differentiated" supervisory models that recognize the importance of diverse supervisory practices; nevertheless, these models fail to address the culture of the school. Consequently, the author conceptualizes a "diversified" model of supervision that builds on the strengths of developmental and differentiated models while taking into consideration the need for development of a shared set of goals and values that square with the culture of the given school.

Cognitive Coaching and Self-Reflection: Looking in the Mirror
While Looking Through the Window
Shaunna K. Uzat, University of Southern Mississippi

A diversified model of supervision calls for use of innovative supervisory strategies. The author illustrated how cognitive coaching that is sensitive to the realities of the teaching setting can serve as an effective means for prompting teacher growth. Further, cognitive coaching can also serve to promote teachers' tendency to self-reflect, resulting in a cyclical model of professional improvement that alternates between other-directed and self-directed strategies.

Diversifying Supervision for Maximum Professional Growth:
Is a Well Supervised Teacher a Satisfied Teacher?
Sylvia H. Robinson, University of Southern Mississippi

Results of the diversified supervisory process were investigated in the third paper.   Borrowing from various characterizations of the clinical supervision model, the author proposed a set of supervisory elements and concepts that exemplify one approach to diversified supervision. The author focused on the outcomes of such a system, particularly in regard to the personal and professional satisfaction of the teacher.

Critique
Ira E. Bogotch, University of New Orleans

A critique of the papers presented was offered. The audience was invited to respond to the papers and ideas presented.

1:00 p.m.-1:50 p.m.   **EDUCATION POLICY (Discussion Session)** ....**Gallier Salon**

PRESIDER:John M. Enger, Arkansas State University

ARKANSAS' 2.0 GPA POLICY ON PARTICIPATION:
COACHES' PERCEPTIONS OF ITS IMPACT

John M. Enger, D. Lynn Howerton, Wilbert Gaines,
and W. Jack Sugg, Arkansas State University

Arkansas requires high school students to have a 2.0 GPA to be eligible to participate in sports and other interscholastic extracurricular activities. This study summarizes coaches' attitudes on the effects on this participation policy. Sport directors for boys and girls were surveyed (boys' and girls' basketball and track coaches, boys' football coaches, and girls' volleyball coaches). To contrast sport and non-sport director perceptions, directors of non-sport activities were also surveyed (band and choral music directors, and FBLA and FFA advisors).

Questionnaires were sent to 3578 activity directors in all public secondary schools in the state; analyses were conducted on 1286 returned questionnaires, representing a 36% response rate. Most boys' coaches (51%) felt the GPA policy had decreased participation in their programs, 46% felt participation had remained the same, and 3% reported an increase. Most girls' coaches (69%) said participation was about the same, 26% said it had decreased, and 5% reported an increase.

A number of contrasts were made between coaches and non-sport directors. Twice as many coaches felt that the GPA policy penalized their programs than those who felt it benefited their programs. In contrast, more non-athletic activity directors felt the policy benefited their programs than those who said it penalized their programs. Another contrast found that most coaches (74%) would prefer a policy different than the 2.0 GPA policy; however, a majority (60%) of the non-sport activity directors would keep the policy. In their written comments, coaches felt that the GPA policy was hurting those students who needed the activities the most. Almost without exception, the coaches reported that when an athlete became ineligible, he or she dropped out of school, became involved in gangs and drugs, and, in many cases, was arrested for violent crimes.

DECLINE IN ARKANSAS HIGH SCHOOL SPORTS PARTICIPATION SINCE
IMPLEMENTATION OF THE 2.0 GPA ELIGIBILITY POLICY

D. Lynn Howerton, John M. Enger, Wilbert Gaines,
and W. Jack Sugg, Arkansas State University

The state of Arkansas initiated a participation policy in 1991 whereby students had to maintain a minimum GPA to play sports or participate in other competitive extracurricular activities such as band. Several studies conducted prior to and after initiation of the minimum participation requirement warned that such a policy would exclude large numbers of students; one study estimated that 45,000 students were academically ineligible to participate in extracurricular activities.

Sport participation data from annual reports published by the National Federation of High School Associations for the 1990-91 through 1996-97 academic years were used to contrast the total number of students participating in the top 10 major sports in Arkansas and the United States. Over a six-year period, Arkansas boys' sports participation declined by 43% while the national participation rate increased 9%. Arkansas girls' participation had declined 5% by 1995, then had increased by 13% in 1997, but did not match the 18% national increase. Arkansas boys' football and basketball declined, but track participation was comparable with national trends. Arkansas girls' basketball declined, whereas girls' track was comparable, and volleyball showed a relative increase to national data.

Sports participation in Arkansas was contrasted with six adjacent states. Arkansas boys' football declined 63%, whereas adjacent states boys' football showed a 30% decline to an 83% increase. Arkansas boys' basketball participation declined 42% and contrasted with adjacent states participation 10% decline to 82% increase. Arkansas girls' basketball showed a 38% decline from 1990-91 to 1996-97 compared with a 29% decline to 68% increase in adjacent states.

Arkansas' initiation of the GPA policy had a dramatic negative effect on sports participation, especially in boys' basketball and football, and girls' basketball. The declines in participation raise questions about whether the GPA standard had the intended effect of motivating students to higher academic standards to participate in sports.

IMPACT OF ARKANSAS' 2.0 GPA POLICY ON STUDENT ELIGIBILITY FOR SPORTS AND OTHER ACTIVITIES

John M. Enger, D. Lynn Howerton, Wilbert Gaines,
and W. Jack Sugg, Arkansas State University

Beginning with the 1991-92 school year, Arkansas adopted GPA eligibility policies for student participation in interscholastic extracurricular activities (all boys and girls sports, band, choir and school clubs, such as FBLA and FFA). The GPA requirement was increased over several years. Effective the 1994-95 school year, high school students needed a GPA of 2.0 or higher to be eligible. This study investigated the impact of this policy on student eligibility for participation.

Surveys were sent to superintendents in the 311 school districts; 78% responded. Information was requested for each secondary school in the district: the numbers of students eligible and ineligible for participation by grade level, gender and race.

Proportionally, 22% of all secondary students in Arkansas were ineligible. By gender, 63% were male, 37% female; and by race, 62% were white, 36% black, and 2% represented other racial backgrounds. Ineligibility rates by race and gender were: black males, 42%; black females, 29%; males of other races, 26%; white males, 23%; females of other races, 15%; and white females, 13%.

Using the 22% ineligibility rate and the number of secondary students the Arkansas Department of Education reported enrolled in 1995-96, an estimated 45,000 secondary students were ineligible to participate in sports and other interscholastic extracurricular activities that year. In summary, the GPA policy impacted black students more than whites and males more than females. Especially impacted were black males. The social consequences of a stringent GPA policy were discussed.

1:00 p.m.-1:50 p.m.   **EXCEPTIONAL EDUCATION**
                            (Discussion Session) ....**Pontalba Salon**

PRESIDER:Linda T. Coats, Mississippi State University

THE RELATIVE EFFECTS OF RULE-BASED STRATEGY AND TRADITIONAL METHOD OF INSTRUCTION ON THE SPELLING PERFORMANCE OF ELEMENTARY STUDENTS WITH LEARNING DISABILITIES

Craig Darch and Soobang Kim, Auburn University

This study compared two instructional methods for teaching spelling to elementary students with learning disabilities to find the more effective and expedient way to increase overall spelling performance. Forty-two second- to fourth-grade students with learning disabilities were randomly assigned to each of two treatment groups: (1) rule-based strategy instruction focusing on teaching students spelling rules in which they utilized phonemic, morphemic, and sentence-based strategies to spell words, and (2) traditional method of instruction that provided an array of spelling activities (e.g., introducing the words in the context of story, defining the meaning of the words, sentence writing, and dictionary skill training) to practice spelling words.

Daily instructional sessions lasting 20-25 minutes were conducted for four consecutive weeks. Three graduate students completing their training program in the area of learning disabilities served as experimental teachers. To control for teacher bias each experimental teacher taught both treatment groups. After receiving instruction in one of the instructional methods, the subjects were compared on results from four unit tests, a generalization to sentence writing measure, a transfer measure, a standardized measure, and a maintenance measure. Finally, an attitude/satisfaction scale was used to determine if students showed a preference to either instructional method.

An analysis of variance was conducted on the scores of each dependent measure separately. Results indicated that the rule-based strategy instructional method was significantly more effective in increasing

the spelling skills of the subjects. The educational implications of these results were that, when teaching students with learning disabilities, it its best to provide rule-based spelling strategies in a structured manner rather than utilizing spelling-related activities often found in traditional curricula.

AN IMPROVED MODEL FOR EVALUATING MINORITY AND NON-MINORITY STUDENTS WITH LEARNING DISABILITIES

S. John Obringer, Mississippi State University

The number of students in learning disabled classes has grown every year since the passage of The Education for All Handicapped Children Act. This growth has resulted in a learning disabled classification for approximately 4.5% of public school students. Some authorities feel that the incidence of special education placement has reached crisis proportions, especially among minority students.

Because of the significant over-representation of minority students identified as learning disabled, this study investigated the effects of modifying the discrepancy formula between intelligence and achievement commonly used to identify and place school age students in learning disabled programs. Three modifications were applied to the discrepancy formula using a sample of 123 students currently being served in learning disabled classes in a school district in Mississippi. The modifications to the discrepancy formula were calculated using the SPSS package and consisted of the following: (1) using only the full scale IQ, thereby eliminating the choice of using the higher of the verbal or performance IQ, (2) raising the full scale IQ to a minimum of 85, and (3) raising the discrepancy between intelligence and achievement scores to approximately one and one-half standard deviations (22 points) with the sole use of full scale IQ. The results indicated that raising the minimum full scale IQ to 85 in the discrepancy formula resulted in the greatest reduction to the over-representation of minority students being placed in classes for students with learning disabilities. Suggestions for future research in this area were offered.

A PILOT STUDY INVESTIGATING A MULTISENSORY SPELLING INTERVENTION TO IMPROVE SHORT- AND LONG-TERM SPELLING WORD RECALL FOR STUDENTS WITH LEARNING DISABILITIES

Johan W. van der Jagt, The University of West Alabama

The pilot study examined the effectiveness of a multisensory spelling intervention under two conditions: non-perceptual-vowel enhanced and perceptual-vowel enhanced, and their effect on short- and long-term recall of high frequency spelling words in isolation and in context for students with learning disabilities.

The randomly-selected sample consisted of 15 fourth- and fifth-grade students with learning disabilities ranging from 10 to 12 years of age. Subjects were pretested for significant differences in auditory discrimination skills and spelling ability.

A pretest-posttest control group design was utilized. Spelling pretests to determine 12 high frequency words in isolation and in context to be used in the intervention were given. A multisensory (VAKT) spelling intervention was utilized under two conditions for the experimental groups: multisensory with perceptual-vowel enhancement in which the vowels were darkened with black marker, and non-perceptual-vowel enhanced. The control group received a traditional method. Posttests to determine short-term recall of words in isolation and in context were given the day directly following the intervention. Second posttests were given to determine long-term recall of high-frequency words in isolation and in context within seven days.

Results were analyzed using one-way analysis of variance and t-tests at the .05 alpha level. Although significant improvement within groups was revealed, there were no significant differences for mean spelling scores among groups. Implications of the results were discussed in light of the pertinent literature, and recommendations, e.g., larger sample, decreased repetitive writing, slower writing speed. time scheduling, and varied segmentation techniques, for future research replication were given.

Wednesday, November 4, 1998

1:00 p.m.-1:50 p.m.   **RESEARCH IN THE SCHOOL**
                                            (Discussion Session) ....**Ursulines Salon**

PRESIDER: Ernest A. Rakow, The University of Mempis

THE RELATIONSHIP BETWEEN MIDDLE SCHOOL CULTURE
AND TEACHER EFFICACY AND COMMITMENT

Ellen H. Reames, Muscogee County (GA) School District,
and William A. Spencer, Auburn University

The purpose of this study was to explore the relationship between the culture of the middle school and the teachers sense of efficacy and commitment. A total of 275 middle school teachers in Georgia, representing 40 schools divided equally among rural and urban contexts, completed a four-part instrument designed to measure perceptions of school work culture, organizational commitment, and teacher efficacy. School work culture was operationalized by The School Work Culture Profile, which consists of four subscales: organizational planning, staff development, program development, and school assessment. Teacher efficacy was measured by Gibson and Dembo's Teacher Efficacy Scale, while teacher commitment was assessed using the Teacher Organizational Commitment Questionnaire by Porter et al.

Using canonical correlation, the responses were analyzed to investigate the relationship between school work culture process and structure variables, on the one hand, and teacher beliefs of efficacy and commitment, on the other. The results revealed that all four dimensions of school work culture were approximately equally important in explaining differences in teacher commitment and efficacy. However, these dimensions were more strongly related to level of organizational commitment than they were to personal efficacy and least related to teaching efficacy.

A CASE STUDY OF A MAGNET SCHOOL UNDER FIRE IN A DISTRICT
BATTLE OVER QUALITY VS. EQUITY ISSUES

Cathy S. Hightower, University of New Orleans

This case study examined one magnet school, Ben Franklin High School, that has drawn the most criticism as elitist in the midst of a parishwide debate over greater access to magnet schools. The evidence sought from this study was how one school that was being subjected to the closest scrutiny about its admissions methods and perhaps its right to exist attempted to answer the questions that continue to dominate discussions about magnet schools around the country: (1) How can admissions policies and procedures create equity? (2) What standards will be continued to guarantee quality of education? (3) Should standardized test scores be a component of eligibility? (4) How do federal government expectations that racial integration be the primary goal of magnet schools operate within a parish whose approach to magnet schools has been primarily curriculum-based instead of enrollment-based? and (5) How do schools balance the competing values of equity and quality?

The researcher met and interviewed constituencies knowledgeable about Ben Franklin High School who represented competing equity and quality value concerns. The data gathered from these interviews and archival evidence from news sources and public records (OCR compliance reports and school board minutes) were used to track how the political subcultures of Ben Franklin evolved and have influenced the development of its values and and practices within the Orleans Parish policies regarding magnet schools.

Tentative conclusions were drawn from tracking the development of Ben Franklin's position that magnet schools in New Orleans can achieve greater equity while not sacrificing quality. The findings of the study suggested implications for the ongoing magnet school admissions debate.

PARENTAL VIEWS OF AN INNOVATIVE CURRICULUM

Charles W. Babb and Tracey R. Ring,
Middle Tennessee State University

This study examined the attitudes of parents whose children were involved with the development of an innovative program in an elementary school. Specifically, parents were asked to respond to a 25-item, Likert-type scale that provided an overall indication of their satisfaction with the program.

The sample included over 35 parents whose children were in the classrooms in which the EFG 21st Century Curriculum was being implemented. The EFG program emphasizes core research skills as well as topics that emphasize Ecology, the Future, and Global Education. Another sample of 36 parents was drawn from classes that did not use the EFG units of work. The overall sample of parents covered the K-6 grade level range of the elementary school.

The Parent Satisfaction with School form was distributed to both samples and subsequently returned for analysis. The form required respondents to mark their satisfaction on 25 items, which allowed an overall mean to be calculated for each parent. Group means were then calculated for both parent samples. For comparison, *t*-tests for independent groups analyzed group differences.

The results will be used at the elementary school to help refine communication to parents regarding the EFG program. The EFG program emphasizes parental involvement, and the findings suggested positive parental support and enthusiasm regarding the program.

1:00 p.m.-1:50 p.m.   **TEACHING AND LEARNING**
                             (Discussion Session) ....**Beauregard Salon**

PRESIDER: Marcia Abide, Loyola University of New Orleans

A STUDY OF COMPARISONS BETWEEN SCORES ON THE TENNESSEE SELF-CONCEPT SCALE AND THE LEARNING AND STUDY STRATEGIES INVENTORY INDICATED BY FRESHMEN AND SENIOR-LEVEL COLLEGE STUDENTS

Linda G. Brown and Linda W. Morse, Mississippi State University

This study explored the relationship between self-concept as measured by the Tennessee Self-Concept Scale-2 (TSCS2) and study strategies as measured by the Learning and Study Strategies Inventory (LASSI) in a population of 40 college students ranging in age from 18 to 34. Twenty participants were freshmen attending a small junior college, and 20 were seniors completing their senior block internship in education at a public university, both located in the mid-south.

This study was designed to determine if there was a significant difference between means indicated by 20 freshmen and 20 seniors on the Learning and Study Strategies Inventory (LASSI) and Tennessee Self Concept Scale (TSCS2), and any difference in means between females and males on both measures. To determine if significant differences existed, a one-way MANOVA, between-groups design was conducted between 10 variables defined by the LASSI and eight variables defined by the TSCS2. The research question was whether there is a significant difference in means between freshmen and seniors, and females and males on each variable measured by both the LASSI and TSCS2.

Results were analyzed using one-way MANOVA, between-groups design. This analysis revealed a significant multivariate effect for class on the LASSI. Seniors indicated greater self-perception of worry about school than did freshmen. They also indicated greater self-perception in their ability to select main points of information from text and lectures than freshmen. Likewise, seniors indicated greater self-perception in their approach to taking tests and ability to evaluate the appropriateness of each approach than freshmen. This analysis also revealed a significant multivariate effect for class on the TSCS2. Seniors indicated greater perceived value and worth as a family member than freshmen. Also, seniors indicated greater self-perception in the academic and work settings than freshmen. In contrast, this analysis failed to reveal a significant multivariate effect for gender on both LASSI and the TSCS2 measures.

COMPARISON OF THINKING STYLES BETWEEN STUDENTS
FROM EDUCATION AND STUDENTS FROM ACCOUNTING

Ming Lei, The University of Alabama

Previous research has shown that students display a variety of cognitive differences when they are challenged to learn new things. Thinking styles have effects in students' vocational choices. Robert J. Sternberg, in his book *Thinking Styles*, systematized thinking styles as three functions (legislative, executive, and judicial), four forms (monarchic, hierarchic, oligarchic, and anarchic), and six groups of levels, scopes and learning (global, local, internal, external, liberal, and conservative). He developed eight items for each of the 13 subgroups of thinking styles to test if a subject can be grouped into this sub-category. The inventory containing 13 x 8 = 104 items was named as Sternberg-Wagner Self-Assessment Inventory on Thinking Style (SWSAITS).

The purpose of the study was to investigate if differences existed in thinking styles between college students from education and students from accounting. The subjects were 24 undergraduate students from education and 67 undergraduate students from accounting. The measurement was SWSAITS. The reliability of Cronbach alpha for the combined subjects was .93. Three MANOVA were conducted for functions, forms and levels of thinking style, respectively. At an alpha level of .05, no significant multivariate differences were found for functions, levels, scopes and learning of thinking styles. Significant multivariate differences were found among the four forms of thinking styles. Tukey's follow-ups showed that students from education were more likely to be grouped into oligarchic and anarchic thinking styles than management students.

The conclusion was that there were differences of thinking styles between students from education and students from accounting. Thinking styles may influence students' vocational choices.

EFFECT OF INTERSPERSING LESS DIFFICULT PROBLEMS ON THE COMPLETION
AND PREFERENCE OF ASSIGNMENTS INVOLVING LINEAR EQUATIONS

Thomas A. DeVaney, Southeastern Louisiana University

The purpose of this study was to examine the effect of interspersing less difficult problems in an assignment involving the solution of linear equations in one variable. A within-subjects design was used to compare performance on two assignment sheets. Additionally, choice data were analyzed to determine if assignment preference was influenced by the interspersal of brief problems. The subjects for this study consisted of approximately 50 graduate students enrolled in an introductory educational research course.

The assignment sheets were printed on an 8.5 x 11 inch sheet of white paper with the title typed centered and boldface at the top of the page. The first assignment contained 16 target problems involving the solution of linear equations in one variable. These problems required the student to combine like terms across the equal sign (e.g., $13x + 18 = 7x + 30$) and resulted in the division of a two-digit by one-digit number (e.g., 12/6). The second assignment also contained 16 target problems. However, six additional problems were interspersed. The additional problems did not require the student to combine like terms across the equal sign (e.g., $5x = 40$). The additional problems were randomly interspersed with a condition that no two would appear consecutively. After completing the assignments, students were asked to indicate which assignment format they preferred.

The assignment sheets were used to collect data concerning the (1) number of total problems completed, (2) number of target problems completed, and (3) percentage of target problems completed correctly. A *t*-test for nonindependent means was used to test for differences between assignments. Preference data were analyzed using a chi-square goodness of fit. An alpha level of .05 was used to determine statistical significance for all tests.

1:00 p.m.-1:50 p.m.   **TECHNOLOGY (Discussion Session)** .... **Cabildo Salon**

PRESIDER: Jimmy Carl Harris, Southeastern Louisiana University

**TEACHING ENGLISH METHODS STUDENTS HOW TO
USE TECHNOLOGY IN THEIR FUTURE CLASSROOMS**

Sue S. Minchew and D. Kay Brocato,
Mississippi State University

This project introduced English methods students to practical uses of technology for publishing student writing. After emphasizing the importance of the publication stage in the writing process, the instructors used a hands-on approach to guide the students in the construction of personal web pages and brochures.

The web pages included digitized pictures of the students, their personal profiles, descriptions of their interests, and their career objectives. The brochures, which also contained the students' digitized pictures, "advertised" their particular skills, their experience, and their teaching philosophies. The web page gave the students an immediate on-line publication available to anyone who chose to access it; the brochure provided an inexpensive, professional quality paper publication that the students could (and did) showcase to future employers.

The skills learned in the class will enable the methods students to employ similar techniques to publish their own students' writing and to give writing assignments with real-world significance, assignments that matter to the students themselves. The methods students' written reflections about the project indicated positive attitudes not only toward their own publications but also toward the use of technology in their future English classrooms.

**UTILIZING DISTANCE LEARNING AND THE CASE STUDY METHOD
TO ENHANCE INSTRUCTION BETWEEN TWO UNIVERSITIES**

Jack J. Klotz, University of Southern Mississippi, and John Borsa,
Southern Illinois University, Edwardsville

Traditional university preparatory programs have been unilaterally oriented, i.e., maintaining their own solidarity in terms of geographic areas of service, delivery styles, organizational culture, and programmatic formatting. Yet, because of national associations and various reports, many common factors exist within such preparatory programs as a result of the existence of a number of agreed upon nationally oriented programmatic standards. This presentation provided a strong philosophical argument for utilizing distance learning and case study methodology to connect students from different programs/universities, geographic areas, and courses to recognize the commonality of problems faced in K-12 educational administration.

Finally, this presentation provided participants with information on the strategy and implementation timelines for the establishment of a linking instructional delivery system between two university campuses' administrative training programs via distance learning modality, while employing the case study method to provide future practitioners located in different geographic areas with the opportunity to actively interact simultaneously with each other in seeking resolution to "real world" educational problems. Additionally, the presentation identified and discussed the constricting factors and positive benefits associated with implementing such an interactive program utilizing currently available technology.

USING E-MAIL TO EXTEND DIALOGUE IN AN ENGLISH METHODS COURSE

B. Joyce Stallworth, The University of Alabama

This action research was undertaken to determine the usefulness and effectiveness of dialogue via e-mail between an English education professor and preservice English teachers. Ten students enrolled in a secondary English methods course were concurrently enrolled in a 90-hour field experience with area master teachers. The purposes of the e-mail project were to: (1) provide opportunities for the students to reflect on and respond individually to issues discussed in the methods class and their own teaching during clinical experiences, and (2) provide individual guidance to the preservice teachers.

The students responded to bi-weekly professor-developed queries based on class readings, discussions, and feedback from their clinical experiences. As the semester progressed, the queries became less

structured, students' responses became more reflective, and the e-mails became a dialogue between student and professor on major issues about learning to teach, including teaching with a multicultural perspective, classroom management, planning, and assessment. At the end of the course, students evaluated the semester-long dialogue with the professor.

The research questions addressed were: (1) How well did students internalize, articulate, and use effective teaching principles and practices taught in the methods course? (2) What were the students' perceptions of communicating via e-mail with their professor? and (3) How can students' reflections, responses, and evaluations be used to improve the teaching and learning process in the methods course and in clinical experiences? Students' reflections and evaluations were read carefully, coded, and placed into categories according to emerging themes. Preliminary conclusions were constructed, revised, and written into a final version. The findings informed the planning of the course and field assignments for the following semester. The findings also had major implications for other programs in this particular college of education as well as other similar teacher education programs.

2:00 p.m.-2:50 p.m.　　　　**EDUCATION REFORM (Symposium)** ....**Cathedral Salon**

ORGANIZER:　　　　Jeffrey Gorrell, Auburn University

VOICES IN EVALUATION OF SCHOOL REFORM EFFORTS: THE NEW ORLEANS AREA LEARNING CONNECTIONS PROJECT

Overview

The primary goal of this symposium was to explore the concept of "voice" in school reform evaluation. The Learning Connections Project, a school improvement project conducted in five New Orleans area parishes by the Center for Development and Learning (CDL) in Covington, Louisiana, provided the context for this symposium. Members of the research and evaluation group associated with this project presented and discussed perspectives related to roles of evaluators engaged in evaluating multi-year, school reform efforts. The papers and the overall discussion progressed from an understanding of the nature of the Learning Connections Project to issues associated with the design, data analysis, interpretation of findings, and the role of advocacy positions in evaluation. The intent of the symposium was to highlight existing and emerging evaluation issues in the context of an ongoing project.

What is the Voice of the Evaluator in an Evolving School Reform Initiative?
Jeffrey Gorrell and Nancy Ares, Auburn University,
and Glenda Thorne, Covington, LA

The first paper examined the basic relationship between evaluators and their clients. Evaluators need to understand the vision of a project more than understanding even the specific activities of the project. Without that understanding, evaluation efforts become technical exercises devoid of meaning to the participants and, ultimately, to the evaluators who are attempting to make professional judgments about the successes or failures of the project. Through the existing Learning Connections Project evaluation plan, the presenters examined the articulation of the project staff's vision and construction of an evaluation plan that can be sensitive to that vision and to the changing dimensions of the project. Finally, they examined the roles that evaluators play in providing advice and recommendations throughout an ongoing, evolving school reform project.

Whose Voice Do You Hear When Participants' (Student, Teacher and Principal) Voices Clash?
Nancy Ares, Young Suk Hwang, and Jeffrey Gorrell, Auburn University

The second paper detailed the dilemma inherent in listening to diverse participants' voices during the course of an evaluation. In particular, they discussed merging conflicting viewpoints into a multi-level

description of what project participants perceived as successful and unsuccessful within an evolving school-improvement project. Data from interviews and observations served as the source of discussion of this topic.

How Does the Evaluator Discern and Communicate Issues of Power in Communities of Difference?
Gisele Waters and Nancy Ares, Auburn University

The third paper examined the advocacy roles that evaluators may play in school reform. They reviewed three contemporary perspectives on evaluation, and, using the Learning Connections Project as a context, explored how issues of diversity, power, and equity could be incorporated as important elements in evaluation and in successful school reform efforts.

How Does the Evaluator Discern and Communicate Issues of Critique?
Marty Alberg, The University of Memphis

Following the presentation of these papers, a critique and a facilitated discussion with the audience were provided.

2:00 p.m.-2:50 p.m.   **COUNSELING (Discussion Session)**...**Gallier Salon**

PRESIDER: Cynthia M. Gettys, The University of Tennessee, Chatanooga

EFFECT OF INTRODUCTORY COUNSELING COURSE ON RETENTION RATES

Mary Hall O'Phelan and Jim Fulkerson, Western Kentucky University

The purpose of this study was to compare student retention rates for beginning college students who took a 100-level counseling course designed to include career information, study skills, and orientation to college with university-wide retention rates.

Data were gathered via the office of institutional research on students enrolled in the counseling course during the four years between 1990 and 1993. Information included the student's ACT score from high school, the student's declared major, graduation date, and grade point average upon graduation. Comparisons of the retention rates for these students were made with university-wide retention rates after four, five, and six years. Retention rates for students enrolled in the counseling course were better than the university-wide retention rate and better than overall college retention rates in the region.

It was concluded that offering orientation and counseling courses similar to the one described in this study increased the retention rates for beginning college students who took them.

ABSOLUTE VERSUS TENTATIVE INTERPRETATIONS: MEDIATING EFFECTS OF CLIENT LOCUS OF CONTROL

Craig S. Cashwell and Amy L. Skinner,
Mississippi State University

Scholars have suggested that counselors can provide interpretations in an absolute or decisive manner, or in a more questioning and tentative manner. While the empirical evidence for the differential effectiveness of tentative versus absolute interpretations is mixed, training put forth in textbooks on counseling skills tends to emphasize the effectiveness of tentative interpretations.

In the current study, the mediating effects of client locus of control, varying from a more internal focus to a more external focus, were considered for two analogue formats (absolute and tentative interpretations) on measures of perceived session depth and smoothness, and perceived counselor expertness, attractiveness, and

trustworthiness. Crossed on level of locus of control, 120 participants were randomly assigned to one of two videotaped treatment conditions: absolute or tentative interpretation.

Results indicated important implications for counseling practice and future research on the use of interpretations.

THE RELATIONSHIPS AMONG TIME MANAGEMENT BEHAVIORS, STRESS, AND GRADES OF EDUCATION MAJORS

Irvin G. Esters and Ellen F. Castellanos,
The University of Southwestern Louisiana

Teachers' management of their time and their response to stressors inherent to their career choice has been a popular topic in the literature for some years. Little work, however, has focused on the quantification of time management or the multifaceted nature of stress. The present study described the relationships among time management, stress, and grade point averages of students enrolled in education courses. Several surveys, including a prevalidated instrument that measures behavior associated with good time management, a measure of two dimensions of stress, plus high school and college cumulative GPAs, were administered to students enrolled in teacher education during the fall term, 1998. Results suggested significant relationships among the dependent variables. Additional results of regression analyses suggested that time management behaviors were significant predictors of stress and grade point averages. Results of the present study were consistent with studies completed with other populations. The authors discussed the results with respect to the role of time management in the preparation of teachers and job/school performance.

2:00 p.m.-2:50 p.m.	**MATHEMATICS EDUCATION**
	(Discussion Session) ....**Pontalba Salon**

PRESIDER: Dennis C. Zuelke, Jacksonville State University

A COMPARISON OF THE EFFECTIVENESS OF APPLIED AND TRADITIONAL MATHEMATICS CURRICULUM

Stanley L. Lightner, Mississippi State University

The quasi-experimental study used the two group pretest/posttest design to investigate the comparison of the acquisition of mathematic skills between General Mathematics students and Applied Mathematics 1 students.

In the 1994-95 and the 1995-96 school years the Generalizable Mathematics Skills Assessment was administered to General Mathematics and Applied Mathematics 1 students as both the pretest and posttest to measure the gain in generalizable mathematics skills. During the study, 151 subjects were tested in three rural Oklahoma comprehensive secondary schools to provide data for the study. The research question was, Are there significant differences in the gains in the total mathematics scores, in the calculation of whole numbers, fractions, decimals, percentages, mixed operations, measurements, or in the estimation of mathematics answers between the students who completed General Mathematics and the students who completed Applied Mathematics 1 as measured by the Generalizable Mathematics Skills Assessment instrument?

Based on the analysis of the data compiled in the study, the researcher found significantly higher gain scores by the Applied Mathematics 1 students when compared to the General Mathematics students for the total instrument and the whole number, fraction, decimal, mixed operation, measurement, and estimation sections of the instrument. There was no significant difference in the gain score between the groups in the percentages section. It was concluded that the contextual approach used in Applied Mathematics 1 was as effective, or possibly more effective, as the traditional teaching methodology used in General Mathematics.

Because of the statistically equivalent or superior scores by the Applied Mathematics 1 students, Applied Mathematics 1 may be substituted for General Mathematics without a loss of learning.

PROFESSIONAL DEVELOPMENT OF MATHEMATICS: TEACHERS USING EVERYDAY MATH CURRICULUM

Gypsy Abbott, Anthony Green, and Charles Calhoun,
The University of Alabama at Birmingham

The mathematics skills of U.S. students continue to be at the low end of the international spectrum according to the Third International Assessment of Mathematics (1997). One reason for the poor math skills of students has been reported to be the less than adequate math skills of their elementary school teachers. To address the problem, the Birmingham Public Schools has obtained funding from the National Science Foundation under the Local Systemic Initiative to provide professional development for implementing the Everyday Math program for all K-5 teachers in the system. The Everyday Math curriculum is based on "best practice" research, using hands-on activities and a curriculum spiraling approach to introduction of math concepts.

Eighty-four teachers participated in professional development activities during the 1997-98 school year. Observations were conducted with a random sample of IO teachers who had not yet participated in the program (baseline data) and a convenience sample of IO teachers who had already attended the training. Observers were trained by Horizons Research, the NSF contractor for the evaluation. The observers obtained interrater reliability with the standards set by Horizons. The observation protocol addressed use of teaching strategies, use of classroom materials, classroom environment, and potential level of conceptual growth for students.

Comparisons of the two sets of observations indicated that the majority of untrained teachers used only a traditional textbook approach and also exhibited errors in mathematical concepts taught. These phenomenon were not observed in the group of trained teachers. Further, strategies used by trained teachers appeared to create a positive environment and a positive attitude toward math by students. The majority of trained teachers, as compared to untrained teachers, provided classrooms that promoted the achievement of all students. Implications for future staff development were discussed.

EFFECTS OF THE INTERSPERSAL TECHNIQUE IN A COMPUTER MATH ASSIGNMENT FOR INPATIENT ADOLESCENTS

Gregg A. Johns, Mississippi State Hospital

Adolescents with emotional and behavioral problems may choose to exhibit disruptive and off-task behaviors as opposed to completing academic tasks. The purpose of the current study was to examine the effects of interspersing brief and easy math problems in one of a choice of two concurrent computer math assignments on assignment preference in inpatient adolescents.

The participants in the study were three adolescents receiving treatment for emotional and behavioral problems in an acute care inpatient hospital unit. The participants completed daily 15-minute computer math assignments for approximately one month. The math assignment consisted of a concurrent choice of math problems located in a flashcard format at the left and right computer screen. The assignment consisted of a choice of target problems, 2x2 multiplication problems, (control choice) vs. target problems with easier problems (1x1) interspersed after every two target problems (experimental choice). Participants chose one of the presented problems and entered an answer and received accuracy feedback. Problem choices were randomly generated per session.

An A-B-C-B multiple-baseline across subjects experimental reversal design was used for the study. The independent variable was the presence of the experimental math assignment on the left or right computer screen. The dependent variable was the percentage of trial time allocated to the left screen problem choice in accordance with previous matching law research. Treatment phases consisted of the experimental problem choice appearing on either the left or right screen. Phases were reversed upon achieving stable response trends. Data were analyzed visually for trends.

Results indicate initial participant preferences for the experimental assignment, between phases, consistent with previous matching law research. Although treatment effects were not robust with repeated

measurement, discussion focuses on future considerations of contingent reinforcement, in conjunction with the interspersal technique, in the maintenance of treatment effects consistent with previous matching law research.

2:00 p.m.-2:50 p.m.   **STATISTICAL METHODS (Discussion Session)** ....**Ursulines Salon**

PRESIDER: James E. McLean, The University of Alabama at Birmingham

ORTHOGONAL VERSUS OBLIQUE FACTOR ROTATION: REVIEW OF THE LITERATURE REGARDING THE PROS AND CONS

Kevin Kieffer, Texas A&M University

Factor analysis has been characterized as being part of the heart of the score validation process. Indeed, until the fifties, some psychometricians considered "factorial validity" to be one of the then-recognized major classes of score validity.

In virtually all applications of exploratory factor analysis, factors are rotated to better meet Thurstone's simple structure criteria. Two major rotation strategies are available: orthogonal and oblique rotation. This paper reviewed the literature regarding the numerous rotation options available in factor analysis, and in particular presented the pros and cons of various analytic choices.

In general, oblique rotation, which yields correlated factors, requires the estimation of more parameters than does orthogonal rotation. This means that oblique structures will usually better fit the sample data, but the solutions are somewhat less parsimonious and therefore somewhat overfit the sample and tend to generalize less well to future samples. On the other hand, constructs are rarely taken to be perfectly uncorrelated, and so oblique solutions may better honor the nature of reality. Some guidelines or rules are offered for resolving these issues in given studies so that appropriate rotation methods can be selected.

APPLICATION OF THE GENERALIZED LINEAR MODEL TO PRE-ENGINEERING STUDENT SUCCESS

Frank R. Lawrence, The University of Alabama at Birmingham,
and Gerald Halpin and Glennelle Halpin, Auburn University

The most frequently used model for analysis of social science data is the linear model. The linear model assumed the conditional residuals are normally distributed. However, this may not be realistic for many situations encountered in social science research. In social science research, the conditional residuals often are not normally distributed, thereby biasing the test statistics.

The study begins with an explanation of the generalized linear model. The explanation is used to extend the generalized linear model methodology for use in a hierarchical data set. Subsequently, the hierarchical generalized linear model is applied to the study of pre-engineering student performance at a major southeastern university. The study demonstrates the methodology by analyzing students' success in their quest for admission to the college of engineering. Student success is gauged at the end of their second year. At the end of their second year, either a student is admitted to the college of engineering or he or she is not. Admission is based on student GPA.

This study consisted of the 1991 to 1995 pre-engineering entering classes (N=3,000). The classes were made up of students with multiple demographic differences. Two of the more interesting demographic differences were ethnic background and gender. In addition, differences associated with year of enrollment were considered. The hierarchical generalized linear model used time and demographic information to model student success as measured by GPA. The model was built using a randomly-selected portion of the data then validated on the remaining cases.

Following the demonstration of this modeling technique, tentative conclusions were put forward. The findings may prove useful to the college of engineering's leadership.

ANCOVA WITH INTACT GROUPS: DON'T DO IT!

Robin K. Henson, Texas A&M University

Educational researchers are rarely able to conduct ecologically-realistic, true experiments using random assignment. When we ask Mikie's parent for permission to study a new educational intervention using a true experiment, the parent is all too often likely to respond that such experimentation sounds good, but that such research should be done with little Susie. And when Susie's parent responds similarly, the researcher is left with many parents supporting the notion of clinical trials of educational interventions, but no subjects.

Some researchers attempt to escape restrictions on true experimentation by invoking "statistical controls" to purportedly mimic the results that would be obtained from real experiments. These statistical procedures are all related to each other and go by various names, such as analysis of covariance (ANCOVA) and partial correlation. Though many of these statistical controls date back to the beginning of the century, most of the corrections have not enjoyed especially wide use in journal articles. Analysis of covariance (ANCOVA), for example, has been used in about 4% of the recently-published research. However, dissertation authors appear to be appreciably more interested in using statistical correction methods. Some academic cultures have inculcated a misperception that statistical corrections can "save" a shoddy experiment.

This paper explained how ANCOVA and related statistical corrections work, and discussed difficulties with the use of these corrections under certain circumstances. Small heuristic data sets were employed to illustrate when ANCOVA can and can not be correctly used in educational research. In the main, ANCOVA can usually be correctly used with randomly- assigned groups, but may not be needed here. When groups are not randomly assigned, ANCOVA often can not be correctly employed (i.e., paradoxically, ANCOVA often can not be used when "correction" is most needed).

2:00 p.m.-2:50 p.m.   **SCHOOL VIOLENCE (Discussion Session)**..............................**Beauregard Salon**

PRESIDER: Beverly M. Klecker, Eastern Kentucky University

VIOLENCE IN OUR SCHOOLS: A REVIEW OF RECENT REPORTS IN THE MEDIA AND INTERVIEWS WITH RECENT GRADUATES MAJORING IN EDUCATION

Jerry Brooksher Gee, Nicholls State University

As recently reported by The Associated Press, there have been eight major acts of violence committed in the schools of our nation since February 1996 that resulted in the death of students. Six of these incidences occurred during the first six months of 1998. Unlike acts of violence in the seventies and eighties in inner-city schools in large metropolitan areas, the majority of these occurred in relatively unlikely peaceful settings.

The purposes of this study were (1) to review current reports in the media concerning violence in our schools, and (2) to interview recent graduates from secondary schools, now majoring in education, to gain insight regarding acts of violence they had either been aware of or actually observed.

A review of reports in the media reflected drastic social problems. Legalities that often appeared made reference to court decisions concerning students' rights and responsibilities. Citations regarding actions of procedural due process, standard interpretations of student suspension and expulsion, and schools with "zero tolerance" for violence were also reviewed.

The second part of the study contained interviews with 60 undergraduates during the fall of 1997 and spring of 1998. Sixty percent (36) of those responding had graduated from secondary schools since 1994. Eighty percent (48) had either observed or been aware of acts of violence. Eighty percent (48) of these acts of violence had occurred between students, 35% (21) had been committed against teachers, and 10% (6) were against administrators. The respondents' descriptions of these violent conflicts reflected a much stronger degree of severity among the more recent graduates of the late nineties than the earlier graduates.

PRETEENS' PERCEPTIONS OF VIOLENCE, SCHOOL SAFETY, CONFLICT AND RESOLUTION, AND SEX-ROLE STEREOTYPES

Yvetta George and Joel Keiter, Nova Southeastern University; Glennelle Halpin and Gerald Halpin, Auburn University; and Donna Dagnese-Pleasants, Florida Atlantic University

Rising school violence has become a serious national concern prompting researchers to engage in studies of the problem. Reported herein are results from one such study designed to assess preteens' perceptions of violence, school safety, conflict resolution, and sex-role stereotypes. Also considered were gender differences in these perceptions.

A 25-item questionnaire was administered to 327 third-, fourth-, and fifth-grade students. Although preteens (Boys--N = 151; Girls--N = 176) saw boys as more violent than girls, they generally did not approve of violence on TV or think that violence "proves that you are tough." Girls were significantly less supportive of violence than boys. School was not viewed as a safe place--over half reported having had something stolen there. Feeling safer in teacher-supervised activities, many of these preteens did not feel safe on the way to/from school, in the restroom, or in before and after school programs. More so than girls, boys reported that they did not feel safe on the way to and from school. Encouraging was the conflict resolution strategies reported. Generally well over half of the preteens would try to talk out or mediate the conflict with girls tending to do so more than boys. However, about 20% would hit or call the other person a name when mad, boys showing a greater tendency to do so than girls.

Results from this study add to our understanding of violence and school safety--or lack thereof--as seen through the eyes of the children. While some positive views emerged, much remains to be done to reduce violence and make schools a safe place.

DETERRING SCHOOL VIOLENCE

Connie A. Jones, Middle Tennessee State University

Violent acts committed by students at public school have escalated. They have been directed at administrators, faculty members, staff members, and other students. This paper was designed to investigate the violent occurrences that result in a police investigation. It further sought to identify and define the type of violent occurrences as well as what was being done to deter school violence.

The study revealed that little effort has been expended to track levels of school violence or maintain statistics. No federal or state agency, or department, is required by law to track incidents of school violence or maintain statistics. Individual crimes have been recorded for selected years. Incidences of school violence have received increased press attention that may result in copycat crimes. The growing numbers of students with emotional disturbances and social maladjustment have also been suggested as an implied cause.

Various programs have been initiated that are designed to deter students from committing violent acts. Zero tolerance programs have sprung up across the nation. Many variations of violence prevention programs exist. Public school systems have designed emergency plans to be implemented if a violent act involving a weapon occurs at their schools.

The final aspect of this investigation centered on the effectiveness of the violence prevention programs in place in American schools. Many of the programs in use in public schools have not been available long enough to have had any effect. While the predictive value is high and reports have declined in some cases, there is no hard evidence that the programs themselves have been the actual cause of the decline.

2:00 p.m.-2:50 p.m.   **TEACHING AND LEARNING (Discussion Session)**...................... **Cabildo Salon**

PRESIDER: Jim Flaitz, University of Southwestern Louisiana

UNDERSTANDING: RECONSIDERING THE U-WORD OF INSTRUCTIONAL DESIGN

Debora L. Adler, University of Central Arkansas

Accepted methods of instructional design, such as those of Gagne, Briggs, and Wagers, have been promoted for both training and education. These methods have emphasized -- even valued -- behavioral outcomes over cognitive understanding. They have focused on the transmission of procedures. The purpose of this literature review was to inquire whether this focus is appropriate in higher education, to look at approaches to instructional design that have modified this focus, and to consider the relevance of those approaches to the development of courses for preservice teacher education.

While some instructional designers have characterized declarative knowledge as rote memorization, several models of knowledge representation have suggested that concepts exist as declarative memory structures. Damasio's autoradiographic imaging studies of the brain supported this conclusion. Means demonstrated that rote learning was not restricted to declarative information. She used the term "brittle procedures" to describe procedures that, lacking meaning, broke down in the face of change. Anderson demonstrated that specific skills were acquired by applying general strategies to a declarative knowledge base. Therefore, instructional designers must give more attention to declarative memory structures.

Attention to declarative knowledge in instructional design methods appears to have increased since 1990. Instructional design texts by Brien and Eastmond; Leshin, Pollock, and Reigeluth; and Merrill offered methods that focused more than earlier texts on declarative information. There is a need to study the effects of these design models on the flexibility of preservice teachers' performance.

It has long been taboo to write an instructional objective that specifies that students will "understand" a concept, but to demand behavior without regard to understanding may be a much bigger mistake. Incorporating declarative knowledge in instructional design may better prepare preservice teachers.

**DO TIME PRESS, STIMULUS, AND CREATIVE PROMPT INFLUENCE
THE DIVERGENT PRODUCTION OF UNDERGRADUATE
STUDENTS? YES, YES, AND NO, NOT VERY MUCH**

David T. Morse and Linda W. Morse, Mississippi State University,
and Gregg A. Johns, Mississippi State Hospital

Previous studies have indicated that originality scores in creativity tasks are sensitive to time press, though most have used single-response outcomes. This study examined the influence of time press, specific stimulus, and type of creativity prompt on fluency and flexibility scores of 75 undergraduate students.

Participants were predominately female (84%), with a median age of 21.0 years (SD=4.0). About 25% were African American, and 67% were juniors or seniors. Three stimuli, or tasks, were administered, in three time allotments (2.5, 5.0, and 7.5 minutes), counterbalanced with three types of prompt (generate as many responses as possible, as many different types of responses as were randomly assigned to combinations). Dependent variables were fluency (number of responses) and flexibility (number of classes of response). Multivariate and univariate analyses of variance were run at the .05 level.

The results suggested that time press has a strong ("large" ES), and typically linear, influence on both mean fluency and flexibility scores. Increasing the amount of time allotted also increased the variability of fluency and flexibiity scores. When scores were adjusted by time allowed, a statistically significant multivariable difference across stimuli was observed for flexibility $F(2, 73) = 4.85$, $p = .011$, but not for fluency scores. Prompts were found to have had very small and nonsignificant effects. Performance on the second of the three tasks did not differ significantly based on whether the time allowed for tasks one and two was a longer/shorter or shorter/longer pattern.

Implications for practitioners included: (1) divergent production is largely a linear function of time, (2) stimulus matters, (3) simple prompting to adopt a certain response style appears not to influence fluency or flexibility scores, and (4) previous task times allowed seem not to affect subsequent task performance.

STRESSED OUT: HOW TO DEAL WITH THE STRESS OF TEACHING
IN TODAY'S PUBLIC SCHOOL SYSTEMS!

M. Craig Hankins, Consultant

The paper briefly described the problems associated with stress, presented basic findings on how to reduce stress, and discussed implementations of various stress reduction programs. Teaching is listed as being one of the most stressful occupations. Increased responsibly, school violence, and budget cuts are just a few of the stress-inducing situations that a teacher may face daily. The American Institute of Stress studies have shown that 75% to 90% of all visits to primary care physicians are for stress-related complaints, including headaches, backaches, anxiety, depression, obesity, and alcoholism. Stress can have negative effects on every aspect of one's life. Therefore, teachers must find ways to reduce stress levels and must organize their schedules to incorporate stress reduction techniques into their lives.

There are a variety of ways one may deal with the stress that may be encountered on a daily basis. Many adult education or continuing education courses are concentrating on stress reduction techniques. As described in the paper, these techniques may include: maintaining a proper diet, low in caffeine and fats; exercising and practicing various movement techniques, such as yoga and Tai Chi; practicing relaxation techniques, such as meditation and guided imagery; and organizing one's life in a manner to have time for fun activities.

Dealing with stress in an appropriate manner allows one to reserve energy that may be used to serve as a more effective teacher. Teachers should seek out training programs, whether self-directed or other-directed, in order to obtain various techniques that will allow them to manage stress. The paper listed a variety of resources that may provide such programs. Individual, as well as, group activities were discussed.

3:00 p.m.-4:50 p.m. **TESTS (Training Session)** .... **Bienville Room**

PRESIDER: Edward C. Drahozal, Riverside Publishing

TEST SCORES AND SCORE REPORTS: WHAT THEY MEAN
AND HOW YOU CAN (YES, YOU CAN!) USE THEM

Edward C. Drahozal, Riverside Publishing (IL);
Evangelina Mangino, Riverside Publishing (TX);
and Paula Tharp, Riverside Publishing (MS)

The presentation was based on successful multi-media training sessions used by the authors for various state, large city, and local testing programs. The success of the materials was based on the number of requests for electronic copies of the various sessions.

The use and derivation of scores discussed included the scores most commonly used in school testing programs and with psychological tests: percentile ranks; three developmental scores - developmental standard scores, grade equivalents, and age equivalents; and status standard scores - NCEs and standard scores by age.

The objectives of the session were to provide school personnel and professors of educational measurement with useful information about the interpretation and use of the test scores as well as misunderstandings and misuses of test scores using copies of real score reports that allow for hands-on, interactive learning.

The presentation began with an activity that illustrated the need for norms and allowed for immediate interaction by the attendees. The ultimate goal of this activity was the use of norms to determine relative strengths and weaknesses of individuals and groups. Attendees were provided with copies of reports that they used to determine relative strengths and weaknesses.

These reports were also used to describe and evaluate the nature, usefulness, and possible misinterpretation of all of the scores discussed. The last quarter of the presentation focused on the derivation of the

scores, discussed common misconceptions about scores, and had the attendees evaluate the value they placed on various types of scores.

All attendees were provided printed copies of the presentation and a disk that could be used in a college course or local district staff-development programs.

3:00 p.m.-4:50 p.m.   **INSERVICE EDUCATION (Symposium)** ....**Cathedral Salon**

ORGANIZER: Reid Jones, Mississippi Valley State University and Delta State University

ASSESSMENT OF TEACHER NEEDS IN K-12 RURAL SCHOOLS

Overview

Rural schools differ from other schools along several important dimensions having lower enrollment, lower population density, and lower instructional budgets. Consequently, there is good reason to believe that the needs of teachers in rural areas would differ from needs of other teachers. Identifying and prioritizing needs of these teachers led to the development of a needs assessment and distribution of that survey to teachers in five rural school districts. Results were used to prioritize a service agenda for the next school year.

Overview and Methodology of Rural Needs Assessment
James Reid Jones and Carolyn Anderson, Mississippi Valley State University,
and Gene Hamon and Shalander Adams, Delta State University

A survey of 15 needs plus five demographic variables was distributed to K-12 teachers. Respondents (N=382) returned anonymous surveys. Three broad areas of need were identified: resources, staff development (nontechnology), and staff development (technology). Over all groups of teachers, greatest needs were expressed for (1) more equipment, (2) more staff development on computer software, and (3) more staff development in reading. Twenty-seven of 81 independent inter-item correlations were significant ($p<.05$). Profiles of descriptive statistics were presented for teachers in each of 15 certification areas. Follow-up phone calls to teachers corroborated the results listed here and in the other papers of the symposium.

Needs Assessment Results for Rural Elementary School Teachers
O. Edward Jack, Mississippi Valley State University,
and Leslie Griffin, Delta State University

Elementary school teachers (N=229) were the largest subgroup of respondents. Three need areas were ranked higher by these teachers than other teachers, including: (1) greater need for equipment, (2) greater need for introductory workshops on computer use, and (3) lower need for workshops on Internet use. Results suggested that rural elementary teachers have had less access to computers and were at a more basic level of need than other groups.

Needs Assessment Results for Rural Special Education Teachers
Patricia Black, Mississippi Valley State University,
and Nita Thornell, Delta State University

Respondents (N=56) who were certified in Special Education reported significantly greater needs for Internet workshops than did other teachers. Additionally, classroom management workshops were rated as priorities by this group. It was noted that the geographical region surveyed had an unusually high percentage of special education students. E-mail among these children could add an important social dimension to their education.

Needs Assessment Results for Rural Science and Mathematics Teachers
Jim Nicholson, Delta State University, and Garfield Burke,
Mississippi Valley State University

Both science teachers (N=46) and mathematics teachers (N=42) rated the need for problem solving and critical thinking workshops higher than did other teachers. Further, science and mathematics teachers rated the need for reading workshops lower than did other teachers. Finally, both groups rated the needs for equipment higher than did other teachers. Possibilities for resource sharing among members of a large consortium of rural districts were discussed.

Technology Needs in Rural School Districts
Hines Cronin, Delta State University, and S. L. Ansah,
Mississippi Valley State University

MANOVA showed that staff development needs in technology-related areas were judged significantly ($p<.01$) higher than were staff development needs in nontechnology areas. Of note was the finding that teachers expressed greater needs for workshops on specific software than they did for workshops on introductions to computer use. Secondary teachers were significantly more likely ($p<.05$) to prioritize Internet training needs. While caution was expressed regarding the view that computers are a panacea for education, they remain a valuable tool that can help bring rural districts closer to being competitive.

3:00 p.m.-4:50 p.m.   **EDUCATION REFORM (Discussion Session)** ....**Gallier Salon**

PRESIDER: Rodney W. Roth, The University of Alabama

CONTRADICTIONS WITHIN A STATE-MANDATED TEACHER EVALUATION SYSTEM: A HISTORICAL PERSPECTIVE, PERSONAL REFLECTIONS AND PRINCIPAL INTERVIEWS

Verdell Lett Dawson, The University of Alabama

The case study examined: (1) the historical background of teacher evaluation processes from early American schooling to the 1990's, (2) personal reflections, and (3) principals' experiences and findings. Supreme questions for the study centered upon local implementation of a state-mandated teacher evaluation system within the elementary and middle school classrooms of a small rural school system in Alabama. The case study's ultimate purpose was to determine whether principals at the grass roots would adhere to the beliefs and practices of the state's valid and reliable research-based system. Simply stated, the overriding question was, Would extensively trained principals follow the state plan, or would they stray from the state plan.

An historical perspective demonstrated a movement from checklists of character traits toward a system that focused on both improved teaching and improved student learning. Reflections revealed that personal, individual experience as a teacher, principal, supervisor of teachers, and coordinator for teacher evaluation suggested that the present evaluation system was a positive reform for Alabama.

The case study revealed that paradoxes/contradictions inherently existed within teacher evaluation. Multi-data sources disclosed an awkward, complex process. Yet, the difficult, awkward process resulted in a more accurate and fair method of assessing how teachers actually effect student learning.

The summary of data sources - (1) a historical perspective, (2) personal reflections, (3) principal interviews - was conclusive. Similar themes emerged despite the variation in instrumentation or data collection. Although imperfect and cumbersome, the reviewed teacher evaluation system offered a better process than previously utilized methods, thus offering hope as one answer to the age-old problem of assessing teacher performance.

FORMATTING A PROACTIVE PRINCIPAL PREPARATION PROGRAM
IN RESPONSE TO THE NATIONAL REFORM MOVEMENT
IN EDUCATIONAL ADMINISTRATIVE PREPARATION

Jack J. Klotz and Larry G. Daniel, University of Southern Mississippi

The publication of *Leaders for America's Schools: The Report of the National Commission on Excellence in Educational Administration* (1988) gave birth to a significant force committed to training programs for the preparation of school principals. Indeed, during the last decade, over 100 studies have been published addressing either philosophical underpinnings and/or specific thematic designs for the training of future school principals. The newly-proposed principal preparation program at the University of Southern Mississippi utilized a highly proactive programmatic design for the training of future school principals to meet the needs for the next millennium as charted by this national reform movement.

This program brings together the following conceptual components of both full-time and part-time student cohort groupings: (1) designated cohort teaching groups assigned specific instructional block delivery responsibilities, (2) joint instructional delivery efforts by professors from the departments of Educational Leadership and Curriculum and Instruction, (3) creation of sequenced instructional delivery blocks, (4) numerous highly interactive field-site clinical experiences, (5) effective utilization and involvement of practitioners as clinical professors, (6) collaborative nomination, screening, and selection of student participants by school district practitioners and university professors, and, (7) the utilization of multiple student assessment strategies, including both traditional efforts in combination with varied authentic assessment components.

This paper provided information and material on the following: (1) a review of the recent literature addressing philosophical and conceptual considerations for principal training programs, (2) a comparison of various existing operational standards expected via the new reform movement in such training programs, (3) a framework for putting into place a sequential strategy for collaborative programmatic review and change development, and (4) the University of Southern Mississippi's proactive answer to the reform movement's call for new and innovative formats in preparing future school principals to be effective instructional leaders.

STATE-MANDATED REFORM OF PROGRAMS PREPARING SCHOOL
PRINCIPALS: ONE UNIVERSITY'S EXPERIENCE

Sandra Lee Gupton, University of Southern Mississippi

The primary thesis of this proposed paper was sharing one university's experiences with state-mandated program reform of educational leaders in order to inform, facilitate, and give support to colleagues engaged in similar efforts.

The author, a faculty member and reform facilitator for the department in question, shared its reform experiences through a firsthand, reflective, analytic description of the events leading up to the reform initiative and the department's response to mandated program reform. In addition, key features of the reformed program were abstracted and offered as examples of what today's pedagogical research base suggests are appropriate curricula for the training and education of adults.

The reform processes included: (1) committing to the tasks, (2) collaborating with school districts, graduate students, other departments, other universities, state department personnel, and intra-departmental faculty, (3) the selection and inclusion of a nationally- reputable team of consultants to assist with the reform process, and (4) the identification, formation, and facilitation of working teams to develop the program.

Key features of the new program are: (1) student cohort enrollment, (2) sequenced, integrated, block scheduling, (3) team teaching, (4) more reliance on a problem-based curriculum, (5) mentors in the field assigned to students in their first semester, and (6) a year-long, personalized internship.

In the final analysis, conclude Whitaker and Moses, restructuring is a reinvention of the culture of schooling, a rethinking of taken-for-granted assumptions, and a quality improvement effort that refuses to be deterred by the past. It is nothing less than mental and emotional turmoil (1994, p. 158). The researcher's first-hand description and attempt at an objective analysis of the department's experiences with imposed reform and the

innovative program that was developed should contribute to the field's understanding of the movement in this country to reconceptualize university programs preparing school administrators and of the emotional, physical, and intellectual rigor of such an undertaking.

3:00 p.m.-4:50 p.m.   **MINORITY ISSUES AND DIVERSITY**
                                (Discussion Session) ....**Pontalba Salon**

PRESIDER: Burnette W. Hamil, Mississippi State University

COLLEGE FACULTY OF DIVERSE RACIAL/ETHNIC BACKGROUNDS: HOW DO STUDENTS EVALUATE THEM?

Anisa Al-Khatab and Kenneth T. Clawson,
Eastern Kentucky University

The purpose of the study was to examine how college faculty of diverse racial/ethnic backgrounds were rated as teachers by their students. The study presented a qualitative analysis and interpretation of a pilot study at a mid-size state university.

Student evaluations of faculty are a very important part of the collegiate culture. Most faculty are regularly evaluated using a variety of instruments and approaches. Many incorporate some type of structured or unstructured open-ended responses. These are utilized for self improvement and professional growth. Evaluations are also used to make summative judgments regarding promotion, tenure, and merit pay. They are also used to hold faculty accountable.

Although there are many factors that influence students' evaluation of faculty, some are particularly important. Communication is critical. Some communication theorists speak of a style-specific communication theory. Piaget's schema development suggests that students may approach a teacher (particularly if she/he is seen as different) with preconceived prejudices or biases toward a faculty of different race/ethnicity. They may selectively take the concepts that fit their schema and reject those that do not.

The study constituted a qualitative analysis and interpretations of responses from 475 students. They were predominantly white Anglo-Americans with approximately two-thirds female. Both undergraduate and graduate student evaluations of faculty who represented similar racial/ethnic backgrounds as the students and ratings of racially/ethnically diverse faculty were studied.   The authors compared the student responses with those from other studies that showed that faculty are perceived differently on several dimensions: communications and clarity, knowledge and use of English, student-faculty relationship, knowledge of subject content and skills, treatment of students, classroom management and organization, and their prejudices and biases.

THE AFFECTIVE AND ACADEMIC BENEFITS FOR MENTORS IN A MINORITY ENGINEERING PROGRAM

Jennifer Good, and Glennelle Halpin and Gerald Halpin,
Auburn University

Examined in this study were peer mentors' comments in journals written during the first quarter of tutoring and mentoring within a Minority Engineering Program at a large land-grant university. Although the journals were established at the beginning of the quarter as a forum for the discussion of the mentors' perspectives on program development and evaluation, the journals also captured mentor growth in the following areas: cognitive skills such as critical thinking, and affective change in confidence and sense of purpose.

Eighteen African American peer mentors (5 females, 13 males) participated in the study. During the initial mentor training session, the participants were given journals and were asked to respond in writing to a weekly prompt eliciting their perceptions of the program and its impact. Among the topics included in the prompts were the mentors' understanding of their roles as mentors and tutors, program goals, staff communication, and descriptions of change and growth noted within the freshman participants in the program. At the end of each week,

one of the researchers would read and respond to mentor comments in order to initiate an open discussion through the journal writings.

At the end of the quarter, the comments within the journals were organized and coded into examples or descriptions of mentors' cognitive and affective growth. Conclusions were drawn based upon the pattern of these comments. The findings of the study suggested that, although the upperclass peer mentors were not the target population of the Minority Engineering Program, they benefited both academically and affectively from program involvement. Illustrative comments from the mentors' journals were provided to substantiate this conclusion and to show areas of mentor growth.

AFRICAN AMERICAN STUDENT FRESHMAN YEAR EXPERIENCES IN
THE COLLEGE OF ENGINEERING FOR THE 1996 ACADEMIC YEAR

Bernadette Maria Chapple, Auburn University

The study examined African American pre-engineering students during their freshman year matriculation to discover: (1) why students choose to persist as an engineering major and (2) why students choose to leave engineering as a major. Approximately 17 students participated in this study that was both quantitative and qualitative in design. The data in the research assisted both the College of Engineering and the university in understanding the educational experiences of the matriculating African American pre-engineering student.

In an effort to provide reasons and rationale about why African American engineering students choose to stay in this major and why other African American engineering student majors choose to leave, the researcher examined an undergraduate engineering program at a land-grant institution in the south. The College of Engineering at this institution was able to institute several programs designed to increase the number of African American students choosing engineering as a major.

Although initiatives for pre-collegiate students are important in the retention of African American students, it is the retention of those students once accepted into a program of study that the institution focuses on most. It was the intent of this study to offer a better understanding of such a retention initiative. Because of the decline of African American students pursuing majors in science and mathematics in general and in engineering in particular, an important research concern has been to offer more insight into the experiences of the freshman engineering student in an attempt to develop fundamental reasons about why students remain in engineering and why some students leave.

3:00 p.m. - 3:50 p.m.   **RESEARCH METHODOLOGY**
      (Discussion Session) ....**Ursulines Salon**

PRESIDER: Linda F. Cornelious, Mississippi State University

THE CAREER ASSESSMENT DIAGNOSTIC INVENTORY:
A SCORE RELIABILITY AND VALIDITY STUDY

Sherry A. Vidal-Brown and Bruce Thompson,
Texas A&M University

Career decision making is an important aspect of most people lives. At some point in time they must decide what types of jobs to seek and what education or training to pursue related to their career choices. Many individuals struggle with these decisions and seek the advice of school counselors. Although career decision making is an integral part of individual development, understanding the process of career decision making has perplexed researchers in the behavioral sciences for over 90 years.

Many empirical studies of the career-related decision making have been conducted, but results are often contradictory. One emerging finding in this literature is that the process is multidimensional, and that therefore relevant assessment instruments must also be multidimensional. Unfortunately, few relevant multidimensional assessment instruments exist.

The present study reported on the development of a multidimensional career decision-making assessment tool that measured six aspects of this decision-making process (e.g., decision-making anxiety, family perceptions, emotional independence). The instrument was administered to 364 undergraduate students. The factor structure of the measure was as anticipated. The alpha coefficients for the scales ranged from .83 to .94. The measure may prove useful in assessing the conflicts people perceive as they attempt to make important career decisions.

A STUDY OF THE CONSTRUCT VALIDITY ASSOCIATED WITH THE DIGIT SPAN SUBTEST OF THE WAIS-III

Jason E. King and Mike C. Ramsay,
Texas A&M University

The Wechsler adult intelligence batteries have traditionally been considered psychometrically sound instruments for measuring the general factor of intelligence, when the construct is assumed to be composed of verbal and performance composites. While the utility of the batteries is generally accepted, the validity of inferences associated with certain subscales has been questioned. In particular, Digit Span has been a source of controversy. Nonetheless, the WAIS-III retains this subtest virtually unchanged from previous editions.

The present study addressed validity issues related to Digit Span. Given that this measure has been included in almost every major intelligence battery, it seems likely that researchers would be largely in agreement about the construct or constructs that Digit Span measures. Such is not the case. Some researchers treat the two components of the subtest separately, considering them to be measures of different abilities or characteristics. Others, including the authors of most of the factor analytic studies, combine Digits Forward and Backward, implicitly assuming no substantial incongruity in measuring the underlying construct. The two approaches have very different implications for clinicians, psychometrists, and neuroscientists.

The factor structure of WAIS-III Digit Span scores was utilized, as well as their correlations with other instruments, in an examination of validity issues. These findings, together with conclusions reached by other researchers who have studied Digit Span, were then assimilated into a logical framework for interpreting the subtest. In our view, the two components of the scale, Digits Forward and Digits Backward, should be treated as factorially distinct. We viewed the first component as measuring sequential processing, and the second, simultaneous processing. Both components measured auditory memory to a degree. In addition, Digits Forward and Backward scores declined with low motivation, inattention, anxiety, brain damage, and the like, thereby providing a measure of these important characteristics as well.

STABILITY AND INTERNAL CONSISTENCY RELIABILITY OF PERSONAL PREFERENCES SELF-DESCRIPTION QUESTIONNAIRE (PPSDQ) SCORES

Bruce Thompson and Randolph C. Arnau, Texas A&M University

The Personal Preferences Self-Description Questionnaire (PPSDQ) was developed to measure personal preferences regarding Jungian psychological types. Instruments in this area are among the most popular measures used in education and psychology; the measures are used in matching teaching and learning styles, in individual counseling and family therapy, in team building, in career planning, and in research in these and other areas.

The PPSDQ has been studied in a series of previous studies, which have focused on the concurrent validity, factor structure, and internal consistency reliability of PPSDQ scores. However, the test-retest reliability of PPSDQ scores has not been previously investigated. The present study was conducted to fill this void in the literature.

PPSDQ data were collected from 143 students at a large southern university on each of two occasions, approximately seven to ten days apart. The two data sets were first analyzed separately to yield Cronbach's alpha for each of the four PPSDQ scales: extraversion-introversion (EI), sensing-intuition (SN),

thinking-feeling (TF), and judging-perceiving (JP). The scale score alpha coefficients ranged from .823 to .886. Test-retest reliability coefficients were also computed, and these ranged from .779 to .882.

The results suggested that previous studies employing the PPSDQ can be interpreted with less caution. The results also suggested that the PPSDQ has sufficient psychometric strength to be potentially useful in future research.

3:00 p.m. - 3:50 p.m.   **TEACHER EDUCATION (Discussion Session)** ....**Beauregard Salon**

PRESIDER: Dennis Zuelke, Jacksonville State University

SERVICE LEARNING: PERCEPTIONS OF PRESERVICE TEACHERS

Rebecca McMahon, University of Scranton

Service learning is defined by the National and Community Service Trust Act of 1993 as " . . . a method under which students . . . learn and develop through active participation in thoughtfully organized service that: is conducted in and meets the needs of the community and is coordinated with a . . . community service program; helps foster civic responsibility; is integrated into and enhances that academic curriculum of the students . . . and includes structured time for the students to reflect on the service experience." Efforts are currently being made across the country to strengthen the connection between student's service learning experiences and course content at the university level. This study used qualitative data for gaining insight into preservice teachers' experiences and perceptions related to service learning.

Subjects were undergraduate students (n = 60) enrolled in two sections of the course, Early Childhood Education. Each student chose an organization serving children/adolescents with which to work and volunteered for a minimum of 10 hours. Students reflected on their experiences by keeping dialogue journals and participating in two reflection sessions. At the end of the semester, students contemplated the community service they completed by responding to seven open-ended questions in the form of a narrative, reaction paper. Reflection papers were individually analyzed by two researchers for the purpose of identifying patterns or similarities in four broad areas of interest: overall opinion, attitudinal changes, learning that occurred, and the impact on academic life at the university. Following a collaborative analysis of the researchers' notes, a synthesis of findings was compiled.

Data analysis revealed an overwhelmingly favorable perspective toward service learning. Academic benefits cited ranged from clarifying one's choice of major to observing or applying information present in university courses. Additionally, participants communicated learning outcomes in regard to one's self, the community, and children/adolescence.

HELPING PRESERVICE SECONDARY TEACHERS UNDERSTAND THE RELATIONSHIP BETWEEN PEDAGOGICAL THEORY AND CLASSROOM PRACTICE THROUGH REFLECTIVE WRITTEN REPORTS

David M. Lund, University of South Alabama

Perceptions of preservice, secondary teachers regarding a curriculum designed to help them understand relationships between a content area reading course's pedagogical knowledge and the teaching practicalities in real educational settings by writing about the included field experience, rather than the usual testing of course knowledge with paper and pencil, were examined to determine preservice teachers' perception of: (1) the relevance of the written assignments to the course, (2) the appropriateness of the work load required, (3) whether they utilized the learning opportunities the course provided, and (4) the overall value of the course to their learning experience.

During the second year of the curriculum's implementation, 175 preservice teachers enrolled in six sections of the class. All were to complete an anonymous, general course survey at the term's end, consisting of a short section requiring demographic data and 32 questions--28 required a Likert-scale, numbered response

with space provided for comments, and four were open ended. Four of the 32 questions--three Likert-scale and one open ended--were relevant to the preservice teachers' perceptions of the field experience and associated assignments; 142 of 175 surveys collected were usable; 33 were rejected because of incompleteness or because they came from special education teachers.

Each Likert-scale question was analyzed by computing the mean of the numbered survey responses. Written comments and responses to the open-ended question were grouped according to their specific nature--positive, negative, or neutral. Conclusions were drawn from the mean Likert-scale scores. Comments and open-end question responses were used to verify Likert-scale conclusions. The findings suggested that written reports may have been an effective alternative to standard paper and pencil tests and an effective method to help students understand relationships between university pedagogy and real classrooms.

THEORIES OF THEORY AND PRACTICE: REFLECTION IN ELEMENTARY PRESERVICE TEACHERS

Sunya T. Collier, Georgia State University

The purpose of this study was to describe and analyze preservice teachers' reflections about how children learn, and, therefore, what teaching should look like in elementary school classrooms. This qualitative inquiry was aimed at documenting preservice teachers' understanding of how practice and theory develop hand-in-hand. Grounded in John Dewey's notion of reflection as a scientific process of problem solving, this research capitalized on reflection as experimentation. Reflective thought became the essential component of the dynamic relationship between theory and practice and the social constructivist vision of knowledge.

Four elementary preservice teachers enrolled in a foundations of education course were selected using intensity case sampling. Only those who had experience with reflective thought in previous education courses were selected. The primary research method used was the interview. During videotaped focus group and individual interviews, participants evaluated the nature of the problem-solving activities they had designed and implemented and also interpreted the work of their peers. Preservice teachers' written reflections and the researcher's field journal provided supporting documentation.

Seven themes emerged from a cross-case analysis. Three themes, including learning for understanding, children's natural learning theories, and experiential learning, were indicative of preservice teachers' emerging theories about learning and instruction. Four supporting themes, including self-awareness, foundations of education, written reflection, and social reflection, revealed the nature and value of preservice teachers' reflective thought throughout the study.

Conclusions from this study revealed the importance of dialogue, community, and reflection as essential and inseparable components for the development of self-knowledge, knowledge of how children learn, and the development of instructional strategy. Several implications for teacher educators were also made. These included acknowledging preservice teachers' incipient theories about how children learn, extending opportunities for multiple levels of social reflection, using videotape as a reflective tool and, finally, emphasizing the reciprocal relationship between theoretical course content and practical experience.

3:00 p.m. - 3:50 p.m.   **TECHNOLOGY (Discussion Session)** .... **Cabildo Salon**

PRESIDER: Gahan Bailey, University of South Alabama

INTEGRATING TECHNOLOGY INTO TEACHER PREPARATION PROGRAMS

Leroy P. Metze, Western Kentucky University; Carl Martray, University of Southern
Mississippi; David Eakles, Lost River Elementary School (KY);
and Tim Murley, North Warren Elementary School (KY)

Two million new teachers will be hired over the next decade. Will these new teachers be comfortable and skilled in using technology? What will it take to transform schools of education so that faculty

feel comfortable with technology? In spite of the efforts of several national organizations, many higher education faculty members are slow to embrace the use of technology and do not provide a positive model for technology integration.

During the spring of 1992, a partnership involving a college of education, a major educational software corporation, and three local school districts was formed for the purpose of developing an implementation model for the integration of technology into teacher education. Each of the major partners has a somewhat unique vision: the university's vision is to provide the best preservice and inservice instruction so that new and experienced teachers are capable of the highest quality instruction; the public schools' vision is to have teachers who provide the highest quality instruction and who individualize instruction so that every student's educational needs are met; and the corporation's vision is to provide the best tools for instructional technology. This partnership is consistent with each partner's vision and an overall vision of breaking down the barriers to integrating technology into teacher education programs and using technology to increase the access to and level of education for all students.

During the partnership, several important events have taken place. The teacher education curriculum has been restructured, and students leave the institution prepared for the challenges they will face in their new assignments, including the creative use of instructional technology. The school partners have reported that their students have benefited from the partnership. For example, one elementary school partner has demonstrated significant gains in scores on state and national tests over a three-year period.

GRADUATE STUDENTS' PERCEPTIONS OF TIME SPENT IN TAKING A COURSE
BY INTERNET VS. TAKING A COURSE IN A REGULAR CLASSROOM

Lorna J. Gifford, Northwestern State University

The purpose of this study was to determine the actual time required in taking a course via the Internet compared to taking a class in a traditional setting. It also examined learning strategies needed for success in completing a course delivered by computer.

Graduate students completed a course in Research on Curriculum and Instruction taught entirely through a web-based program and e-mail. Of the 16 students (13 females, three males) enrolled in the course, 14 were Caucasian, one was African American, and one was Hispanic. The syllabus and course notes were posted in the web-based program. Students were instructed to read articles in their textbook and respond to given questions each week. They were to post their responses to the questions, read the responses of assigned group members, and respond to their comments. In addition, they were given three outside assignments, including a research paper. At the end of the semester, the students were sent a questionnaire related to their learning experience. Data in the form of open-ended responses were obtained from the students. The responses were content analyzed and grouped in empirically generated categories.

Results indicated that the majority of students responding felt that more time was spent on taking a course via the Internet (55%), while over a third felt that the same amount of time was spent on taking a course via the internet and a course in a regular classroom (36%). Students indicated that self-discipline and self-motivation were necessary to complete a class via the Internet.

Based on these findings, course content and delivery systems need to be evaluated to determine a more equitable way of delivering courses through distance learning. Additional studies should also be made comparing the time required in taking classes via the Internet and taking a class in person.

4:00 p.m. - 4:50 p.m.   **PROFESSIONAL DEVELOPMENT**
(Discussion Session). ....**Gallier Salon**

PRESIDER:Emma T. Pitts, Southern University

SABBATICAL LEAVE: A CASE STUDY OF PROFESSIONAL
GROWTH AND DEVELOPMENT
Julie A. Holmes, Louisiana Tech University
and Lincoln (LA) Parish Schools

The topic of sabbatical leave in the state of Louisiana brings out a myriad of responses, both positive and negative. The state legislature in recent months has discussed the possibility of denying all forms of sabbatical leave for teachers in the public school systems. The purpose of this paper was to defend the right to and to describe the effects of a sabbatical leave for professional growth and development purposes. The literature on sabbatical leave was reviewed and the results of a case study and the personal reflections of a recent sabbatical taken by the author were reported.

Several major themes emerged as contributing factors to the author's professional growth and development during the six-month sabbatical. Themes that emerged and were addressed in this paper included: (1) presenting topics of study to peers and adults, (2) increasing the use of technology in instruction, (3) developing alternative and performance assessments for use in classrooms, (4) learning from peers, and (5) gaining ideas to use with students upon return to the classroom such as addressing various learning styles and meeting the needs of diverse students.

Although these objectives can, to some degree, be accomplished while teaching full- time, full-time study creates a chance for increasing both the depth and breadth of knowledge. Perhaps the most worthwhile part of the sabbatical leave was being able to pursue these interests consistently while devoting all available time and energy to professional development. Working with peers and other educators on a regular basis also allowed the author to develop a broader view of how what is done in one classroom fits into other instructional and grade levels as well as a deeper understanding of how what is taught to students builds on previous knowledge and supports future learning.

THE STATISTICS AND REALITY: A NEEDS ASSESSMENT FOR FACULTY/GRADUATE ASSISTANT DEVELOPMENT . . . WHERE DO WE GO FROM HERE?

Beverly A. Wallace and Margaret L. Rice, The University of Alabama

In an attempt to improve professional development at its location, a southern university used surveys to conduct a needs assessment of its faculty and graduate assistants (GAs) during the fall of 1997. The discussion in this paper addressed methodological procedures, survey results, and evaluative concerns relating to the major issues arising from the survey results.

One issue involved balancing the interests of faculty with those of GAs. One of the requests for demographic data asked the respondent to identify her or his position at the university. This identification allowed for subgrouping of the faculty into various professional designations, including assistant, associate, and instructor. It also provided for a delineation of GAs into graduate teaching assistants (GTAs) and graduate research assistants (GRAs). The survey utilized Likert-scale items to solicit information on preferred topics for colloquia and foci for discussion groups. The topic choices for colloquia consisted of items within four areas: course management, faculty/student relations, teaching methods, and professional growth. The list of nine discussion group choices included groups to discuss teaching experiences and concerns, the use of technology in teaching, and groups to discuss writing and research projects. Results of the analyses indicated that the interests of the two major groups, faculty and GAs, differed in significant ways concerning both colloquia and discussion groups. Significant differences were found among the various subgroups concerning interests in colloquia topics.

Another issue involved discovering which elements the respondents thought, while being important to teaching and professional development, might not be perceived as necessary to a faculty development program. In addition to the colloquia and research interests, respondents were asked to check which items from a list of seven choices they thought should be included in a faculty development program. No significant differences were found between the two major groups.

| 4:00 p.m. - 4:50 p.m. | **RESEARCH IN THE AFFECTIVE DOMAIN** |
| | **(Discussion Session)** ....**Pontalba Salon** |

PRESIDER: William A. Spencer, Auburn University

TRIANGULAR CODING PRISM: AN INSTRUCTIONAL/LEARNING MODEL

Fran Holman, Gahan Bailey, and Paula Bickham, Louisiana Tech University

The Triangular Coding Prism Model for Instruction/Learning presented in this position paper is comprised of three faces. Embedded within each of these faces are the three processes of thinking, doing, and feeling. Thinking, doing, feeling can occur in stages or as an amalgam. Seldom, if ever, does one occur in isolation.

The model includes: (1) sensory encoding - formatting knowledge and skills, determining strategies and methodologies, and creating affective classroom rhythms, (2) meaning decoding - learner's individual regulatory principles with regard to thinking, doing, and feeling, and (3) metaskills transcoding - process observation, reflection and metaphor, and appreciation of ambiguity.

Thinking refers to cognitive processing. Briefly, what teachers consider first for instruction is formatting the content or information to be distributed into receivable packages; this begins in sensory encoding. Everything a student learns, i.e., processes cognitively, enters through the senses. A person's thinking is regulated by individual regulatory principles or language, experience, and feeling.

The instructional content or information will be nothing more than inert knowledge unless students do something with it. Specific methodologies are described, but the import is clear: doing is part of learning.

The third face of the prism is feeling, a frequently under-represented part of teaching and learning. Recent neuropsychological research informs teachers and learners that emotion, i.e., feeling, is paramount to the enhancement of learning or to the impediment of learning.

The Triangular Coding Prism Model, which was presented graphically, is more than a theoretical stance; it provides a pragmatic framework for instruction and learning that can readily be adapted to and beyond the classroom.

WHAT DOES IT TAKE TO BE EMOTIONALLY INTELLIGENT? A DIMENSIONAL ANALYSIS

Gwendolyn L. Hamilton and Judith A. Burry-Stock,
The University of Alabama

Emotional intelligence is defined as the subset of social intelligence that allows one to accurately perceive, assess, and express emotion. It also involves the ability to access and/ or generate feelings when they promote thought. Emotional intelligence includes the ability to understand emotion and emotional knowledge and the ability to manage and/ or control emotions to promote emotional and intellectual growth. Emotional intelligence is explained using four distinct branches. The four branches are organized from the most basic psychological processes to the higher, more complex psychological processes.

The purpose of the study was to determine if the proposed four-factor model fit a data set, or if the data set could be better explained by fewer factors. The data for the analysis were drawn from a sample of college students at The University of Alabama. Approximately 325 students completed a 45-item emotional intelligence inventory.

Using principal component factor analysis and varimax rotation, three different solutions were found with three, four, and five factors.   After careful examination of the content of the items in each factor, the simple structure with four factors was regarded as the best solution. The four factors seemed to be related to self-control, empathy, sensitivity, and self-expression. A reliability estimate was generated for the questionnaire. Cronbach alpha was .7900, and the standardized item alpha was .8036.

MEASURING THE EMOTION QUOTIENT ("EQ"): WHAT WE KNOW SO FAR

Jane E. Finnegan, Texas A&M University

Since the turn of the century, when Binet conducted his well-known studies of intelligence in France, educational researchers and psychologists have been interested in the measurement of IQ. Of course, even from the turn of the century, heated debates raged regarding the nature of intelligence, and whether it was unidimensional, multidimensional, or primarily unidimensional with some less noteworthy nuance factors also delineating the factor space. Researchers such as Spearman, Pearson, Thomson, and Cattell are associated with these debates.

More recently, however, some scholars have proposed that the emotional content of perception is processed in its own unique fashions. Furthermore, it has been argued that a discrete form of processing, emotional intelligence or "EQ," can be measured. It has been suggested that IQ and EQ are not necessarily related to each other. Finally, it has been suggested that high "EQ" can be at least as important as IQ in some situations, such as performance in certain kinds of careers. For example, children with higher EQ may be more likely to be classroom leaders and to manifest fewer school behavior problems.

The purpose of this paper was to review the nascent literature regarding what was known at this point about EQ. Specifically, the paper reviewed both the psychometric properties or measures of EQ and the findings regarding the development and impacts of higher EQ.

4:00 p.m. - 4:50 p.m.	**RESEARCH IN THE SCHOOL**
(Discussion Session)	**Ursulines Salon**

PRESIDER: Jerry Brooksher Gee, Nicholls State University

HOW MIDDLE SCHOOL STUDENTS SPEND THEIR TIME OUTSIDE OF SCHOOL: A LONGITUDINAL INVESTIGATION

Lauren Wells, Lauderdale County (MS) Public Schools,
and Jack Blendinger, Mississippi State University

No longitudinal studies providing information on how children spend their time outside of school have been reported in the literature. This study investigated how middle school students spent their time when not in school during a two-year period, 1996-97 and 1997-98. Although many studies have been conducted about how children spend time in school, little is known about children's out-of-school activities and the influence they may have on academic achievement.

Nearly 75 middle school students participated in the study. The subjects' out-of-school activities were first investigated in April 1997 when they were in the fifth grade. The same students were studied again in April 1998 when they were in the sixth grade. The instrument used was specifically designed for gathering information about how children spend their time outside of school from Monday through Sunday. It listed 10 mutually exclusive activities (e.g., watching television, reading, doing homework) and an "other" category, which provided an opportunity for the children to name activities in addition to those listed. An icon accompanied the words for each activity.

To analyze the data collected, the total number of times the children reported doing a particular activity (e.g., watching television) during the week and on the weekend was tabulated. A proportional value was given to each activity by dividing the tabulated total for a particular activity by the total number computed for all activities (including the other category). This process provided an activity index rating that made it possible to make comparisons among activities, from those activities in which the children engaged in the most to those they engaged in the least. The *t*-test was used to determine the level of statistical significance of observed differences between the two years investigated. No differences were found. Children's activity patterns remained constant. Watching television was the most prevalent activity, significantly surpassing reading for pleasure, for both years even though the subjects were involved in an accelerated reading program during the 1997-98 school year.

Wednesday, November 4, 1998

AN ANALYSIS OF THE RELATION BETWEEN STUDENT ACHIEVEMENT AS MEASURED BY TENNESSEE VALUE-ADDED GAIN SCORES AND TEACHER ABSENCE EDUCATION, SCHOOL, AND EXPERIENCE

Marie Miller-Whitehead, Institute for Quality Leadership

The purpose of the research was to determine whether teacher experience, education level, school building assignment, and teacher days absent had a statistically significant relationship with student achievement as measured by the Tennessee Value-Added Assessment System scores in the five core subject areas of language arts, reading, math, science, and social studies.

The target population consisted of teachers in grades two through eight in one Tennessee school system for whom student-teacher records could be matched and for whom value-added scores had been computed. After records were matched, the language arts population was 64 teachers at 14 schools; the reading population was 69 teachers at 16 schools; the math population was 64 teachers at 15 schools; the science population was 59 teachers at 14 schools; and the social studies population was 64 teachers at 15 schools.

Teacher demographic data from personnel records were used to determine values for teacher experience, education level, building assignment, and days absent. Critical F was calculated for these variables, and student achievement gain in reading, language arts, math, science, and social studies using the ANOVA subprocedure of the general linear model. R^2 determined strength of association for each of the variables in the analysis.

School building assignment was significantly related to student achievement in reading ($F = 4.61$, $p < .001$), language arts ($F = 2.88$, $p < .01$), and social studies ($F = 4.61$, $p < .05$). Practical significance of these results was indicated by an R^2 of .56 for reading, .42 for language arts, and .41 for social studies. There was no statistically significant relation between any of the variables in the analysis and student achievement in math or science.

COMPARISON OF MULTIAGE AND TRADITIONAL STUDENT ACHIEVEMENT IN A PRIMARY SETTING

David Holman and Jim Lively,
Arkansas State University

This evaluation examined test results of a group of elementary students in single and multiage classrooms. The Stanford Achievement Test Version 9 (SAT9) and Kindergarten exit assessment scores were used to ascertain the differences in achievement between students in the different classrooms.

This evaluation was comprised of two aspects. Each student's scores on her/his third- and fourth-grade SAT9 were matched. Third-grade scores were used as a covariate for analyzing fourth-grade achievement. A subgroup of students was identified who had been in attendance at the school for their entire educational history. This allowed the impact of the educational environment to be separated from students who entered from other institutions during the four- year timetable incorporated into this study. Both analyses indicated significant higher performance of multiage students.

4:00 p.m. - 5:05 p.m.   **SCIENCE EDUCATION (Discussion Session)** ....**Beauregard Salon**

PRESIDER: W. C. Johnson, Mississippi State University

EXPLORING SPACE: AN EVALUATIVE PORTRAIT OF ALABAMA TEACHERS

Sharon H. Harwell and Sandra K. Enger,
The University of Alabama at Huntsville

This study evaluated the effectiveness of follow-up professional development for 71 Alabama teachers who participated in the Exploring Space: The Classroom Connection program, summer 1997. This program is a collaborative effort of the Alabama Commission on Higher Education, Alabama State Department of Education, U. S. Space and Rocket Center, The University of Alabama/Huntsville, and the local corporate community. Based on Stake's Responsive Evaluation Model, formative and summative evaluation informed program development and implementation.

In addition to demographic information, teachers communicated their understanding of basic science concepts, their perceptions of classroom science inquiry opportunities for students, perceptions of their science classroom learning environments, and science teaching efficacy beliefs. Teachers also communicated their satisfaction level with content presentation and delivery.

Teachers' mean responses on seven basic premises underlying inquiry-based science showed overall agreement. No significant differences were noted between the 1998 and 1996 follow-up groups of Alabama teachers on the following domains: science attitudes, constructivism, concept development, inquiry science, interdisciplinary connections and assessment, and science standards. A t value of 2.26 indicated a significant difference ($p \leq .05$) between groups in the nature of science domain.

Teachers expressed high science teaching efficacy beliefs and perceived themselves capable of curriculum integration of space science content and activities. Perceptions of the science classroom learning environment and inquiry learning opportunities for students indicated an incongruence between reported teacher practice and exemplary research-based science education. Findings clearly pointed to teacher-driven, science learning environments.

Strong program satisfaction based on participant feedback, coupled with systematic monitoring of science attitudes, knowledge and understanding, and perceptions of science classroom learning environments, proved beneficial to personnel in responding to evolving program needs of teachers. Identified learning needs of teachers were targeted for future program implementation. Challenges for future research and practice were delineated.

TRAINING OF A WILDLIFE HABITAT EVALUATION PROGRAM (W.H.E.P.) TEAM: A CASE STUDY

Randy Cromwell, The University of South Alabama

This study documented the training of one of Alabama's Wildlife Habitat Evaluation Program (W.H.E.P.) teams. The guiding questions for this study were: (1) How do the participants' past histories influence their W.H.E.P. experience? and (2) How does the training of this particular W.H.E.P. team meet the environmental education objectives set by the United Nations at Tbilisi Georgia, USSR?

A case study mode of investigation was used. The participants included three members of the local W.H.E.P. team and the team coach. The researcher's role was a volunteer W.H.E.P. leader. Data came from three to four interviews with each of the study participants. All interviews were in semi-structured format. Observational data were collected during all of the team training sessions and associated activities. Data were entered into a word processor and analyzed with the program, NUD·IST.

Three themes emerged from the data and analysis. First, the participants' had experiences with nature before their W.H.E.P. participation. Secondly, the greater the participants' experiences with nature the less competitive they were in the state W.H.E.P. contest. The third theme dealt with the interrelationships among the objectives for environmental education set at the Tbilisi Conference.

Several assertions were made based on this study. The Alabama W.H.E.P. caters to participants with wildlife experiences. This study indicated that having extensive knowledge of wildlife was not important for successful competition in the state W.H.E.P. contest. W.H.E.P. met the objectives established during the Tbilisi Conference. Even more interesting was the symbiotic relationship that existed among the Tbilisi objectives. Further research efforts suggested from this study were: (1) the application of Stephen Kellert's survey to past W.H.E.P. participants, and (2) a study of the interrelationship of students' classroom participation, knowledge, and awareness of the subject matter.

EXAMINING THE EFFECTS OF SCIENCE MANIPULATIVES ON ACHIEVEMENT, ATTITUDES, AND JOURNAL WRITING OF ELEMENTARY SCIENCE STUDENTS

Lynda R. Frederick and Edward L. Shaw, Jr., University of South Alabama

This study examined various aspects of elementary science students' achievement, attitudes, and journal writing in conjunction with an Alabama Hands-on Activity Science Program (HASP) kit.

The sample consisted of 47 fourth-grade students in two separate classes within the same elementary school. Each group was taught, by the same teacher, a unit on electricity and circuits following the procedures outlined in the HASP materials. A 15-item test that was included in the HASP kit was administered as a pretest and a posttest. The test consisted of application and knowledge-level questions about electricity and circuits. The researchers developed a 12-item attitude survey that was administered before and after instruction. The attitude survey included items about the science content presented, instructional strategies, use of the HASP kit, cooperative learning groups, and journal writing. The subjects responded to the survey via a modified Likert scale. In addition to the test and attitude survey, subjects were requested to reflect upon their participation by writing in journals. The study lasted four weeks during the spring of 1998.

The achievement test data collected were analyzed using a t-test. Significant differences occurred between the pretests and posttests. Results indicated that elementary students' achievement increased with the use of the HASP kit and appropriate instruction. However, the results of the attitude survey did not support using science manipulatives as a means of increasing favorable responses towards science education, careers, and journal writing activities. A qualitative content analysis of the students' journals revealed that both the quality and quantity of the reflective writing decreased over the duration of the instructional unit. For example, students drew fewer diagrams and charts towards the middle and end of the unit, and their written summaries shortened into brief, often incomplete statements that contained fewer expressions of reflective thinking with each journal entry.

HANDS-ON SCIENTIFIC RESEARCH: CONDUCTING GLOBE PROJECT PROTOCOL TRAINING IN OKTIBBEHA COUNTY

Burnette W. Hamil, Mississippi State University

With the aid of a Public School Partnership Grant, seven teachers participated in a four-day GLOBE workshop. The project, "Hands-on Scientific Research: Implementing GLOBE (Global Learning and Observations to Benefit the Environment) Project Protocols," was coordinated by three GLOBE trainers.

The Globe trainers volunteered their time to serve as facilitators for the workshop and conducted follow-up visits to the schools to offer further assistance. Preservice teachers worked closely with the teachers in the schools while each enhanced their own GLOBE skills in becoming more familiar with the implementation procedures of the protocols.

At the completion of the workshop, teachers responded to the GLOBE Workshop Participant Evaluation Form and the Problem Solving Inventory in order to collect pertinent information useful in planning future workshops. A t-test used to analyze the "pre" and "post" responses of the participants to The Problem Solving Inventory to measure their problem-solving perception showed the following: .52 on approach-avoidance, .37 on personal control, .37 on Problem-Solving Confidence, and .27 for the problem-solving total.

Along with this information and that derived from participant responses to the GLOBE Participant Evaluation Form, the workshop was deemed highly successful. The teachers and their preservice teachers who gained experience using the GLOBE activities expressed positive reflections toward the GLOBE Program.

4:00 p.m. - 4:50 p.m.   **SCHOOL ADMINISTRATION**
                                     (Discussion Session) .... **Cabildo Salon**

PRESIDER: Kenneth T. Clawson, Eastern Kentucky University

INTEGRATING CURRICULUM AND INSTRUCTION/ADMINISTRATIVE
PRACTICE TO CREATE NEW EDUCATIONAL LEADERS

Jack J. Klotz and Melissa Whiting,
University of Southern Mississippi

Historically, students in graduate programs in educational leadership have experienced training in curricular issues by registering for separate courses within the departments of Curriculum and Instruction and Educational Leadership. This program presented an early effort to employ the concept of integrated curriculum instruction from these two existing departments in the delivery of an innovative graduate program to train future educational site leaders. The focus of this preliminary effort employed three sections of an existing graduate course in educational leadership to demonstrate how knowledge and skills from both departments could be brought together to more realistically frame "real world" problem solutions. This instructional delivery model allowed the opportunity for both professors and students to jointly challenge traditional beliefs and practices in designing strategies that would create innovative educational environments within K-12 settings.

Within the program's presentation, participants received information and materials that were employed in this reform delivery model. Additionally, data from a pre-post assessment instrument on this instructional delivery effort was provided.

AN ASSESSMENT OF A FIRST-YEAR MODIFIED BLOCK SCHEDULING EXPERIENCE

Robert S. Calvery, Southside Public Schools (AR), and David Bell
and Glenn Sheets, Arkansas Tech University

The purpose of this study was to determine the effectiveness of a modified block scheduling, first-year experience as perceived by both teachers and students. The study used data collected from surveys to compare teacher and student perceptions focusing on the block scheduling issues of involvement, discipline, teaching methods, homework, and overall evaluation. The surveys consisted of 12 questions using a Likert-type scale. Participants included 22 teachers and 200 students.

Data analysis consisted of t-test comparisons of the teacher and student means on each of the 12 block scheduling variables. The t-test comparisons of teacher and student means found statistically significant differences for 10 of the 12 variables. The most statistically significant finds were issues of class time, homework, teaching methods, and student interest. However, both teachers and students wanted to continue with the block scheduling rather than returning to the traditional schedule used in the past.

Based on the findings drawn from the surveys recommendations included the following: continuation of the block scheduling in the next school year, use of more student activities in classes, teachers encouraged to be more student-centered, and more staff development for teachers.

THE FEASIBILITY OF 4X4 BLOCK SCHEDULING IN SECONDARY
SCHOOLS: A REVIEW OF THE LITERATURE

Anthony Stanley and Lorna J. Gifford,
Northwestern State University (LA)

The purpose of this study was to examine the possibility of implementing the 4x4 block schedule as a means of improving education without an added financial burden to the schools. The call for improved education in modern America, coupled with the scarcity of resources with which to accomplish such a task, requires a thoughtful reallocation of the currently available resources in order to make improvements in instruction.

Rearranging time is one of the most accessible methods available to stretch current resources to greater use. By use of alternative scheduling, high schools have the potential to effectively reduce the down time between classes, increase usable time per class period, and decrease discipline referrals. Scheduling class time into extended blocks appears to be the simplest and most effective method by which these ends can be met. Among the many block schedules available, the 4x4 block is one of the most widely implemented. Its attractive characteristics are drawing more adherents daily, begging the question of how applicable the model truly is to improved instruction. While the advantages of the 4x4 block format are probably legitimate, it is doubtful that the model is the all-encompassing remedy that its widespread adoption would suggest.

If the implementation of the 4x4 block schedule format is pursued in a logical, thoughtful, and reasonable manner, it is possible that its wonderful advantages can be harnessed in the situations that best suit it. When adopted without lengthy consideration, it could lead to very high profile failures.

5:30 p.m.   **KEYNOTE ADDRESS**...**Queen Ann Ballroom**

INTRODUCTION .... John M. Enger, Arkansas State University
President, MSERA

KEYNOTE SPEAKER .... Jim Popham

MEASURING MILEAGE WITH A TABLESPOON: THE MISUSE OF STANDARDIZED ACHIEVEMENT TESTS

MSERA President's Reception

7:30 a.m.- 8:45 a.m.   **NEW MEMBER AND GRADUATE STUDENT BREAKFAST**
A Conversation with Jim Popham...................................... **Queen Ann Parlor**

9:00 a.m. - 9:50 a.m.   **COLLEGE OF EDUCATION DEANS' SPECIAL SESSION**
.... **Ursulines Salon**

PRESIDER :   Carl Martray, University of Southern Mississippi

The general membership is invited to attend this special session with the deans of the colleges of education of mid-south universities

9:00 a.m. - 10:50 a.m.   **RESEARCH METHODOLOGY (Training Session)** .... **Bienville Room**

PRESIDER :   Kathy K. Franklin, University of Arkansas at Little Rock

THE SEARCH FOR A NEEDLE-IN-A-HAYSTACK: QUALITATIVE DATA ANALYSIS

Kathy K. Franklin, Carmen Rameriz, and Piyaporn Nawarat,
University of Arkansas at Little Rock

Winnowing the multifarious data embedded in the artifacts of qualitative research can be an onerous task. Without a rigorous analysis protocol, phenomenological inquiry can become needlessly laborious and produce data that are, at best, unwieldy and, at worst, unreliable.

The purpose of this two-hour training session was to share with participants a qualitative data analysis protocol used by the facilitators of this session in past qualitative research. In a collaborative-learning format, participants used focus group transcripts from extant research to build a theoretical framework related to the following research question: What criteria do college students use to determine student satisfaction? The learning objectives for participants in this training session included the ability to: (1) apply the discussed data analysis protocol to actual qualitative artifacts, (2) classify diverse data into topical attitude categories, categories into attitude themes, and themes into attitude patterns, and (3) construct a theoretical framework, as related to the research question, from the attitude patterns. Each participant received a workbook to guide future qualitative data analysis.

At the beginning of the session, facilitators briefed participants on the learning objectives for the session, the specifics of the qualitative data analysis protocol, and the parameters of the research that produced the focus group transcripts. The remainder of the training session was divided into four phases. First, participants coded data from the focus group transcripts into topical attitude categories as related to the research question. In phase two, participants combined the topical attitudes into singular attitude themes. For phases three and four, participants reduced the attitude themes into common attitude patterns and developed a theoretical framework from the attitude patterns, respectively. Between each phase, facilitators shared their experiences analyzing qualitative data.

9:00 a.m. - 9:50 a.m.   **INTERNATIONAL EDUCATION (Symposium)** .... **Cathedral Salon**

ORGANIZER: Qaisar Sultana, Eastern Kentucky University

DISCUSSANT: Jeffrey Gorrell, Auburn University

PRE-COLLEGE EDUCATION IN ASIAN COUNTRIES

Overview

Results of the Third International Mathematics and Science Study were greeted with headlines like, "Another 'F' in science and math," "Hey, we're No. 19!" and "Even best students lag in international results." "Among the 21 nations in the study, American high school seniors came in 16th in general science knowledge, 19th in general math skills, and last in physics. The U. S. performance was actually worse than it looked, because Asian nations, which do particularly well in these comparisons, were not involved in this study. Otherwise, America might have been fighting for 39th or 40th place in a 41-nation field" (U.S. News & World Report, March 9, 1998).

A Nation at Risk and subsequent massive education reforms in 35 states have not changed the performance of U.S. students on international measures. High school students in Asian countries continue to excel beyond their European and U.S. counterparts. The length of the school year, the nature of curriculum, cultural expectations, high school graduation standards, and rigorous assessment of high school graduates contribute to the high level of Asian students' achievement.

Education System in Iraq
Anisa Al-Khatab, Eastern Kentucky University

Comparisons of students' performance on international measures identify curriculum as an area of major significance. The education system in Iraq has a solid ground because of certain features, including the curriculum nature and its development. Content selection, scope, and depth are among the significant criteria. Iraq also has national curriculum standards that schools throughout the country adhere to. Furthermore, a related factor, length of school year and time spent on content contribute to in-depth treatment of topics leading to better and deeper understanding. Knowledge plays a most significant role in higher-level thinking and problem solving, for one cannot generate them from a vacuum.

The Value of Education in Pakistani Culture
Qaisar Sultana, Eastern Kentucky University

In Pakistan, the acquisition of knowledge is considered to be a religious obligation. Pakistani culture places a high value on education and reveres teachers. Education is an investment in the future. Parents often sacrifice their basic needs in favor of providing the best possible education to their offspring. Educational achievement of children is publicly recognized and celebrated.

Assessment of High School Graduates in Korea
Young Suk Hwang, Auburn University

The assessment of high school students in Korea is rigorous and norm referenced. High school students have to meet high standards and demonstrate their performance on a national test in order to graduate from high school. To be admitted to college they have to pass an additional test.

9:00 a.m. - 9:50 a.m.   **TEACHER EDUCATION (Discussion Session)**........................ **Gallier Salon**

PRESIDER: Linda F. Cornelious, Mississippi State University

AN EVALUATION OF THE MIDDLE SCHOOL PROJECT

Theresa G. Siskind, The Citadel

The Middle School Project (MSP) was a collaborative effort between the university and three local middle schools. Conducted during the 1995-96 school year, MSP involved 10 inservice teachers and six preservice teachers.

During the summer of 1995, 10 in-service teachers enrolled in a course in which they incorporated a meta-cognitive approach to studying their teaching practices. During the fall, they served as co-professors in a methods and materials class for six preservice teachers interested in middle school instruction. In spring, five of the preservice teachers interned in the collaborating schools and were either directly supervised or supported by the inservice teachers.

The five preservice teachers completed their degrees and obtained teaching positions. During the fall of 1997, all of the "new" teachers were entering the second year of their teaching careers. An evaluation was conducted during this time to determine: (1) how the adjustment and development of the "new" teachers in MSP (experimental group) compared to the adjustment and development of a similar group of "new" teachers who had not participated in the project (control group), and (2) how students and teachers in the project assessed its overall effectiveness.

Experimental and control teachers were interviewed extensively using a 17-item protocol. They were also observed teaching class and completed a three-page self-evaluation and attitudinal questionnaire. Questions on this instrument were developed specifically for this study and were adapted from adult and teacher development scales. The 10 original inservice teachers were interviewed utilizing a 13-item protocol.

Interview data were analyzed qualitatively. Results from the three-page attitudinal questionnaire were inconclusive. Overall results indicated that teachers in MSP did not differ from controls in their preparedness and teaching self-concepts after one year of teaching experience; however, they did adjust more easily to their internships. Suggestions for program implementation and improvement from former students and collaborating teachers were given.

QUALITY CONTROL: PROCEDURES FOR TEACHER EDUCATION

Cynthia Harper and Lynetta Owens, Jacksonville State University

Colleges of education have an obligation to ensure that only well-prepared, mature individuals receive education degrees. The problem is that the desire to teach and the ability to teach are two different issues. Decades of experience with student teachers have indicated that failure in student teaching has been associated more routinely with the latter than the former set of abilities. Unfortunately, these weaknesses have been rarely addressed until the student has already expended considerable years and resources.

The Prime Candidate Program is designed to identify, remediate, and counsel those students who exhibit characteristics associated with problems in student teaching early in the education process to prevent the trauma associated with failure in student teaching. There are seven ways that a student can be identified as a Prime Candidate. The primary method of identification is through instructor referral. Once a student has been referred and the concerns reviewed, the student is called to a meeting with the coordinator of clinical experience, at which time concerns are shared. The student is

invited to meet with her/his support team at a designated time. A plan for success (remediation) is devised by the team. The student is monitored periodically to ensure that conditions of the plan are met. The support team meets and schedules a final meeting to determine if the items of the plan are successfully achieved.

Results of the program have been varied. While many students have been successfully remediated, others have dropped out of teacher education, some have transferred to other schools,and some have changed their majors. The faculty members of the College of Education and Professional Studies support the Prime Candidate Program and view it as a means of ensuring quality in education. This is one method devised by a college of education to provide for quality control in the preparation of teachers.

MIDDLE-LEVEL PREPARATION IN TEACHER EDUCATION

Candais L. Rowe, Mississippi State University

Young adolescence is a very critical time in human development. Most young adolescents face differentiated pressures in a society that does not always recognize the significance of this period in their lives. During the early sixties, middle-level schools were organized to meet the unique developmental needs for early adolescents. Many state licensing agencies provide either elementary or secondary certification, which historically was believed to be adequate for middle-level teaching. Special training, preparation and/or certification for preservice teachers who wish to work at this level is unavailable in the majority of these states.

It was the position of this paper to support the premise that middle school teachers must be prepared to meet the education needs of adolescent learners. Further, middle school teachers must participate in specific undergraduate experience related to instruction in the middle school. Finally, strong support is given for teacher preparation programs designed to specifically prepare teachers for middle school teaching. These programs should contain field experience at the middle level, training in the unique developmental needs of the adolescent, and special training in a variety of instructional strategies for middle-level students.

9:00 a.m. - **9:50 a.m.**   **AT-RISK STUDENTS (Discussion Session)** ....**Pontalba Salon**

PRESIDER: William A. Spencer, Auburn University

DEVELOPMENT OF A KNOWLEDGE BASE FOR THE DERIVATION OF POLICY FOR ALTERNATIVE EDUCATION: A PILOT STUDY

Susan B. Spofford and Jimmie C. Fortune, Virginia Tech

The rising costs of public school education and the increasing public pressure for accountability have resulted in public schools seeking new and different paradigms for operation and administration of programs. One solution has been the expansion of alternative education programs. This paper presented a systematic effort to review research and reports of practice of alternative education.

Because of the complexity of alternative education, the generalization of the use of the label "high risk," and the trend for educators to emphasize practice rather than research, the body of knowledge concerning alternative education has been diverse, dispersed, and in need of synthesis. We have needed to know what works with which types of "high risk" students, the range of available

alternative education options and policies, and the criteria and costs applicable to measuring the success of alternative education. Even in conducting a simple literature review, there were questions for which we did not have answers.

The methodology pilot tested included adhering to a systematic application of a coordinated use of review techniques proposed by Light and Pillmer, Glass and Rosenthal, and Noblit and Guerdin to develop a synthesis of the field. This process involves an expansive data collection effort. This effort included a search for the pertinent journals, extensive E.R.I.C. system searches, and a review of popular journals in education over the past decade to build a database of related topics. The articles were divided into two groups: a group of research and evaluation results and a group of polemics. The group of research and evaluation results were synthesized using a process that includes both meta-analysis and meta-ethnography. The group of polemics along with synthesis was summarized using the thematic approach of Light and Pillmer. Policy implications and practices were derived from the results.

EDUCATIONAL OUTCOMES OF STUDENTS ENROLLED IN DEVELOPMENTAL EDUCATION COURSES

Glenda Holland and Valerie S. Fields,
Northeast Louisiana University

This study described the educational outcomes of students enrolled in developmental/remedial courses at one postsecondary institution. The following research questions were addressed: (1) What are the demographics of students enrolled in developmental/remedial courses? (2) What percentage of students pass developmental/remedial courses on the first attempt? and (3) How do pass/fail elements modify the educational outcomes of students who were enrolled in developmental/ remedial education courses?

The population consisted of students enrolled in developmental/remedial courses during the fall semesters 1990, 1991, and 1992. The average total enrollment for those semesters was 2,299 students. Data were collected unobtrusively by accessing the university databases. The data obtained from the Institutional Research Department were in roster form and provided the following information: (1) the developmental course(s) in which each student was enrolled, (2) the semester and year of enrollment, (3) the age, sex, and race of each student, and (4) the number of times each student attempted the developmental course(s). Further data were obtained to determine whether a student graduated, was currently enrolled, or was not enrolled. The students' names were not used at any time during this study, and results were presented in aggregated format.

Seventy-seven percent of the students who enrolled in developmental/remedial courses completed these courses. The educational outcomes of students enrolled in developmental/ remedial courses indicated that after a seven-year period of study at the institution 16% graduated; 9% were still enrolled, and 75% were no longer enrolled. More females enrolled in developmental/ remedial courses than males. Traditional students outnumbered non-traditional students.

THE PATH TO THE GED: BARRIERS, CHALLENGES, AND ENCOURAGEMENT

Rose D. Drill-Peterson, New Orleans (LA) Public Schools and The University
of New Orleans, and Richard J. Elliott, University of New Orleans

Policy makers are promoting adult education programs as a way to move individuals from welfare to work. Overall, the record of success of adult education programs has been dismal. In

Louisiana, only one out of five adults who register for adult education persists and is recommended to take the GED.

This study focused on the barriers and challenges faced by African American women who returned to classes to complete their preparation for the GED. A sample of 21 adults participated in the study, which used focus groups to collect narratives that tell of informants' embattled tenure and premature departure from secondary school; their repeated experiences of quitting and re-entering adult education; and finally, the conditions and experiences that contributed to their successful completion of the GED program. These narratives were examined using learned helplessness, cultural resistance, and persistence theory as theoretical frameworks.

Overall, this study suggested that dropouts share a common perspective on schooling. This included a legacy of struggle and resistance to the structures and processes associated with school. As adults, they seek environments that are supportive; participants identified the presence of a good and caring teacher, the establishment of a "family-like" learning environment, the provision of supportive resources like child care and transportation, and the connection between the GED program and education in a trade as attributes of their current programs that allowed them to persist.

Results suggested that secondary schools should find ways to establish connective communities for at-risk students, and that adult programs should find ways to include the voices of participants in structuring and conducting classes. Further, analysis uncovered certain regulatory requirements of Louisiana's GED program that may create an unanticipated barrier to success for returning students. Further research needs to be conducted to identify the impact of these regulations.

9:00 a.m. - 9:50 a.m.   **RESEARCH IN THE SCHOOL**
                           (Discussion Session) .... **Beauregard Salon**

PRESIDER: Burnette W. Hamil, Mississippi State University

THE RELATIONSHIP BETWEEN TRANSFER AND ACADEMIC ACHIEVEMENT OF HIGH SCHOOL STUDENTS

Hae-Seong Park, University of New Orleans

The purpose of this study was to examine the relationship between student transfer and academic achievement of high school students. A sample of high school seniors (n=10591) was drawn using the data of the NELS 88:2nd followup study. One-way ANOVA and post hoc tests using the Bonferroni Inequality were employed to determine the association of transfer with academic performance.

Academic achievement was measured through four standardized tests: reading, mathematics, science,and history/geography. A significant ($p<.001$) impact of student transfer was found on academic achievement of high school students. Specifically, students who transferred more than one time showed significantly lower academic achievement than students who did not transfer. Also, students who changed schools more than twice displayed significantly lower academic performance than students who experienced school transfer once or twice.

In addition, the relationships between the factors of student transfer and academic achievement were examined. Pearson correlations were employed to determine the relationships between two variables. Students who transferred because of a disciplinary problem demonstrated a significant ($p<.001$) negative relationship with academic achievement. Students who transferred because of family moving showed a positive relationship with academic achievement. Students who changed schools from public to private exhibited higher academic performance than other groups of transfer students. Suggestions for future research were offered.

A SCHOOL-WIDE RESEARCH PROJECT: PRELIMINARY FINDINGS

Dianne Lawler-Prince, Arkansas State University, and
Melissa Gammill, Jonesboro (AR) Public Schools

Schools with a large number of at-risk students often have problems in many areas, including peer relations, student attitudes toward school, and learning and achievement. The purpose of this project was to develop "action plans" to enhance peer relations, under the assumption that peer relations will have an impact on other aspects of school, such as school attitudes and achievement. This project was funded through Goals 2000 grant monies.

This project was a school-wide action research study that addressed the following questions: (1) Are students who are identified as high achievers more popular with peers than those who are identified as low achievers? (2) Do cooperative group, collaborative planning, and activities that specifically address cooperation/peer relations affect peer status? and (3) How can teachers utilize action research in school improvement efforts?

Teachers in grades 1-5 of an elementary school in northeast Arkansas participated in the project. Teachers requested parent permission for their children to be interviewed. Sociograms were conducted by university field students working with the teachers and children in the participating classrooms. Children who chose not to participate were exempt from the study. Following sociogram analysis, students were placed into categories based upon the following information: (1) race/gender - African American males, African American females, Caucasian males, Caucasian females, other males, other females, (2) family status - birth parents, separated/single parents, remarried/step parents, and other family configurations, (3) achievement rank (based on standardized reading tests scores), and (4) peer status - very popular, somewhat popular, less popular, and isolates.

Following descriptive data analysis, teachers in each grade level developed "action plans" for addressing the summarized findings concerning racial, achievement, and peer relations within their grade level. Teachers implemented the action plans during a five-week period during the spring semester of 1998. Following implementation, the university field students conducted post-sociograms in each participating classroom.

The purpose of this presentation was to share the analyses of the pre-post findings. There were changes in peer status. Results indicated that there was a school-wide reduction in the number of total isolates. Teachers' action plans were shared as well as school improvement plans for the future based upon these findings. Teachers shared how this project gave the school a "focus" for the improvement of peer relations and motivated teachers to collaborate and plan cooperative learning/peer relations activities to enhance more positive peer relations.

**A DESCRIPTIVE ANALYSIS OF THE PERSPECTIVES OF NEVILLE HIGH SCHOOL'S
TEACHERS REGARDING THE SCHOOL'S RENOVATION**

Christella G. B. Dawson, Northeast Louisiana University,
and Randall D. Parker, Louisiana Tech University

The literature suggests that poor physical conditions of school facilities have an adverse affect on student achievement and teacher satisfaction. According to Frazier (1993), many of America's public schools are in disrepair, and this situation is negatively affecting the morale, health, and productivity of teachers as well as the learning of students. This raises the question: If dilapidated

school environments negatively affect morale, what effects do renovation have on morale? This qualitative study examined the effects Neville High School's renovation had on its faculty.

To gather data for this study, 10 participants were selected through purposive as well as snowball sampling to represent the cultural diversity of the 67 teachers at Neville. Of the 10 subjects, three were black males, two were black females, and five were white females. Three of the white females were Neville graduates; the other two were from out-of-state. Four of the participants had taught at Neville for less than five years, two between six and nine years, and four for more than ten years.

A combination of the oral interview, direct observation, participant-observation, and document review was utilized in the collection process to produce triangulation. The findings of this study revealed that a significant portion of the participants harbored unspoken feelings of frustration and anxiety resulting from the renovation, although all of them had previously expressed total support for the renovation efforts. The findings suggested that, even though faculty members appreciate and understand the renovation process, the disruptions accompanying that renovation can severely affect their immediate temperament -- influencing their interactions with students.

9:00 a.m.-9:50 a.m.   **EARLY CHILDHOOD EDUCATION**
                              (Display Session).. **Cabildo Salon**

FIRST GRADE OR NOT? USING CHILDREN'S ARTWORK AS A TOOL IN DETERMINING READING READINESS

Judy Ann Hale, Jacksonville State University, and Sandra Boozer,
Pleasant Valley Elementary School

The topic was the assessment of young children's reading abilities through the use of artwork. According to Lowenfeld and Brittain (1987), if the objects in a child's drawing are unrelated to each other (a characteristic of the preschematic stage of art development), then that child does not have the ability to relate letters to each other and is not ready to learn to read. Adults can encourage the development of cognition and literacy by providing children with a variety of drawing materials. Cognition and literacy can be encouraged by helping children to become more aware of their environment and their relationship to that environment.   This developing awareness of their relationship to the environment is reflected in the children's drawing.

This display was significant in that it demonstrated how the artwork of children could be used in the assessment of children's reading readiness, thereby enabling a determination to be made about the potential for reading success in the first grade.

This study consisted of 80 kindergarten children. Artwork was collected from each child during the last week of the school year. Each kindergarten teacher determined those children who would progress on to first grade or to a transitional first-grade class for the following year. The researcher analyzed the artwork of each child and determined who was ready for first grade based on the art stage of development and who should be placed in the transitional first-grade class. A parallel was then drawn between the decisions of the classroom teachers and the findings of the researcher.

BUILDING A READING LEGACY: A UNIVERSITY, SCHOOL, AND COMMUNITY PARTNERSHIP

Linda T. Coats, Mississippi State University

A significant number of middle school students' achievement test scores continue to fall in the lowest percentile. Recognizing this growing problem, educational leaders have mandated academic goals for teachers and school officials to achieve. However, to ensure that all students meet these academic goals, the public schools and community in which these schools are located must join forces and work with students. More importantly, colleges, universities, and community organizations must work with elementary and secondary schools by sponsoring summer and after-school enrichment and assistance programs for underachieving students. Thus, the purpose of the Making Reading a Legacy: A Summer Reading Program was to help rising eighth-grade students improve their reading scores on state assessments. Also, this summer reading program helped students to improve their reading comprehension and   communication skills, and to foster their appreciation and enjoyment for reading.

This two-week pilot program targeted 15 randomly-selected rising eighth graders whose scores were in the lowest percentile on the 1997 state assessment. The students were pretested with the Nelson Reading Test. The results were used to allow students to select reading materials written for their reading level. Students read one self-selected novel and were required to keep a reading journal and a vocabulary log. In addition, students participated in group readings and were given the opportunity to express orally their reactions to the material read. Students were divided into a three-student reading team, and each team was monitored by a reading team leader. These leaders were five professional educators who volunteered their time.

The display highlighted innovative instructional strategies used by the reading team leaders, original expressions from student participants, and samples of the reading materials used.

THE DEVELOPMENT AND IMPLEMENTATION OF A THEME BASED CURRICULUM TO MEET THE NEEDS OF ALL LEARNERS: A FOCUS FOR ELEMENTARY TEACHERS

Susan T. Franks, Melvin E. Franks, and Sophie Kent,
Georgia Southern University

This display provided ideas to help inservice and preservice teachers develop and use theme-based curriculum units to meet the needs of all learners in the elementary classroom. The focus of the display was an innovative curriculum that is currently being implemented in a local school. The curriculum consists of broad-based units that immerse the learners into studies of their own family histories and backgrounds while they study other areas of the curriculum. Strategies of instruction and meaningful activities were presented. The display depicted how the units involve the students in meaningful reading, writing, speaking, and listening activities that span across the curriculum.

The display also presented student work and portfolios of assessment that depicted the successful results of the curriculum. The results of the curriculum were examined with regard to the way the curriculum met the needs of a diverse group of learners within the school.

10:00 a.m.-10:50 a.m.   **RESEARCH METHODOLOGY (Symposium)**......................**Cathedral Salon**

ORGANIZER: Ann A. O'Connell, The University of Memphis

METHODOLOGICAL ISSUES FOR SAMPLING AND SURVEY DESIGN - PART I

Overview

Thursday, November 5, 1998

This symposium was Part I of a two-session sequence that examined issues related to the design and administration of sample surveys (see Part II, below). This first session contained five papers emphasizing methodological issues in sampling and survey design, including historical perspectives and some recent innovations and applications. Audience reactions and questions were encouraged.

Critical Elements of Sampling Strategies and Approaches to Sampling in Education and the Social Sciences
Selena Y. Grimes, The University of Memphis

The essence of sampling is to create a model of the population of interest. To have faith in the results of a study, one needs to know how the sample was obtained and what limitations exist from the method of sampling used. This presentation provided an overview of critical elements of sampling methodology that researchers need to be aware of as they plan and/or attempt to generalize study results.

Census 2000: To Sample or Not to Sample
Destiny C. Shellhammer,
The University of Memphis

The U.S. Constitution mandates that a census be taken every 10 years to apportion seats in the House of Representatives. Starting with a review of the methods used for the first census in 1790, this presentation gave an historical perspective of methodological changes in the census, and examined the current debate regarding sampling strategies during the Census 2000.

Measuring Sample Design Effects: Examples from a National Population Study of Air Force Recruits
James Williamson, The University of Memphis

Elements of the sample design, such as the use of clustering or stratification, can have a profound effect on population estimates obtained from a sample. Using data from a population of Air Force recruits, the impact of particular sample design effects were presented and discussed. Implications for data analysis and interpretation of results from complex samples were reviewed.

Sampling Strategies for the Investigation of DietitiansÆ Perceptions of and Participation in Research
Deborah L. Slawson, The University of Memphis

Recent research has indicated that clinical dietitians do not generally participate in research. However, many of these studies suffer from self-selection bias. The key to valid results regarding dietitiansÆ involvement in research lies in the use of appropriate sampling strategies. This presentation focused on current efforts to obtain a valid sample of dietitians in order to glean an understanding of their research backgrounds, interests, and participation in research efforts.

**The Internet as a Mode of Sampling: A Comparison
of Response Rates with Traditional Mail Surveys**
Gail Weems, The University of Memphis

This presentation compared the techniques of telephone interviews, mail surveys, and personal interviews, and offered the Internet as an alternative to mail surveys. Response rates were compared, and an Internet focused sampling plan was proposed. The potential of the Internet for data collection and the impact on response rates for this mode of sampling were discussed.

10:00 a.m.-10:50 a.m.   **TEACHING AND LEARNING (Discussion Session)**.............. **Gallier Salon**

PRESIDER: Arlene T. Amos, Choctaw County Schools

**TEAM-TEACHING A COLLEGE CORE FOUNDATIONS COURSE: COMPARISON
OF INSTRUCTORS' AND STUDENTS' ASSESSMENTS**

Samuel Hinton and Jan Downing,
Eastern Kentucky University

The study examined college instructors' and students' perspectives on the effectiveness of team teaching an undergraduate educational foundations course titled School and Society. The course was team-taught by a female Caucasian instructor and a male African American instructor. All of the students were Caucasian, and one was hearing-impaired. The instructors jointly planned and presented the academic content. They also assumed primary responsibility for teaching specified content areas.

Specific advantages associated with team-teaching were included. The particular talents of instructors were used to the fullest in their specific areas of specialization. The team benefited from reciprocal sharing and critiquing.   Instructors complemented each others' method of teaching. Perceived disadvantages that could imperil the process were considered by the team prior to teaching the course: planning may be time-consuming, personal clashes could deter progress, inadequate planning could degenerate to large-group instruction with "turn-teaching" rather than team-teaching, and team members must want to participate and not be forced. This team was determined to embark on this task with a positive pioneering spirit.

A question was posed after the completion of the course: Were we an effective team? A 25-item Likert-type questionnaire was completed by each instructor, and the results were tabulated and compared. A second question sought the perspective of the students: Were they (instructors) an effective team? Students completed one IDEA course evaluation for both instructors.

Teaming college instructors of different genders and racial origins may be unique. The team continues to reflect on the dynamics of planning, process, and delivery of instruction and is satisfied with the success in teaching a brand new course for the first time together. The experience, process, and results suggested implications for teacher educators engaged in curriculum reform, course restructuring, and change in their respective institutions.

**ARE TWO INSTRUCTORS BETTER THAN ONE?: PLANNING,
TEACHING AND EVALUATION A DEUX**

Patricia Davis-Wiley and Angela Crespo Cozart,

The University of Tennessee

Collaboration in the field of education during the nineties has been a popular mantra of the Holmes Group, the Renaissance Group, and the Commission on Teaching and America's Future. There exists, however, a paucity of research specifically related to collaboration among members of faculties of colleges of education, especially concerning team teaching at the university level.

The primary focus of this year-long research study was to examine the efficacy of a team approach in the planning, teaching, and evaluating of three graduate courses in the College of Education at a large university during the 1997-98 academic year. A variety of on-going evaluation tools was employed by the two researcher/team instructors (one a full, tenured professor, the other a third-year doctoral student) throughout the three-semesters of collaborative planning, instruction, and assessment. These consisted of bi-weekly and end-of-term open-ended comment sheets (N= 77) from the students, forum discussions with the students, and self-reflection journals of the team instructors. As a result of qualitative analysis of the former, the findings of the study corroborated the efficacy of a multi-level, dynamic team-teaching approach for both the students and the instructors.

VOICES FROM THE CLASSROOM: UNDERSTANDING THE ROLE OF COURSE OBJECTIVES IN GRADUATE EDUCATION COURSES

Candace H. Lacey and Amany Saleh, Arkansas State University

This qualitative study was the first to examine the differences in professors' and students' perceptions of course objectives by exploring teachers' pedagogical beliefs, instructional objectives, and instructional practices. Students' perception of which goals are emphasized in a class setting may foster or hinder the adoption of successful patterns of learning, affect student achievement, and influence the goals students adapt or retain (Ames & Archer, 1988; Buck, Lee, & Midgley, 1992; Meece, 1991; Nicholls, Cobb, Wood, Yackel, & Patashnick, 1990; Nolan & Haladyna, 1990). The consequences of not clarifying course objectives are likely to be misunderstanding and mistrust on the part of professors and learners (Richards & Lockhart, 1994).

Participants included two students enrolled in a doctoral course, two students enrolled in a master's course, and two professors. The main source of data was in-depth interviews. Each participant was interviewed by the two researchers using a previously agreed upon set of questions. The interviews were transcribed and analyzed; emerging patterns were determined using comparative analysis. Triangulation was accomplished through tape recording and respondent validation of the resulting typed transcripts, review of the transcripts by the researchers on at least three different occasions, and analysis of the syllabi for the two courses to examine the written course objectives.

The findings of this study suggested that there were clear differences in the perceptions of both students and professors with regard to the function and understanding of course objectives. Doctoral students and their professor appeared less clear on the nature of objectives then did their master's counterparts. Professors at both levels functionally expressed the role objectives played in their courses. However, students did not share this perception. These findings suggested a need for professors to articulate and determine an understanding from their students of the role objectives play in their courses.

10:00 a.m.-10:50 a.m. **COUNSELING (Discussion Session)** ....**Pontalba Salon**

PRESIDER: Daniel Fasko, Jr., Morehead State University

A HOLISTIC APPROACH TO COUNSELING AND DEVELOPMENT
IN URBAN PUBLIC SCHOOL SETTINGS

Zarus E. P. Watson and Cirecie A. West-Olatunji,
University of New Orleans

Schools today are beset with problems from within and outside of the classroom, including rising violence in and out of school, teacher assault, growing dropout rates, and chronic low achievement, especially among inner-city schools.

Current and past efforts have dwelt on this symptomology without long-term success. This is predictable when one considers that the causes of such symptomology are systemically based. In essence, efforts have been centering on the effect rather than the cause. Causal agents, such as systemic social conditioning among students, parents, teachers, and administrators have never been fully explored in the educational literature. To compound this fact, theorists in the behavioral science area have generally not extended their research from an insulated mental health focus to applied programs encountered in the school systems.

The proposed approach would illustrate the conditioning mechanism inherent within the larger social system. Details on such systemic functions and recent data regarding racial identity development are used to illustrate how certain social outcomes are generated. Within this approach causal elements can be fully explored, explained, and understood, giving all concerned a knowledge foundation of what operational mechanisms are present and how they function.

For the school-based personnel, the result would be how conditioning has influenced their students, their parents, and themselves. Knowledge of such conditioning information in resultant symptomology would lead to interventions focusing on systemic pre-conditional behaviors and attitudes.

SCHOOL COUNSELOR SUPERVISION IN KENTUCKY: A CONTRADICTION IN TERMS?

Stacy S. Carone, Edie Hall, and Deborah J. Grubb, Morehead State University

This study gathered data regarding the supervision of school counselors across the state of Kentucky to find out: (1) the job title of persons providing direct supervision, and (2) the ratio of students to counselors from a representative sample across eight service regions. Letters requesting supervision information were mailed to the school superintendent of every district, and follow-up telephone inquiries were conducted to gather missing data.

Data from 100 out of 176 districts, representing 80 out of 120 counties, were collected. Categories were developed to indicate ideal, acceptable, and unacceptable student-to-counselor ratios, based on American School Counselor Association recommendations. Ratios of less than 400-1 were labeled "Ideal", 400-1 through 500-1 ratios were considered "Acceptable," and ratios greater than 500-1 were considered "Unacceptable." Fourteen percent of the total sample were identified as ideal, 44% were classified as acceptable, and 40% were considered to be unacceptable.

Six categories representing various job titles of those acting as direct supervisors to counselors were distinguished: Principal, Certified Administrative Supervisor, Coordinator/Director, Superintendent, Counseling Supervisor, and Director of Pupil Personnel. Seventy-four percent of the direct supervisors were Principals, 7% were Coordinator/Directors, 6% were Superintendents, 5% were Directors of Pupil Personnel, 5% were Certified Administrative Supervisors, and 2% were Counseling Supervisors.

Results showed that the majority of school counselors across Kentucky were supervised by administrators rather than counseling personnel. Thus, school counselors were lacking in

counseling-related supervision for counseling services they provided, which should require minimal supervision by a counseling-certified administrator. In order to provide sufficient direct counseling services to students, 40% of the districts sampled required a more adequate number of counselors per student and, ideally, 98% should have provided some documented supervision by a certified counselor. Further discussion and implications for research and practice were presented.

INTRA-PROFILE RELATIONSHIPS FOR KEY PSYCHOMETRIC VARIABLES IN OCCUPATIONAL EVALUATION

Robin A. Cook, Wichita State University

Several critical constructs are commonly considered by counselors assisting consumers with career counseling and subsequent job recommendations. These constructs are vocational interests, vocational aptitudes, and occupationally-relevant personality variables. For various reasons, practitioners often fail to measure each of these areas when conducting vocational assessments. A lack of understanding exists regarding linkages between these constructs from both clinical and empirical standpoints. Though predictive power for each of these domains with respect to successful occupational functioning has been demonstrated, little research has been conducted addressing the potential nature of their interaction. While some studies attempted to describe relationships for various pairings of aptitude, interest, and personality, very few have simultaneously addressed all three, despite calls for such research as far back as 55 years ago.

The purpose of this research was to provide information that would contribute towards a better understanding of how the major classes of vocational variables related to one another within vocational profiles. This information may contribute towards improving the selection of, and procedures associated with, vocational testing and subsequent occupational recommendations.

This study evaluated the interrelatedness of vocational interests, vocational aptitudes, and occupationally-relevant personality traits via a modified version of the Inter-Domain Model, a clinical guide articulated by Lowman (1991). Participants were 101 persons age 16 or over enrolled in one of two state employment and training programs. Evaluees were administered four standardized psychometric instruments (16 PF, EPPS, Self-Directed Search and GATB), which together measured the constructs of interest.

Descriptive, discriminant, and post-hoc analyses offered partial support for postulated construct relationships. Differentiation of evaluees was possible for some vocational interest categories. Implications for testing practices of youth and adults in secondary or post-secondary educational settings (i.e., selection of instruments, interpretation of results and use of these in career counseling) were noted.

10:00 a.m.-10:50 a.m.   **HIGHER EDUCATION (Discussion Session)** .... **Ursulines Salon**

PRESIDER: Rodney W. Roth, The University of Alabama

A CASE STUDY OF STUDENT PARTICIPATION IN SHARED GOVERNANCE AT MISSISSIPPI STATE UNIVERSITY

Xiao Ying Zhang, Mississippi State University

Most of the literature on shared governance in higher education is focused on the relationship between administration and faculty. Relatively little research and study has been done to investigate student participation in shared governance on campus. Still less has been done to examine

the decision-making models used by the student government. One of the reasons for this void is the mistrust in the effectiveness of student participation in campus governance.

This study aimed at understanding the role of Mississippi State University students and their government in the establishment of the shuttle system and the interrelations between various constituencies in the process. It investigated the decision-making process and addressed the following questions: (1) How was the decision made and who were the key players in the process? (2) What was the role of the student organization in the decision-making? and (3) What models were involved in the whole process? It employed such qualitative research methods as interview and document review to gather data.

The findings indicated that shared governance was more than rhetoric. It was part of the reality in Mississippi State University. The model analysis of the decision-making process revealed that decision making was rarely located in one official nor within the frame of one single model. The study showed an example of successful student participation in shared college governance. It expanded knowledge of shared governance by looking at a relatively neglected aspect of college governance, the student, and by demonstrating that student participation in campus decision making was beneficial and indispensable and could be very effective.

SHARING GOVERNANCE AT A COLLEGE OF EDUCATION: A LONGITUDINAL STUDY

Linda F. Cornelious, Vincent R. McGrath, and Jack Blendinger,
Mississippi State University

This study investigated how faculty governance contributed to professionalism by tracing events during a two-year effort (1996-1998) to establish and maintain a faculty council for a college of education at a major research university. The faculty council evolved in an effort to respond effectively to a growing number of critical issues and problems that the previous advisory committee had inadequately addressed. Capitalizing on an increasing concern for colleges of education to function more effectively, and to cope with the challenges of the coming millennium, the council became a viable mechanism for participating in the decision-making process and facilitating open and on-going communication between the faculty and the administration.

Findings in this study revealed that more than 90% of the faculty in the college participated in activities regarding governance issues. Data collected over a two-year period from artifacts, such as operational guidelines, memoranda, agenda and minutes, advisory reports to the dean, and faculty surveys, were shared during this session. Participants in this session were invited to share their own experiences and become partners in an action research Internet project that will track experiences in shared governance at colleges of education.

If colleges of education are to effectively involve faculties in policy development and decision making, more actual anecdotal cases and longitudinal studies of faculty councils at work are needed to provide authenticity to what is presently a minuscule literature base addressing faculty governance. The findings presented in this study illuminated understanding on how to establish effective mechanisms such as faculty councils for sharing authority at the college level in a large university. The study suggested that faculty governance systems can be neither top-down nor bottom-up; they must be shared to cope more effectively with the challenges that continue to face colleges of education.

CREATING "GOOD" GRADUATE STUDENTS: A MODEL FOR SUCCESS

Debbie L. Hahs, The University of Alabama

Though it may be difficult to define the qualities of a "good" graduate student, most institutions equate retention and degree attainment with successful students. Research indicates that the graduate student environment and support structure are essential in providing elements that lead to graduate student retention and completion of graduate programs.

This project was a pilot study that analyzed the results of a survey completed by 144 graduate assistants at a large, southeastern research university. The survey results indicated what graduate assistants believed they needed to persevere and graduate. The purpose of the study was to create a model for graduate student support based on what graduate students believed they needed, what the university was currently offering, and what research indicated was needed.

The survey included questions on demographics; employment status; time spent on campus; involvement in the Graduate Student Association; interest in workshops, research expositions, and social activities; interest in resources for graduate students; and the preferred form of communication. At least 30% of the respondents indicated the desire to attend workshops on thesis and dissertation writing, computer training, writing a vitae or resume, grant writing, and financial aid. Approximately 50% were interested in research expositions, conferences, and forums where their research could be presented. At least 35% were interested in informational resources regarding the following: financial aid, research and travel support funding, library resources, writing a thesis or dissertation, employment resources, and student insurance.

It can be inferred that students who are requesting information on services or resources have not satisfactorily received this information through current channels. Based upon the results of the survey, what was currently offered by the university, and current research, a model representing programs, services, and resources for graduate student retention, satisfaction, and completion was proposed.

10:00 a.m.-10:50 a.m.   **TEACHING STATISTICS AND RESEARCH**
(Discussion Session)   **Beauregard Salon**

PRESIDER: Randall D. Parker, Louisiana Tech University

A STUDY OF REDUCTION OF ANXIETY IN GRADUATE STUDENTS IN AN INTRODUCTORY EDUCATIONAL RESEARCH COURSE

Vicki A. Wilson, Muskingum College

Anxiety about statistics can result in impaired performance, mental anguish, and avoidance of statistics courses needed for professional advancement. In this study, 53 graduate students enrolled in an introductory course in educational research were administered the Statistical Anxiety Rating Scale (STARS) prior to the start of the course. During the seven weeks of the course, the instructor employed strategies noted in the literature as possibly helpful in alleviating anxiety in statistics classes: addressing the anxiety, using humor, applying statistics to real-world situations, reducing fear of evaluation, and encouraging students to work in cooperative groups.

Anxiety was acknowledged by the instructor when new concepts were presented; in addition, students were encouraged to share their concerns during semi-weekly, one-minute reflection/sharing sessions. Humor was introduced into the class with jokes and cartoons. Students used their developing knowledge in educational research to propose, implement, and present research projects based on their own experiences in classrooms. There were no formal tests; assessments included journal critiques, the research proposal and project, and data sets. Students worked

cooperatively on data sets, and groups of three students served as "support groups" on the major research project.

STARS was administered as a posttest at the final course session. A paired-samples *t*-test was used to compare the means of the pretest and posttest scores. Differences in the total score and five of six factors (worth of statistics, interpretation anxiety, test and class anxiety, fear of asking for help, and fear of the statistics teacher) were significant at the .001 level. Difference in one factor (computation self-concept) was significant at the .01 level. All mean scores were reduced, denoting a reduction in anxiety, from the pretest to the posttest.

It appeared that it was possible to reduce statistics anxiety in graduate education students by employing specific instructional strategies.

THE EFFECTS OF COOPERATIVE LEARNING ON ATTITUDES AND ACHIEVEMENT IN GRADUATE-LEVEL RESEARCH METHODOLOGY COURSES

Denise DaRos, Youngstown State University, and
Anthony J. Onwuegbuzie, Valdosta State University

In an effort to increase achievement levels in graduate-level research methodology courses, some instructors have implemented some form of cooperative learning (CL). However, to date, no study has investigated the effectiveness of this instructional technique in these courses. This was the purpose of the present study. Indeed, scant research in the area of CL exists at the graduate level.

Subjects comprised 193 students enrolled in mid-southern university graduate-level research methodology courses. Eighty-one students were enrolled in sections in which CL groups were formed to undertake the major course requirements; 112 were enrolled in sections in which all assignments were undertaken and graded individually (IL). Conceptual knowledge, involving students' knowledge of research concepts, methodologies, and applications, was measured individually in both sets of classes via midterm and final examinations.

Although CL students preferred this method of instruction, they had lower ($t = 3.01$, $p < .01$) performance levels (M = 76.7%) than IL students (M = 82.1%) at the midpoint of the course, as measured by the midterm examination. No difference ($t = 1.68$, $p > .05$) was found between CL (M = 82.2%) and IL (M = 84.9%) with respect to the final examination. No overall difference ($t = -1.21$, $p > .05$) in course average was found between CL (M = 83.8%) and IL (M = 82.4%) groups.

The finding that the CL group had lower performance levels at the midpoint stage suggested that CL techniques needed more time for their effects to be realized. The fact that no overall achievement difference was found between the two groups indicated that some students may have preferred cooperative learning, not because it increased their performance levels, but because they did not have to put forth as much effort to pass these courses--suggesting that even greater cooperative structure was needed in these courses.

Recommendations for implementing CL in research methodology courses were made.

WHAT IF I AM NOT PERFECT IN MY STATISTICS CLASSES? THE RELATIONSHIP BETWEEN PERFECTIONISM AND STATISTICS ANXIETY

Anthony J. Onwuegbuzie, Valdosta State University,
and Christine E. Daley, Georgia Public Schools

Perfectionism has been defined as the tendency to set and to pursue unrealistically high goals and standards for oneself across many domains. Perfectionists often are preoccupied with flaws in their own performance and tend to exaggerate negative outcomes in a self-punitive manner.

Moreover, these individuals are susceptible to negative affective states, including guilt, feelings of failure, low self-esteem, and procrastination.

Recent research suggests that perfectionism is a multidimensional construct comprising three dimensions: self-oriented perfectionism, other-oriented perfectionism, and socially-prescribed perfectionism. Despite the reported gravity of perfectionism, scant empirical research studies of this phenomenon exist, particularly among graduate students. Yet, it is likely that graduate students, in general, exhibit high levels of perfectionism. Because many graduate students set unrealistic achievement goals while enrolled in statistics and research methodology courses, and because statistics anxiety has been found to be a psychological barrier to achievement in these courses, it is possible that level of perfectionism is related to statistics anxiety. Statistics anxiety also has been conceptualized as being multidimensional, consisting of worth of statistics, interpretation anxiety, test and class anxiety, computational self-concept, fear of asking for help, and fear of the statistics instructor.

The purpose of this study was to investigate the relationship between perfectionism and statistics anxiety, using a multivariate approach. Participants were 107 students enrolled in graduate-level research methodology courses.

A canonical correlation analysis revealed that graduate students who held unrealistic standards for significant others (i.e., other-oriented perfectionists) and those who maintained a perceived need to attain standards and expectations prescribed by significant others (i.e., socially-prescribed perfectionists) tended to have higher levels of statistics anxiety associated with interpretation anxiety, test and class anxiety, computational self-concept, and fear of asking for help. The implications of these findings were discussed.

10:00 a.m.-10:50 a.m.   RESEARCH IN THE SCHOOL (Display Session)................... **Cabildo Salon**

THE INFLUENCE OF BOOK-BAG BACKPACK WEIGHT ON STUDENTS' POSTURE

Donna E. Pascoe, Auburn University

More than 40 million students carry book-bag backpacks. Children experiencing physical growth may be a vulnerable population for weight-bearing stress caused by carrying heavy packs. The potential elimination of lockers by administrators, unsafe carrying practices by students, and the increased weight of school materials create a need for determining weight limits for loads carried by students.

A biomechanical analysis was used to determine significant postural changes resulting from book-bag carriage (without bag, 0%, 5%, 10%, 15%, and 20% of body weight) during randomized static and dynamic trails. The subjects (13 years old) wore 18 anatomical markers identifying major segments of the body and one point identifying the center of the book-bag. A video camera provided images (65Hz) for a video analysis system from which the investigator examined the subjects' posture. The book-bag was positioned on either the upper- or lower-back region to represent the two typical styles of carriage by students. Statistical analysis provided comparisons of gender, postural changes indicated by angle/range of motion of the trunk, and angle/range of motion of the head. Significant postural changes are associated with lower back pain and functional scoliosis. Heavy backpacks have caused nerve damage to the shoulder with muscle atrophy in the arm, and to a lesser extent numbness of the hands.

This research provided information that would help educate students about the appropriate load and positioning of book-bags for safe carriage. Administrators may use this information when making decisions regarding the use and accessibility of lockers. Finally, teaching strategies that minimize the load of educational materials will help reduce the load students are required to carry.

STUDENTS' PERCEPTIONS OF CHARACTERISTICS OF EFFECTIVE TEACHERS

Barbara N. Young, Middle Tennessee State University; Marilyn E. Whitley,
Metro-Nashville (TN) Public Schools; and Carol A. Helton,
Tennessee State University

A survey was conducted among students at three different educational levels. These levels included high school students, college freshmen in developmental studies, and college seniors enrolled in education classes. The survey asked questions regarding the characteristics, methodology, and effectiveness of their teachers in general. The responses of each group were tallied, and comparisons were made among the groups. The results were analyzed and presented.

The objectives of the survey were to recognize the characteristics of effective teachers that were perceived by students as having different education levels and maturity, and to determine if these perceived characteristics of effective teachers changed with the maturity level of the students. An additional goal was to utilize teaching strategies indicated by the survey for appropriate age levels, thereby increasing teacher effectiveness.

The survey was anonymous, but age, gender, race, and grade level were disclosed. The sample included 109 high school students, 100 developmental college freshmen, and 30 college seniors in education classes. The Likert scale measured the responses ranging from very efficient, efficient, inefficient, somewhat efficient, or very important, important, somewhat important, to not important. The questions regarded methodology of instruction and personal interaction of the teacher with the students. A comparison of the groups was analyzed and presented.

11:00 a.m.-11:50 a.m.   **PUBLICATION (Training Session)** ....**Bienville Room**

TRAINER: John R. Petry, The University of Mempis

WRITING AND GETTING PUBLISHED

John R. Petry, The University of Memphis

Training centered around opportunities and problems associated with writing and publishing articles and manuscripts. Topics included were 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 included elements of style: elementary roles of usage, principles of composition and form, an approach to style, and faults in scholarly writing. The use of the computer in writing and editing was explored.

Objectives of the session were to increase the awareness of attendees of opportunities to publish, raise standards for writing quality manuscripts, and establish minimum guidelines for professional growth. The use of technology was of primary value.

Activities included 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. Many sources for publishing were presented and discussed. Publication sources were identified that gave the manuscript submitters a higher chance of achieving success for acceptance. Participants' manuscripts were evaluated for their content, style, impact on the reader, value to the scholarly community, and importance as a contribution to literature.

11:00 a.m.-11:50 a.m.   **RESEARCH METHODOLOGY (Symposium)**......................**Cathedral Salon**

ORGANIZER: Ann A. O'Connell, The University of Memphis

METHODOLOGICAL ISSUES FOR SAMPLING AND SURVEY DESIGN - PART II

Overview

This symposium formed Part II of a two-session sequence that examined issues related to the design and administration of sample surveys. Four papers were presented, with an emphasis on methodological issues regarding survey design. In particular, aspects of survey design and their impact on survey error were discussed. The session closed with a discussion of ethical considerations for researchers involved in sampling and survey design. Audience reactions and questions were encouraged.

Satisficing and Question Format
Bonnie McLain-Allen,
The University of Memphis

Surveys are one of the most important tools for data collection available to researchers. However, survey respondents do not always answer with the most accurate response. This presentation discussed the process of satisficing, a major source of inaccuracy in survey response. A method for identifying and correcting problematic questions and a proposal to test respondent accuracy and consistency were presented.

Pain and Functional Assessment Questionnaires: Could Rules Pertaining to Conversation in Daily Life Affect Patient Responses?
Greg Ginn, The University of Memphis

Evaluating clinical outcomes and designing instruments to assess patient-based outcomes are currently two of the most widely discussed topics in the medical community. One reason for this increased interest may be the need to evaluate patients' clinical condition and progress and thus improve treatment efficacy. The purpose of this presentation was to provide a brief overview and comparison of four frequently-used patient-administered pain and health instruments, with a particular focus on how respondents may draw extensively from the information provided in the questionnaires in order to make the most sense of the questions they are being asked.

Promoting Honest Responses from Adolescents in Self-Report Survey Data on Smoking, Alcohol, and Marijuana Use
Patricia L. Stephenson, The University of Memphis

Most self-report data are considered to be valid representations of respondent characteristics. Concerns exist, however, particularly when the topic under study is sensitive in nature.

The study compared two methods of self-report data collection with adolescents as subjects: written survey questionnaires versus person-to-person interviews. The interviews were conducted on subjects known to the researcher, as well as with subjects previously unknown to the researcher. Preliminary findings across these three groups indicated no significant statistical differences, yet some limitations and indications of inaccurate responses were noted. Implications of these results for researchers working with adolescents were discussed.

Ethical Issues Regarding Sampling, Survey Design, and Data Collection
Lynne S. Padgett, The University of Memphis

This presentation focused on a review of two guiding standards on ethics, one from the American Educational Research Association (AERA) and the second from the American Psychological Association (APA). Although there is a difference in scope of these two codes, both emphasize professional integrity and responsibility in their primary field of research. Implications of these ethical codes for sampling, survey/question design, and mode of data collection were discussed.

11:00 a.m.-11:50 a.m.   **MINORITY ISSUES AND DIVERSITY**
                                  (Discussion Session) .... **Gallier Salon**

PRESIDER: Jerry Brooksher Gee, Nicholls State University

A SURVEY OF PRESERVICE TEACHERSÆ PERSONAL AND PROFESSIONAL BELIEFS ABOUT AND SENSITIVITY TOWARD CULTURAL DIVERSITY ISSUES

Pamela A. Taylor, Mississippi State University

Research strongly suggests that there is relationship between one's beliefs and subsequent behavior. Being aware of and sensitive to not only the differences in cultures, but how culture impacts learning is a need for every teacher. The purpose of this study was to investigate preservice teacher's personal beliefs (within the context of one's daily life) and their professional beliefs (as related to the context of schools) about issues surrounding cultural diversity.

The Beliefs About Diversity Scale, a five-point Likert-type scale, which measures personal and professional beliefs about and sensitivity toward areas of diversity ranging from race to sexual orientation, was administered to student volunteers enrolled in education foundations courses. Of the 57 students who participated in this study, 72% were European American, 21% African American; 77% were female; and 89% were under 25 years of age. The majority declared themselves as elementary education majors, and 74% were juniors.

The findings revealed that this group of preservice teachers as a whole had more professional sensitivity than personal toward issues about diversity. As a group, the participants showed more cultural sensitivity for issues related to race and multicultural education than the other cultural issues surveyed. The issue receiving the lowest rating for tolerance, by the group, was sexual orientation. None of the mean scores for any cultural issue subgroup, group personal or professional belief, or by demographic categories were at the highest rating of strongly agree, indicating that the preservice teachers did not have strong beliefs, personal or professional, about issues of diversity.

In light of the demographic shifts predicted for the 21st century, with increasing immigration of ethnic groups in both American society and schools, it is imperative that teachers have strong beliefs about diversity in order to meet the demand and mandates of societal changes and school population.

AN ANALYSIS OF THE RELATIONSHIP BETWEEN FUTURE TEACHERS' ATTITUDES TOWARD DIVERSITY AND THEIR MORAL REASONING, ATTRIBUTIONAL COMPLEXITY, AND RELIGIOSITY

Antony D. Norman and Shula G. Ramsay,
Western Kentucky University

In our increasingly multicultural society, it is important that teachers appreciate attitudes, values, and beliefs different from their own. In order to promote more positive attitudes toward other cultures, the teacher education program at a regional mid-south university requires that all students participate in a diversity awareness workshop, which lasts more than two hours, outside of their class work. Most students participate in this workshop as part of an educational psychology course, one of the first courses required as part of the teacher education program. However, there is some concern that the effectiveness of the workshop in changing the attitudes of students may be affected by at least three factors: students' moral reasoning ability, their preference (or lack thereof) for seeking multiple explanations for human behavior, and their level of religiosity.

As part of the diversity workshop experience, 214 students in eight educational psychology classes were asked to complete three instruments: Rest's Defining Issues Test, a measure of moral reasoning; the Attributional Complexity Scale, a measure of one's preference to attribute simple or complex explanations for human behaviors; and a pre- and post-workshop questionnaire. Beyond questions regarding one's attitudes toward diversity, the questionnaire requested demographic information, including one's level of religiosity.

Our study examined the relationships among openness to diversity and moral reasoning, attributional complexity, and religious beliefs of these college students. More specifically, it addresses the following questions: (1) What is the relationship between attitudes toward diversity and moral reasoning? (2) What is the relationship between attitudes toward diversity and attributional complexity? (3) What is the relationship between attitudes toward diversity and religiosity? (4) Is there an interaction among these variables?

The implications of these findings regarding programs designed to promote diversity awareness among future teachers were discussed.

UNDERGRADUATE TEACHER EDUCATION MAJORS' AWARENESS OF CULTURAL DIVERSITY

Joan C. Harlan and Kathy Hulley,
The University of Mississippi

The literature clearly suggests that teachers need to be knowledgeable about cultural diversity-related issues. It is recognized that teachers need to examine and refine their attitudes, beliefs, and behaviors toward students from culturally diverse backgrounds. Quality teacher preparation programs are attentive to this, and accrediting agencies are requiring this.

This study investigated the extent of undergraduate teacher education majors' awareness of cultural diversity-related issues. One hundred ten students in the elementary education undergraduate program at The University of Mississippi were the subjects. They ranged in age from 20 to 45, and over 90% of the subjects were white females.

During the spring semester of 1997, subjects, who were then juniors, voluntarily completed a 31-item self-examination questionnaire devised in 1991 by Gertrude B. Henry entitled the

Cultural Diversity Awareness Inventory. The same subjects, in the fall of 1997, during their student teaching experience and immersion in integrated coursework known as the "Senior Block," again voluntarily completed the same instrument. The questionnaire is designed to assist users to look at their own attitudes, beliefs, and behavior towards elementary children of diverse backgrounds. It uses a five-point Likert scale wherein users check strongly agree, agree, neutral, disagree, or strongly disagree. Respondents' replies before and after the student teaching, and coursework experiences were compared and analyzed

Results indicated substantial differences in respondents' replies prior to and following the student teaching and coursework experiences. Differences were in the direction of increased understanding and celebration of differences with a tendency away from mere toleration or passive acceptance of cultural, ethnic, and linguistic differences. Class discussions of instrument items also yielded interesting perspectives and insights into subjects' values and thoughts. These thoughts, along with research findings and their implications for teacher education programs, were presented.

11:00 a.m.-11:50 a.m. **EARLY CHILDHOOD EDUCATION**
(Discussion Session)..**Pontalba Salon**

PRESIDER: Mary Ruth Reynolds, University of West Georgia

EMERGENT LITERACY AS PRODUCT, PROCESS, AND EXPERIENCE: AN INNOVATIVE LITERACY BLOCK EXPERIENCE FOR PRESERVICE TEACHERS

Susan T. Franks, Georgia Southern University

This discussion examined a literacy block experience for elementary preservice teachers. Teachers are enrolled in the block as a requirement for a degree in Early Childhood and Reading. The content of the course examines emergent literacy from three unique perspectives: product, process, and experience. Throughout the block experience, the preservice teachers study reading, writing, speaking, listening, and viewing from each perspective and become immersed in strategies of instruction.

The debate about what is the best method of teaching early reading and writing has centered in the behavioristic theory of stimulus response learning, the cognitive developmental theory of learning, and the psycholinguistic and linguistic theories of language learning based on generative transformational grammar. Reading and writing as product is based on the stimulus response mode of learning, and as process is based on the cognitive and psycholinguistic theories of learning. Reading and writing as experience depends on the same abilities students used to construct their knowledge of a complex world (consisting of physical, emotional, intellectual, and spiritual environments) by the types of experiences they have had in the world. Because literature attempts to replicate this world, it provides experiences that can be used by students to help them construct and expand their knowledge.

The design of this literacy block is unique. It separates the theoretical bases of each of the major reading writing programs and the teaching strategies derived from them. Other courses and texts tend to mix them or present mostly one side of the reading picture. By separating these programs, students and classroom teachers can determine more fully the bases of the reading programs adopted by the schools in which they teach. Preservice teachers can select elements from all of the approaches and construct their own reading programs or modify those that they find in use where they teach.

EARLY CHILDHOOD PRESERVICE TEACHERS' BELIEFS

Huey-Ling F. Lin, Steven B. Silvern, and Jeffrey Gorrell,
Auburn University

The study compared perceptions of Taiwan preservice teachers who were at the beginning of their early childhood teacher preparation programs with those who were near the end of their preparation programs. The instrument included six open-ended questions that examined teaching, learning, and relationships with students. Participants included 298 preservice teachers who were either completing their first year of a teacher training program or who were completing their third year of the program. They participated voluntarily in answering questionnaires.

It was hypothesized that there would be a distinction between the teaching and learning beliefs of beginning-level and ending-level preservice teachers. Of particular interest was variation in preservice teachers' perceptions of their roles as teachers, of children's learning, and of their relationships with children. This exploratory study aimed primarily at the description of central beliefs and their interrelationships. The grounded theory method (Strauss, 1987; Strauss & Corbin, 1990) was the predominant mode of data analysis. Chi-square analysis was conducted to support claims of representativeness in conjunction with category analysis to provide a better understanding of preservice teachers' beliefs.

The cross-group comparisons of preservice teachers' beliefs showed qualitative differences related to willingness to take responsibility for children's learning, how teaching should be conducted, how learning experiences should be constructed, integrating cognitive ability to social and culture learning, learning from teachers' experience and building relationships for teaching. The study illuminated how preservice teachers' beliefs became more integrated with experience. It is pertinent to those who work directly with preservice teachers and policymakers, as well as professors and students in teacher education programs.

TEACHING FUNCTIONAL BEHAVIORS TO A DEVELOPMENTALLY DELAYED PRESCHOOLER

Katrina N. Rhymer, T. Stuart Watson, and Stephanie Miles,
Mississippi State University

Many teachers who educate children with developmental delays often struggle with how to teach functional behaviors to these youngsters. Intense, early intervention using applied behavior analysis has been effective in teaching some skills to children who are developmentally delayed. The use of discrete trials, reinforcement, and prompting the target behavior has proven to be effective. Educational psychologists have had the training and resources to educate and model applied behavior analysis to the teachers and parents that have had daily contact with these students.

The effectiveness of using discrete trials to teach compliance was demonstrated with a non-verbal, three-year-old boy. Billy was ruled developmentally delayed and displayed autistic-like behaviors. He would not sit in a chair at a table when asked to do so, which made puzzles and snack time very difficult for the teachers. Billy would not engage in eye contact; therefore, getting his attention was a challenge for his teachers and parents. Billy had no effective form of communication to identify his needs and displayed frequent temper tantrums. He also ground his teeth, walked on his toes, and flapped his hands, which were disruptive behaviors in the classroom.

The technique of verbally and physically prompting target behaviors was used to increase eye contact with adults and other functional classroom behaviors (i.e., sitting, standing, raising arms).

Baseline for compliance for these behaviors ranged from 0% to 33%. After the intervention, compliance for these behaviors ranged from 38% to 100%. This research suggested that the discrete trial training was effective in teaching these four functional behaviors to a preschooler with developmental disabilities. Directions were provided for educational psychologists in the implementation of these procedures in a special education classroom.

11:00 a.m.-11:50 a.m.   **EDUCATION REFORM (Discussion Session)**...................... **Ursulines Salon**

PRESIDER: Deborah L. Adler, University of Central Arkansas

HOMESCHOOLING: WHO AND WHY?

Deborah J. Grubb, Morehead State University

The purpose of the study was to survey parents who were home-schooling their children to determine primary and secondary reasons for home-schooling, parents' perceptions of the advantages and disadvantages in home-schooling and in public schooling (including school reform efforts), the extent that computers and Internet impacted their decision to home-school, and respondents' perceptions of what public schools needed to change in order to re-attract families.

Parents who home-schooled their children were surveyed through the Kentucky Home Education Association (KHEA) because the Kentucky Department of Education did maintain a list of the estimated 4,500 parents in the state who home-schooled their children. In an attempt to reach as many parents as possible, the entire membership of approximately 400 KHEA members was sent a one-page (13-item) survey with the summer KHEA newsletter. The data were analyzed using descriptive statistics.

Of the 69 parents who responded to the survey, most reported religion as the most important factor in their decision to home-school. However, the majority also reported that they thought that their children were receiving a superior education over that offered in the public schools. Computer availability was judged important to the home curriculum, but not a determining factor in whether to home-school. Removing their children from perceived negative peer influences was also reported as a primary reason for home-schooling. Respondents were given an opportunity to state what would need to change before they would consider sending their children to public schools. Most reported that nothing the public schools could do would make them change their minds to home-school because they believed that they were providing a superior individualized education that public schools, by their very nature, could never achieve.

Implications for public schools and further research were discussed.

STUDENTS AND NO STUDENTS: IS THIS AN OVERLOOKED FACTOR IN EDUCATIONAL REFORM?

Jianliang Wang and Liqing Tao,
Western Kentucky University

This session intended to discuss the results of an investigation into the role students should play in the current educational reform movement in the United States.

Educational reform has been on-going ever since Dewey's call for and efforts in pushing for curricular reform (Jackson, 1992). However, the American society's dissatisfaction with educational

outcome seems to be continuously registered both in popular media and scholarly journals. It indicates that the educational reform up to now has not been effective in producing the results as the society expects.

An investigation was made into this phenomenon by examining the factors directly involved in educational reform. Relevant literature on both state and national levels of educational reform was searched and synthesized. Theoretically, both teachers and students are the focus of efforts in reforming education. While students' performance serves as the outcome measure for the effect of education, teachers are the ones who make instructional decisions that are assumed responsible for students' outcome. This responsibility role on the part of the teacher has made its way to the center of the reform. As a result, we have found more rhetoric on teacher responsibility than students' responsibility in today's literature on educational reform. This is also true in literature describing classroom reforms. Teachers are the ones who are mustering everything they can to motivate and get students to learn. However, very little has been said about students' role and responsibility of learning.

An argument was made that students' active role in assuming responsibility for learning is the missing factor in educational reform. This oversight may feed to the constant public outcry about unsatisfactory educational outcome and result in possible failure in educational reform. Unless students are fully involved and given the responsibility for their learning, the dire situation of a mismatch between students' outcome and public expectations will likely persist.

The major content was presented orally and supplemented with overhead transparencies and handouts. Time was allotted for group discussion and for questions and comments from the audience.

PARTNER SCHOOLS: A REVIEW OF CURRENT LITERATURE

Mary Jane Bradley and Dianne Lawler-Prince,
Arkansas State University

Developing school-university partnerships facilitate growth and development for university and public schools. The overall objective of this paper was to review the current literature regarding the strategies, implementation, attributes, and evaluation of partnership between public schools and universities.

The review of literature included current references (1988-98) in education journals, ERIC documents, and books. The following questions were addressed through the examination of literature: (1) What strategies have been successfully utilized to develop partnerships between public schools and universities for the purpose of preservice teacher training? (2) What methods of implementation have been reported as successful in the partnership schools? (3) What, according to the literature, appear to be the most important, influential attributes of successful partnership schools? (4) How are partnership schools evaluated, according to the literature? and (5) What applications can be made from these findings from the literature?

An extensive review of literature was conducted to address the aforementioned research questions. Validity and quality of research/writings were considered in the inclusion of the findings. Comparisons were made between and among programs.

The literature revealed a great deal about the value of partnership schools, which included the high quality of experience obtained by the preservice teachers as well as the growth and renewal reported by collaborating teachers/schools. It appeared, generally, that partnership schools were not only beneficial to preservice and inservice teachers, but to the students attending those schools as well. Although there is still much to be learned about evaluation, as well as implementation strategies, this trend is one that seems to be here to stay. Furthermore, it appears that partnership

schools may not be a trend but the most effective method documented for teacher education programs to ensure the quality and depth of experiences provided

11:00 a.m.-11:50 a.m.   **RESEARCH IN THE SCHOOL**
    (Discussion Session)... **Beauregard Salon**

PRESIDER: Fred H. Groves, Northeast Louisiana University

EFFECTS OF TUTORING ON READING AND MATH OUTCOMES FOR AT-RISK STUDENTS AFTER TWO YEARS OF ASSESSMENT

Dennis C. Zuelke and J. Gordon Nelson,
Jacksonville State University

The purpose of this study was to determine whether after-school tutoring helped 294 at-risk students, grades 1-12, in eight local schools to raise their grade point averages in reading and mathematics. This study was the second of a series of annual assessments. These annual assessments have illustrated a custom-designed collaborative relationship between faculty from a college of education and a community agency providing the tutoring service to the schools.

As occurred in the first year's assessment, data were obtained from school records. These data included the dependent variables of standardized test scores, grade point averages (GPAs) in reading and mathematics, and GPA gains in reading and mathematics. The following were among the independent variables: type of tutoring program, type of tutors used, number of hours students were tutored, absences from school, SES, race, gender, ages of students, and students' grade levels. These data were statistically correlated to obtain relationships between the dependent and independent variables.

Results of the second year's assessment were similar to the first year. Tutoring had little positive impact on test scores and GPAs in reading and mathematics. The results again showed that the plan of action for the after-school tutoring program was fundamentally ineffective. Recommendations from the previous year's assessment were reiterated. The tutor-tutee relationship must be improved to include substantial one-on-one tutoring and far less small group activity. Further, coordination among paid tutors and classroom teachers needs to occur if at-risk students are to improve in reading and mathematics. Finally, technology must be better integrated with instruction during the tutoring sessions so that students can receive more individualized help related to their specific academic shortcomings. The two years of assessment appeared to reveal more about the politics of community agency action than effective intervention in the lives of at-risk students.

A GENERALIZABILITY STUDY OF THE EFFECTS OF TRAINING ON TEACHER CONSISTENCY IN THE RATING OF STUDENTS' WRITING

Janice M. Stuhlmann, Amy Dellinger, and Cathy S. Daniel,
Louisiana State University

This study examined 40 kindergarten and first-grade teachers' abilities to use an established rubric to reliably rate 20 first-grade writing samples. Twenty-three of the teachers were trained to interpret the scoring dimensions of the rubric, while the other 17 teachers received no training. The purpose of the study was to investigate issues related to intra-rater and inter-rater

reliability of raters and to explore whether training raters to interpret the scoring dimensions on a rubric increased consistency.

In this study generalizability theory was used to enable researchers to estimate reliability by examining multiple sources of errors and their possible interactions simultaneously. Because teachers were nested within training conditions (school), ANOVA was run using a partially nested design. Variance estimates and generalizability coefficients were calculated from the ANOVA results for each scoring dimension and the total raw score of the rubric. Subsequently, variance estimates were calculated for each school (trained vs. untrained) on each of the scoring dimensions.

Initial results indicated no increase in reliability because of training. Raters were nested within training and because of this it was impossible to separate rater main effect from the rater by training interaction. To further examine the nature of variation in the rater within training term, separate analyses were performed on the data for trained and untrained raters. Data indicated a greater amount of variation in four out of six scoring categories for the untrained raters. The trained raters were more consistent as a group when scoring those categories. When comparing the two groups, the same pattern was also present in the total raw score of the writing samples. Less variance suggests that training increased raters abilities to reliably rate these scoring items. These findings have implications for rubric design, as well as teacher training in the use of portfolio assessment.

**A STUDY ON THE USE OF SELF-EVALUATION INVENTORIES AS A MEANS
OF ALTERNATIVE ASSESSMENT IN ELEMENTARY
SCIENCE METHODS COURSES**

Clifford A. Hofwolt, Vanderbilt University

With interest in building portfolios for prospective teacher education students and the search for alternative means of assessment besides traditional paper and pencil, can self evaluation inventories serve as an addition to a student's portfolio or as a means of alternative assessment? Self-evaluation inventories are instruments in which students rate their progress toward achievement, skill, and/or attitude of a course's objectives on a numerical scale, at the beginning and end of the course. This study investigated whether a student's perceived gain in achievement correlated with the actual gain in achievement.

Students in elementary science methods courses were give a self-evaluation inventory for initial assessment and a pretest of achievement at the beginning of the course. At the end of the course, students were given their self-evaluation inventory to make a final assessment and a posttest of achievement. A Pearson product-moment correlation was used to determine any significant correlation between gain in student achievement on the achievement test and the gain in perceived achievement on the self-evaluation inventories. A significant correlation between gain in achievement and perceived gain in achievement was found.

The findings indicated that student-reported gains in achievement, attitudes, and/or skills will reflect real gains. Through the use of properly constructed self-evaluation inventories, alternative means of assessment are possible. Self-evaluation inventories can lend credence to portfolios and aid in the process of reflection that teacher education institutions use today.

11:00 a.m.-11:50 a.m. **TECHNOLOGY (Display Session)** .... **Cabildo Salon**

**INFUSING TECHNOLOGY INTO INSTRUCTION: APPLICATIONS
OF TECHNOLOGY IN HIGHER EDUCATION**

Jane H. McHaney, Kennesaw State University;
Victoria McLain, Marymount University (LA);
and Gary Nelson, Oglethorpe University

The purpose of this display session was to share different facets of integration of instructional technology in teacher preparation using a multimedia format. The perspective included an overview from a state accrediting agency and three universities.

Technology is now in the forefront of instruction in teacher preparation and impacts all areas of the program. This presentation addressed issues related to technology and included: a non-traditional approach to the infusion of technology into the curriculum rather than an isolated course, an outline of technology competencies and how they are being met throughout teacher preparation, examples of application uses of technology in the field component specifically at Professional Development Schools, and examples of instructional applications such as the development of course syllabi on the web and e-mail communications with students. The use of technology was demonstrated throughout the presentation, and participants were given an opportunity to ask questions. Handouts were available.

DEVELOPING AN INTERACTIVE APPLICATION USING AUTHORWARE PROFESSIONAL

Vivian H. Wright and Margaret L. Rice, The University of Alabama

This presentation was designed to demonstrate the use of multimedia technology in creating computerized interactive applications using an authoring package that does not require extensive programming knowledge, but allows flexibility. Authoring packages provide an alternative for individuals not proficient in programming skills or who may not have the time to learn a programming language. Authorware Professional was used to create The Basic Athletic Training Interactive Quiz for use with individuals who will be taking the Athletic Trainers Certification Exam.

Athletic Trainers are required to pass a national certification exam requiring knowledge in five domains: prevention of athletic injuries, evaluation and management of athletic injuries, reconditioning and rehabilitation of athletic injuries, health care administration, and professional development.   The certification exam is difficult and has a low success rate. The instructional technology and sports medicine departments at a southern university collaborated to create an interactive quiz testing entry-level knowledge within these five domains. The quiz also allows students to assess areas of weaknesses.

The authoring package used to develop the computerized interactive quiz was Authorware Professional, which employs an object-oriented interface and does not require extensive programming knowledge or skills.   Authorware Professional enables the developer to use most conventional types of testing formats and also allows use of simulations, and so forth. Applications can include graphics, digitized video, and sound, and responses to items can be given in a variety of ways. Both the interactive quiz and Authorware Professional were demonstrated.

**HOW TO CREATE A CD-ROM YEARBOOK USING POWERPOINT:
A CONSTRUCTIVIST TEACHING APPROACH**

J. Gordon Nelson and Franklin L. King,
Jacksonville State University

This project was designed to help students develop computer skills by producing a CD-ROM for their annual high school yearbook. The project was taught within a constructivist teaching approach by Pamella Inmon at Jacksonville (FL) High School (i.e., guided discovery, reflective thinking, hands-on "authentic" activities, student collaboration, creative expression, development of organizational skills, and access to domain experts).

Developing a CD-ROM School Yearbook supplement was a highly motivating experience for the students. They gained expertise in PowerPoint, the main program used in this project. In addition, they developed skills in graphic design, storyboarding, and innumerable software and hardware computer-related skills. There were also many instances of positive effects in social and academic areas. The experience of working on the project led to a high level of rapport among the students and their teachers.

The final CD-ROM version included an opening video collage of school memories (sports, candid video clips of students and teachers, etc.). Next came a Main Menu page with the following titles: School Organizations, Student Pictures, Athletics, and Yearbook Committee (a creative and humorous morphed sequence of student faces). These were all hyperlinked to other menu pages using the action buttons and action settings in PowerPoint. The final result consisted of a combination of music, graphics, and video (e.g., a video clip of a winning touchdown, a clip from an exciting basketball game, etc.).

It was our experience that students could produce a CD-ROM yearbook for a fraction of the cost of a professional company, and with the major benefit of a long-term, highly- motivational learning experience. This is what happened at Jacksonville High School. Not only did the school collectively benefit with a higher school spirit, but also the students individually benefited from the teamwork, problem solving, development of computer skills, and a sense of belonging.

12:00 p.m.-12:50 p.m. **MSERF LUNCHEON
(Foundation Members Only)**. .... **Queen Ann Parlor**

12:00 p.m.-12:50 p.m. **RESEARCH SEMINAR (Training Session)**........................... **Bienville Room**

PRESIDER: Scott C. Bauer, University of New Orleans

GRADUATE STUDENT RESEARCH SEMINAR: TALKING ABOUT YOUR RESEARCH

Scott C. Bauer and Louvinia Wallace, University of New Orleans

This session was originally envisioned as a place for newcomers to MSERA to engage in meaningful dialogue about the process of doing research. The premise guiding the session was that students at all stages of their doctoral programs could benefit from engaging in opportunities to talk about research. Thus, the primary objective of the session was to provide a forum for doctoral students who have not yet completed research projects to discuss their research interests, proposals, methodologies, and questions with interested students and faculty.

Originally, this session was to be designed by faculty for students. Instead, given the focus of the session, members of the Leadership in Educational Administration Doctoral Support (LEADS) group at the University of New Orleans designed the session, and they acted as the hosts. Members of the group developed guide questions and activities for group discussion, and they facilitated the session.

In keeping with the theme, interested students and faculty were invited to bring their ideas, an abstract of a research proposal to share, or some specific questions to pose to their colleagues. Participants were urged to consider this a safe place to float an idea, voice some frustrations, or learn about an opportunity to participate in an ongoing research project. Most of all, they were urged to come prepared to engage in a dialogue about doing research.

1:00 p.m.-2:50 p.m.	**PROFESSIONAL DEVELOPMENT**
(Training Session)	**Bienville Room**

MODERATOR: Jimmy Carl Harris, Southeastern Louisiana University

PANELISTS: Larry G. Daniel, University of Southern Mississippi; Lea McGee, The University of Alabama; Dot Reed, Air University, U.S. Air Force; Stella Wear, Delta State University; and Robert Wimpelberg, University of New Orleans

MAKING IT: GOT THE DEGREE, GET THE JOB

This session was of particular interest to graduate students nearing graduation, as well as anyone else seeking a job change. A panel of deans, department heads, military education specialists, search committee members, and successful job-seekers, all with professional education positions within the MSERA region, offered a candid discussion of their expectations, standards, and experiences relative to the process of seeking and securing employment.

The subjects covered included the nature of the job market (university and other), requirements for various positions, career patterns, and networking for success. The subjects also included the format and content of resumes and curricula vitae, cover letters, the interview process, follow-ups, and negotiating a contract.

The session began with panelist presentations based on their individual areas of expertise and experience. This was followed by an open discussion, during which the panelists interacted with the audience and with each other. Audience questions and comments were encouraged. A paper, containing guidelines provided by the panelists of this session and of two previous sessions, was available to the audience.

1:00 p.m.-1:50 p.m.   **SCHOOL VIOLENCE (Symposium)** .... **Cathedral Salon**

ORGANIZER: Christopher H. Skinner, Mississippi State University

Thursday, November 5, 1998

TOOTLING: USING PEER-MONITORING AND INTERDEPENDENT GROUP CONTINGENCIES TO INCREASE INCIDENTAL PROSOCIAL BEHAVIOR IN ELEMENTARY STUDENTS

Overview

In most educational systems, proactive systems are in place that are designed to prevent incidental day-to-day antisocial behaviors. These proactive system are typically composed of rules and regulations and punishment for breaking these rules. Furthermore, in most classrooms and schools, a system has evolved were students help educators enforce rules and regulations by monitoring and reporting peers' appropriate behaviors (i.e., tattling). While these punishment-based systems have many negative side-effects, perhaps the biggest is that they shift focus and attention away from incidental prosocial behaviors. Thus, educators and students are often unaware of how often students engage in prosocial behaviors. In educational environments, prosocial behaviors should be encouraged, shaped, and rewarded, not ignored. This symposium presented three papers addressing this problem and investigating a remedy.

Tootling not Tattling
Christopher H. Skinner, Amy L. Skinner, and Tammy H. Cashwell,
Mississippi State University

This position paper delineated the problems with current punishment-based systems that rely on peers to report and educators to punish antisocial behaviors. A corollary proactive system where group contingencies are used to encourage peers to monitor and report incidental prosocial behaviors was described.

Peer-Monitoring and Interdependent Group Contingencies: Increasing Prosocial Behaviors in Second-Grade Students
Tammy H. Cashwell and Christopher H. Skinner,
Mississippi State University

This paper described an experiment that evaluated the effects of a tootling program on an intact second-grade classroom. A reversal design was used, and the number of daily tootles was the primary dependent variable.

Increasing Fourth-Grade Students' Reports of Peers' Incidental Prosocial Behaviors Using Direct Instruction, Interdependent Group Contingencies, and Public Posting
Amy L. Skinner, Christopher H. Skinner, and Tammy H. Cashwell,
Mississippi State University

This paper described the results of a similar study that was conducted with fourth-grade students. One interesting finding related to this study was that it showed the danger of implementing dependent-group-oriented punishment procedures.

Audience Participation

After the third study was presented the researchers outlined their future research. The audience was asked to participate by providing suggestions for: (1) group-activity reinforcers, (2) alternative target behaviors, and (3) future research.

1:00 p.m.-1:50 p.m.   **TEACHER EDUCATION (Discussion Session)**.........................**Gallier Salon**

PRESIDER: Robin A. Cook, Wichita State University

LEGAL ISSUES AND STUDENT TEACHERS

Dana R. Monts, Mississippi State University

Teacher educators continually ask the question, What is it that future teachers need to know? There seems to be a multitude of answers to that question, ranging from the concrete subject knowledge to the elusive answer of how to manage a classroom. One subject that seems to have received less attention than content or management is legal issues.   Teachers and administrators function in a complex environment that must address a wide range of legal issues. In most cases, when student teachers become a part of a school, their actions are subject to the same laws as are the teachers (Hartmeister, 1995). During the mid-eighties to mid-nineties, there has been a 200% increase in lawsuits involving teachers (Valente, 1994).

Numerous laws are enacted each year that affect teachers and their classrooms. It is essential that teachers and teacher educators are kept informed so that they are made aware of the legal consequences of their professional actions in carrying out duties and responsibilities. To be responsive to society and to better serve future teachers, teacher educators must have a firm understanding of the law as it effects children and teachers.

A survey was sent to area superintendents, principals and other administrative officials in order to gain knowledge of the laws that they believed were vitally important for student teachers to know. The survey listed 16 laws for the school personnel to rate in order of importance. Responses indicated the legal issues administrators felt were important for preservice teachers to be taught.

AN INQUIRY INTO TEACHER CONCERNS IN TAIWAN

Yih-fen Chen and Carolyn Reeves-Kazelskis,
University of Southern Mississippi

The purposes of this inquiry were to identify concerns of teachers in Taiwan, and contrast concerns of teachers in Taiwan with the 56 concerns that comprise the Teacher Concerns Checklist, Form B (TCC-B), developed in the United States.

A total of 294 teachers (155 preservice teachers and 139 inservice teachers) residing in central Taiwan volunteered to participate in the inquiry. Preservice teachers (female = 92, male = 63) included sophomore, junior, and senior students attending a teachers college; inservice teachers (female = 103, male = 36) included teachers with one or more years of teaching experience, representing four elementary schools.

Data were collected by administering a Chinese version of the Survey of Teacher Concerns (STC), a questionnaire developed by the researchers. Respondents were instructed to complete the questionnaire without discussion or interaction with other respondents. The first page of the STC requested demographic information and provided a definition of teacher concerns, including some examples of teacher concerns. The second page of the STC asked the question, "If you become a teacher, what will you be concerned about?" (for preservice teachers) or "As a teacher, what are your concerns?" (for inservice teachers). In the space provided, respondents listed their concerns, according to level of concern, under the headings of little concern, moderate concern, a lot of concern, and most concern.

Qualitative procedures were used to analyze the data. A total of 149 concern areas were identified. Preservice and inservice teachers expressed the same level of concern about 46 areas, but in six areas the two groups differed in level of concern. Both groups were highly concerned about nine areas related to traditional Chinese culture and the contemporary societal environment in Taiwan. Teachers in Taiwan expressed concern about 18 areas contained in the TCC-B, but identified several concern areas not included in the TCC-B.

FEEDBACK GIVEN DURING CLASSROOM INSTRUCTION BY STUDENT TEACHERS: IS IT EQUITABLE?

Melina N. Vaughan and Linda T. Jones,
Mississippi State University

This study analyzed verbal interactions of student teachers with children in grades K-8 during teaching. The sample was composed of 44 student teachers majoring in elementary education and their supervising teachers. Supervising teachers conducted observations of their student teachers to determine which children were receiving feedback and if the feedback was positive or corrective.

The researchers met with the supervising teachers to distribute and explain two feedback analysis forms to be completed during observations of each student teacher. Supervising teachers were instructed to record feedback given by the student teacher to the children during a 30-minute time period of whole-group instruction. On the first feedback form the supervising teacher recorded the number of positive and corrective responses given to females and males. On the second feedback form the supervising teacher recorded the number of positive and corrective responses given to high, average, or low achievers. Upon completion of the observation, the supervising teacher discussed the findings with the student teacher.

All feedback forms were collected and summarized. The results of the first feedback form indicated that 69% of the male students and 77% of the female students received positive feedback.

Forty-six percent of the male students and 27% of the female students received corrective feedback. Overall, student teachers gave more positive feedback (68%) to both male and female students than corrective feedback (32%). The results of the second feedback form indicated that 89% of high achievers, 88% of average achievers and 94% of low achievers received positive feedback. Corrective feedback was given to 30% of high achievers, 38% of average achievers, and 47% of low achievers.

The results of these classroom observations of the equity of feedback given by student teachers provided data to teacher educators, classroom supervisors, and student teachers.

1:00 p.m.-1:50 p.m.   **EDUCATION POLICY (Discussion Session)**..........................**Pontalba Salon**

PRESIDER: Ernest A. Rakow, The University of Memphis

U. S. EDUCATION POLICY RESEARCH AT THE BROOKINGS INSTITUTION

D. D. Kumar, Florida Atlantic University

A study of the education policy efforts at the Brookings Institution was undertaken. The Brookings Institution is a leading non-profit public policy research institute (think-tank) in the United States. The data for this study were derived from on-site interviews, the Brookings Institution library, as well as archival materials. The on-site interviews took place during the summer of 1996 and focused on contextual factors, including a review of research efforts in education policy at Brookings. The data from the interviews and those from the library and archival collections were analyzed in conjunction with each other.

The findings of this study showed that the Brookings Institution had a considerably long history of involvement in education policy research in the United States. The findings also revealed that a number of factors work together in policy research efforts at Brookings, including a progressive trend of involvement in education policy over time, availability of a critical concentration of scholars with some degree of interest in education reform, and an organizational climate conducive to research on innovative education policies. The latter included a sense of cohesiveness and mutual understanding and respect between the scholars and administrators. Strong administrative support, as well as technical support for research and dissemination of research findings, were key factors.

The findings of this study should help researchers, policymakers, and administrators in education gain a picture of education policy research at the Brookings Institution, and provide a foundation for launching comprehensive studies of the role of public policy research organizations in education reform in the United States.

IS "DOES MONEY MAKE A DIFFERENCE IN STUDENT ACHIEVEMENT?" AN EQUITY QUESTION?: AN ANNOTATION OF ATTEMPTS TO ANSWER IT

Lisa G. Driscoll and Jimmie C. Fortune, Virginia Tech

In state public school finance equity litigation and in school district budget discussions someone inevitably raises the question, "Does money really make a difference in school achievement?" On the surface the question appears simplistic and easily delineated. However, this simplicity may be only an illusion. The answer to the query may be much harder to develop and may not be as utilitarian as expected.

Since the advent of the Coleman et al. regression analysis and its consequential basis for federal government intervention and the Hanushek counting analyses that popularized an errant

perception that extensive waste of monetary resources pervaded public education, many research methodologies have been applied by many researchers to ascertain the relevancy of these claims.

This paper was directed toward the compilation of an exhaustive annotated bibliography to address the aforementioned question. Each annotation included a brief description of each study, its results, and the conclusions advanced therefrom. A matrix was developed in accordance with the study methodology, its results, and the conclusions drawn.

IS "DOES MONEY MAKE A DIFFERENCE IN STUDENT ACHIEVEMENT?" AN EQUITY QUESTION? WHY THE QUESTION HAS NOT BEEN ANSWERED

Lisa G. Driscoll and Jimmie C. Fortune, Virginia Tech

The relationship between public school funding and student achievement has been germane to the development and implementation of state public school funding policies and evaluated in school finance equity litigation. There appear to be compelling forces that suggest that there existed no relationship between money and student achievement. Some have even suggested that this question cannot be definitively answered. Conversely, there are also compelling legal and rational arguments that have shown such a strong, positive relationship.

Six methods have been used to address the question, "Does money make a difference in school achievement?" These methods include: the linear correlation method of production function analysis, the multiple regression method of production analysis, a global across time comparison model, a threshold driven comparison model, and a structural equation model. Each of these methods has been applied with variable levels of success to arrive at disparate study conclusions.

A critique of these methods in accordance with their underlying methodological assumptions was made. None of the research reviewed was without criticism. Two summary methods, the counting method of literature summary, and the meta-analysis literature summary were examined. The paper concluded that none of the methods answered the question solely without criticism. However, the preponderance of the evidence from these studies seemed to indicate that money did make a difference in student achievement.

1:00 p.m.-1:50 p.m.   **EXCEPTIONAL EDUCATION**
                            (Discussion Session) .... **Ursulines Salon**

PRESIDER: Linda T. Coats, Mississippi State University

THE RELATIONSHIP BETWEEN SELF-CONCEPT OF LEARNING DISABLED AND MENTALLY RETARDED STUDENTS AND TIME SPENT IN A GENERAL EDUCATION CLASSROOM

Donald F. DeMoulin and Stan Wigle,
The University of Tennessee, Martin

This study investigated the relationship between the self-concepts of students with disabilities and the varying time that such students spent in the general education classroom. Specifically, this study tested the hypothesis that there was no significant relationship between self-concept levels and time spent in inclusive settings.

The DeMoulin Self-Concept Developmental Scale (DSCDS) was administered to 170 disabled or mentally retarded students in grades kindergarten through three from participating schools

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in western Tennessee. The DSCDS is an unbiased measure that describes overall self-concept of participants and is subdivided into self-efficacy (sensitivity toward school) and self-esteem (attitude toward self) components. Teachers were asked to complete a survey and rate each student on a scale from zero (not descriptive) to 10 (completely descriptive). On this survey, they were to indicate their perception of the general behavior of each student and to log the amount of time students with disabilities spent in a regular classroom setting.

The data were subjected to a Pearson correlation to determine the magnitude and nature of the relationship between self-concept and time spent in a general classroom setting. Results indicated that a significant relationship existed between self-concept and time spent in inclusive settings for both learning disabled and mentally retarded students.

Data also indicated some interesting differences in the nature of the relationship that existed for each group. These differences indicated that perhaps inclusion should not be used in a blanket manner for all students. Instead, data suggested that a more flexible and sophisticated approach be taken when determining the amount of time that students with disabilities should be served in the general education classroom. The findings of this study strongly suggested that self-concept is an important component to consider when making placement decisions for students with disabilities.

READING DISABILITIES VIEWED FROM AN INTERACTIVE PERSPECTIVE

Gerald J. Calais, McNeese State University, and Jo Ann Belk,
Mississippi State University

Both the intrinsic and extrinsic perspectives on the problems of reading disabilities are seriously flawed, especially from a practitioner's point of view. Neither perspective makes allowance for the interaction of within-child characteristics and the environment. Accordingly, an interactive perspective is crucial for a thorough understanding of reading disability. Such a perspective should be based upon theoretically relevant characteristics, account for individual differences typically relevant to reading achievement, and focus on the abilities center to reading acquisition in nondisabled readers. The aforementioned attributes of an interactive perspective should be the base for any educationally effective model of reading disability.

The literature can be categorized into two major paradigms on the problem of reading disability: the intrinsic paradigm and the extrinsic paradigm. The intrinsic paradigm encompasses a variety of theoretical models; the most important of those models, historically, were the medical model, the underlying-abilities model, and the direct-instruction model. Each of the models shares a fundamental flaw: an exclusive focus on deficits within the child and the propensity to assume a biological disorder as the cause of reading disability. In contrast, the extrinsic paradigm perceives most reading failure to be attributable to environmental, instructional, or motivational causes. Unfortunately, this paradigm, too, is flawed because it ignores the role played by children's intrinsic characteristics in learning. Because neither major paradigm enables practitioners to see the child and the environment interact with one another, an authentically interactive paradigm on reading disability is essential.

Implications of an interactive paradigm include: an integrative model of reading disability, greater insight into children's learning difficulties resulting in more effective techniques for resolving them, a reduction in the number of children classified as reading disabled, a modified role for learning disability specialists, and educational change--both in the classroom and at the broader systemic level.

Thursday, November 5, 1998

AN INVESTIGATION OF THE EFFECTS OF MUSIC ON TWO EMOTIONALLY DISTURBED STUDENTS' WRITING MOTIVATIONS AND WRITING SKILLS

Cindy J. Honeycutt, Milligan College

Most emotionally disturbed students are easily distracted during their writing. The problem for educators is to motivate the students to become involved in the writing process. This study demonstrated that music could be used as a tool to motivate emotionally disturbed students to develop a positive attitude about writing that would result in a higher volume of writing output and improved writing skills. The research focused on two fourth-grade, male students. The data collection instruments included a rubric writing skills evaluation, a sentence quantity evaluation, and an opinionnaire survey. The research indicated that music improved writing skills, increased output volume, and enhanced attitudes related to writing. Research needs to continue to better define how music can be utilized as a tool to enhance motivation to write and to develop writing skills.

1:00 p.m.-1:50 p.m. **STATISTICAL METHOD (Discussion Session)** .... **Beauregard Salon**

PRESIDER: Jianliang Wang, Western Kentucky University

CONDUCTING REPEATED MEASURES ANALYSES USING REGRESSION: THE GENERAL LINEAR MODEL LIVES

Robert D. Wells, Texas A&M University

In some experimental designs it is feasible to assign subjects to several experimental conditions rather than only one condition each (i.e., a so-called fully-crossed design). The first design is a so-called repeated measures design. Such designs can have considerably more power against Type II error; the designs at the extreme have an effect related to multiplying the sample size by a multiple associated with the number of repeated conditions.

The purpose of the present paper was to review the basics of repeated measures designs. It was demonstrated that repeated measures ANOVA can be conducted using linear regression, which is the most general case of the univariate General Linear Model.

However, the repeated measures design, like most analyses, requires that certain assumptions must be met in order for the test statistics to be accurate (e.g., the sphericity assumption). Data sets differ as regards how well the necessary assumptions are met. A wide array of analytic choices are available when the assumption is not perfectly met. These include either Geiser-Greenhouse or Huyhn-Feldt corrections that are applied to degrees of freedom, or the use of multivariate methods even for designs in which a single dependent variable is measured multiple times. The use of statistical packages to implement these various analyses was illustrated.

PROTECTED VERSUS UNPROTECTED MULTIPLE COMPARISON PROCEDURES

J. Jackson Barnette, University of Iowa, and James E. McLean,
The University of Alabama at Birmingham

Conventional wisdom suggests that the omnibus *F*-test needs to be significant before conducting post-hoc pairwise multiple comparisons. However, there is little empirical evidence

supporting this practice. Protected tests are conducted only after a significant omnibus *F*-test while unprotected tests are conducted without regard to the significance of the omnibus *F*-test.

Monte Carlo methods were used to generate replications expected to provide .95 confidence intervals of +/-.001 around the nominal alphas of .10, .05, and .01 for 42 combinations of n (5, 10, 15, 20, 30, 60, and 100) and numbers of groups (3, 4, 5, 6, 8, and 10). Unprotected and protected tests were conducted using the Dunn-Bonferroni, Dunn-Sidak, Holm, and Tukey's HSD procedures. Means and standard deviations of observed Type I error-rates and percentages of observed Type I errors falling below, within, and above the .95 CI's were determined for total number of Type I errors.

Differences in observed Type I errors for sample size and number of groups were minimal. However, there were differences in Type I error control among the four multiple comparison procedures and when the tests were conducted as protected or unprotected. The Dunn-Bonferroni had the best control of Type I error as an unprotected test with 96.0% of the observed Type I errors fell below the .95 CI when used as a protected test, thus being very conservative. As unprotected tests the Dunn-Sidak and Holm tended to be liberal, but were conservative as protected tests. HSD was liberal in both situations, but was much more as an unprotected test. These results, combined with the ease of using the Dunn-Bonferroni, suggested that this method may provide the best and easiest control of Type I error when used in an unprotected mode.

PAIRWISE MULTIPLE COMPARISONS IN A RANDOMIZED BLOCK DESIGN

Richard Kazelskis, The University of Southern Mississippi

When the assumption of sphericity (circularity) is met in repeated measures designs, multiple comparisons following a significant omnibus *F*-test are fairly straight forward. When sphericity is not met, however, procedures for carrying out multiple comparisons are more problematical.

The present study used Monte Carlo methods to explore some approaches to making multiple comparisons in a randomized block design across varying levels of sphericity for a variety of sizes of the design for three selected multiple comparison techniques. In particular, 3000 replications were run for all combinations of (a) k = 3, 4, and 5 measures, (b) n = 10, 20, and 30 blocks, and (c) four levels of departure from sphericity. For each replication, a two-stage multiple comparison approach was utilized, i.e, all pairwise multiple comparisons were carried out if, and only if, the omnibus *F*-test was significant. Type I error rates were tallied for Fisher's LSD test, the Scheffe test, and the Bonferonni adjusted test using separate and common error terms for each comparison and using a common error term with adjusted degrees of freedom.

It was found that the Huyhn-Feldt adjustment did not adequately control Type I error rates when departure from sphericity was moderate to small. This was evident in the Type I error rates both for the omnibus *F*-test and for the follow-up multiple comparisons. Additionally, using a common error term with degrees of freedom adjusted had little effect on the Type I error rates compared to those based on a common error term with unadjusted degrees of freedom. Finally, the use of separate error terms had little effect on the Type I error rates for the LSD test. Separate error terms resulted in very conservative error rates for the Scheffe test and for the Bonferonni controlled tests.

1:00 p.m.-1:50 p.m.   EDUCATION REFORM (Display Session) .... **Cabildo Salon**

IMPROVING AN ELEMENTARY SCHOOL FROM WITHIN: THE OKOLONA STORY

Jack Blendinger, Mississippi State University, and Lauren Wells,
Lauderdale County (MS) Public Schools

This longitudinal case study presented in this poster session focused on efforts to improve a rural K-6 elementary school from within during a five-year period (1993-94 through 1997-98). Approximately 600 students, mostly African American, attended the school. Improvement efforts were based on the premise that meaningful and lasting school improvement must come from within schools themselves and that those closest to students--teachers, staff and parents--are best qualified to implement and sustain positive change through creating a community of learners.

Data collected over the five-year improvement period from field-based observations, interviews with persons affected by the changes, and artifacts, such as before-and-after photographs, were shared with those attending the session. Expectations for teaching and learning, curricular changes made, and the school's overall culture were addressed. In addition, a brief documentary about the school accompanied the presentation.

To motivate school staffs in making sincere commitments to educational reform, actual anecdotal cases of improving schools from within are needed to provide authenticity to the literature base addressing the revitalization of teaching and learning. The findings presented in this case study make a meaningful contribution to that literature base.

DEVELOPING AN INNOVATIVE MODEL OF ELEMENTARY TEACHER EDUCATION

Sunya T. Collier, Georgia State University

The innovative teacher education program described in this display session is in its first year of implementation. Therefore, the purpose of the presentation was to articulate the design elements and goals of the program within the context of data collected from participating preservice teachers and cooperating field placement teachers during the pilot study year. Participant observation, focus group interview, and survey methods provided both qualitative and quantitative data.

Many preservice teacher education programs discuss the importance of the development of reflective thoughts while others point to the importance of understanding the development of the child. Often, there is more emphasis on pedagogy than there is on rationale for a particular approach, leaving preservice teachers in the lurch with regard to why one instructional choice is more appropriate than another in any given context. This innovative approach to educating elementary preservice teachers takes both notions into account in a fashion that requires holistic examination of the developing child in preschool through fifth grade. Specifically, preservice teachers experience a program that is recursive, integrated, and appropriate to sequential grade-level field placements. Students are progressively exposed to not only the content, but also the theoretical underpinnings that provide the continuity needed to cultivate a habit of critical reflectivity as they interact with three- and four-year-old children, four- and five-year-old children, six- and seven-year-old children, eight- and nine-year-old children, and finally, ten- and eleven-year-old children. Through this process, students have many opportunities to make systematic connections between individual learning needs and compatible teaching decisions at each level of the elementary school experience. A key feature of this program was that students began and ended the programs a cohort and collaborated with three university professors and five cooperating elementary school teachers in learning, teaching, and researching throughout the four-semester program.

A COMPARATIVE STUDY OF THE INITIATIVES AND ASPIRATIONS
OF TWO LABORATORY SCHOOLS

Rebecca McMahon, University of Scranton, and Beatrice K. Volkman,
Mississippi University for Women

A laboratory school is defined as a "school that falls under the jurisdiction or guidance of a teacher-preparation institution of higher learning, with school facilities used for lesson demonstrations, research, and practice teaching" (Spafford, Pesce & Grosser, 1998, p. 151). By definition, these schools share several common characteristics. Despite these commonalities, however, many variations exist within this broad category of schools.

This display presented the results of an investigation into the working relationship of two laboratory schools and their sponsoring institutions. Detailed descriptions, including both student and teacher demographics, mission statement, and curriculum, were provided for the University of Scranton Campus School in Scranton, Pennsylvania, and the Mississippi University for Women Demonstration School in Columbus, Mississippi. In addition, each school's relationship with its sponsoring institution was evaluated in the following three areas: (1) student involvement, (2) faculty partnerships, and (3) goals for the future.

Information providing the basis for these evaluations was collected from a variety of sources. Following a review of promotional literature available for the two schools, teachers at each site completed a questionnaire containing 12 open-ended questions, and an interview was conducted with each laboratory school administrator. The data received were, then, validated through a series of on-site visits conducted by the researchers over the course of a semester.

The findings of this study suggested implications for teacher educators working with faculty/staff in laboratory, public, private or parochial school settings.

2:00 p.m.-2:50 p.m.	**TEACHING STATISTICS AND RESEARCH**
	(Symposium) .... **Cathedral Salon**

ORGANIZER: Jimmie C. Fortune, Virginia Tech

DISCUSSANT: Lisa G. Driscoll

BUILDING STUDENT PARTICIPATION INTO INSTRUCTION IN RESEARCH METHODS

**Building Conceptual Understanding of Research and Statistical
Methods Through Student Projects**
Margaret G. Jamison, University of Louisville

A Survey of Qualitative Methods Taught Through the Use of Student Participation
Jimmie C. Fortune, Virginia Tech

The Use of Computer-Presentation Programs to Teach Research Methodology
Abbot Packard, University of Northern Iowa

Generally, research courses serve as portal courses for graduate study in education. Students with a diverse range of interests and abilities find them uninteresting, difficult, and not useful

to real educational settings. Fear may motivate some of these students' perceptions, but the standard chalkboard and lecture method of instruction may also be a contributing factor. This symposium addressed three attempts to instruct students in research methods so as to alleviate these perceptions and fears. All three of the methods use student participation as the primary instructional methodology. One method teaches research methods and statistics by having students conceptualize and actively participate in designing and writing research projects in their own educational area of interest. The second method uses student presentations, book reports, and skill development exercises to teach a survey of qualitative methods. The third method uses a computer-based set of topical programs and student-control of the learning process to teach six topics in research. It is believed that the success of these three courses may be due in part to the element of student involvement.

2:00 p.m.-2:50 p.m.   **TECHNOLOGY (Discussion Session)**..**Gallier Salon**

PRESIDER: Jim Flaitz, University of Southwestern Louisiana

NOTHING VENTURED, NOTHING GAINED: THE STORY OF A COLLABORATIVE TELECOMMUNICATIONS PROJECT

Denise Johnson, University of Central Arkansas

The purpose of this presentation was to describe how one university formed a partnership with a local elementary school that modeled sharing and expertise regarding the integration of computer technology, specifically telecommunications, into the curriculum. The project was conducted during the 1996-97 academic school year in a suburban town in the south. The project was developed collaboratively and involved the university faculty, the principal and fourth-grade teachers, and approximately 90 fourth-grade students.

Faculty training on the use of interactive telecommunications for the three fourth-grade teachers and the principal was conducted once a week for five training sessions. Hands-on experience was provided by pairing each teacher and student in the fourth grade with a teacher or student "e-pal" in the fourth grade at an elementary school in the southeastern region of the U.S. The teacher and student e-pals corresponded via e-mail. Student e-pals were involved in literature-response dyads by responding to a piece of literature that was provided for all students participating in the project and read simultaneously. The students began by responding to specific questions posed by the teachers and then, through time and training, were to move to more critical and evaluative responses. Additionally, each of the principals was to visit the other's elementary school. Toward the end of the year, the teachers were to prepare a culminating event that would finally allow the students to see and hear their e-pals in person through a videotaped presentation.

The teachers in the local elementary school were asked to keep a journal describing their feelings about the project and their observations of the students' reactions. Copies of all students' e-mail messages were also kept. The journals and messages were analyzed, and tentative conclusions were drawn about the effectiveness of integrating telecommunications into the language arts curriculum.

INDUSTRY-RELATED FACULTY DEVELOPMENT IN TENNESSEE'S TWO-YEAR COLLEGES

Collin T. Ballance and Sydney U. Rogers, Nashville State Tech, and
Roger J. Deveau, University of Massachusetts at Dartmouth

The Tennessee Exemplary Faculty for Advanced Technological Education (TEFATE) project was funded by the National Science Foundation for the two-year period from 1996-97 through 1997-98. The purpose of this project was to prepare faculty to create a work-based learning environment that supports the growing computer networking and telecommunications industries. Devoted in part to faculty development, TEFATE has had a significant impact on faculty members from two-year schools in Tennessee.

Interdisciplinary teams made up of faculty from mathematics, English, science, engineering technology, and information systems were formed at each of five participating schools. These faculty teams were augmented by partners from four-year colleges (Engineering Technology), secondary schools (Tech Prep), and industry.

Faculty development activities included workshops, industry site visits, and industry internships. Workshop topics included Team Building, Critical Thinking, Telecommunications, Training, Case Study Development, Assessment Strategies, Cooperative Learning, Problem-based Learning, and Case Study Implementation. Industry visits included enterprises as diverse as manufacturing plants, telecommunications providers, automobile assembly facilities, and major regional power plants. Faculty served in equally varied internships, including NORTEL, Oak Ridge National Laboratories, and MCI. TEFATE interns performed a variety of tasks for the host industries including training, establishing intranets, installing cabling, conducting marketing studies, and designing networks.

TEFATE enriched the personal and professional experience of the faculty, exposing them to novel technology-related applications through the site visits. Industry internships further served the faculty who re-entered the classroom with real-world and work-based experiences with which to motivate and energize their students. Supported by the workshops and training activities, TEFATE faculty and their partners developed over 20 case studies in telecommunications, some already in use in our classrooms. Ultimately, 25 such case studies will be field-tested, refined, and published on the Internet.

All features of this project were discussed in this presentation. Sample case studies were shared.

AN INTERNSHIP IN BUSINESS AS FACULTY DEVELOPMENT

Vickie V. Ballance, Hospital Hospitality House of Nashville, and
Charles Hoover and Claudia House, Nashville State Tech

As a component of the Tennessee Exemplary Faculty for Advanced Technological Education (TEFATE) project, faculty from participating two-year colleges served internships in host businesses and industries. Internships served by faculty benefit the host businesses, the faculty interns, the colleges, and ultimately the students in the classroom. This paper chronicled one internship served by a faculty member from Nashville State Tech in a local health-care- related business.

Hospital Hospitality House of Nashville provides respite, hospice, and support for the families of seriously ill patients in area hospitals. Housed in aging facilities, this agency faces the dual challenge of maintaining comfortable accommodations for its guests while also implementing modern technologies to support improved client service.

A faculty intern from Nashville State Tech, using resources provided HHH by a foundation grant, coordinated the acquisition and installation of a local area network that supports e-mail, accounting, and ad hoc database and reporting functions for this small agency. The internship provided the faculty member with real-world applications of networking technology for use in his classes. Case studies, written by Nashville State Tech faculty, based upon this internship, were field-tested during the fall 1998 semester and were distributed under the TEFATE dissemination effort at the conclusion of the fall semester.

Internships hold the promise to enrich the professional experience of higher education faculty and bring real-world problems and issues directly into the classes of the faculty interns. This paper highlighted the experience of the faculty intern, the perspective of the host business' executive director, and the case studies developed under the internship.

2:00 p.m.-2:50 p.m.   **EDUCATION REFORM (Discussion Session)**........................**Pontalba Salon**

PRESIDER: Marcia Abide, Loyola University of New Orleans

AN IN-DEPTH LOOK AT THE TYPES OF DECISIONS MADE BY KENTUCKYÆS SCHOOL-BASED, DECISION-MAKING COUNCILS

Beverly M. Klecker, Jerry L. Austin, and Leonard T. Burns,
Eastern Kentucky University

With few exceptions, all public schools in Kentucky were mandated by the state legislature to have school-based decision making councils by July 1, 1996. Kentucky's commitment to school-based decision making went beyond the advisory nature of many site-based models; the legislature gave legal authority to local councils. The purpose of this study, funded by the Kentucky Department of Education, was to examine the types of decisions being made by the Councils from July 1, 1996 through November 30, 1997.

A target sample of 344 Councils was selected through a stratified random sample from the population of 1032 SBDM Councils in Kentucky (strata were regions of the state and school level). Data sources requested by mail from the Councils were: (1) meeting minutes and (2) demographic information. Returns were received from 137 Councils (40%). The sample was representative of the target sample by region and level. Nine decision categories were defined by state law. The decisions described in the Councils' minutes were coded by category by two researchers. Data were then analyzed using SAS. In addition to descriptive statistics, ANOVAs were computed to compare frequencies of decisions by demographic categories.

Most members of the SBDM Councils were new to the process. More than half of the principals (54.8%) had been at their school three years or fewer. Ninety-one percent of the parents and 78% percent of the teachers had served on the Councils two years or fewer. Much variation was found among Councils on types of decisions, frequency of meetings, and methods of documentation. "Budget" decisions were the most frequent (24%), 18% of the decisions concerned "procedural" matters (e.g., setting meeting times), and 14% of the decisions were categorized as "personnel consultation." At this early stage of implementation, Kentucky's SBDM Councils were infrequently addressing curriculum, instructional practice, or professional development.

EVALUATION OF THE FIRST-YEAR IMPLEMENTATION OF GRADUATION 2010

Antony D. Norman, Mary Hall O'Phelan, and Gayle W. Ecton,
Western Kentucky University

A plethora of recent research has provided new data about enhancing the operation of the brain and early child development, with clear implications for education. In particular, research has indicated the importance of at least eight areas to brain development and success in school. These areas are: (1) the development of strong reading skills, (2) the development of thinking skills, (3) early exposure to foreign language, (4) early exposure to music, (5) early exposure to the arts, (6) family involvement in the child's education, (7) community involvement in schools, and (8) the physical and emotional well-being of the child.

In early 1997, a committee of public educators and concerned citizens in a mid-south state's county school system was formed to examine these research findings and to determine what curricular changes could be made that would enhance the intellectual capacity of children in the county. The committee's work led to the development of the Graduation 2010 program, which outlined goals and objectives related to the above eight strands to be implemented across all elementary schools. The program was so named for the children who entered kindergarten in the fall of 1997 as part of the class of 2010, the first class to benefit from these educational changes for a full 13 years.

Data collection for year one of this program consisted of two open-ended surveys aimed at measuring the extent to which the various strands of the program were implemented across each school in the district. These surveys were circulated to principals at mid-year and at the end of the year. Analysis of these surveys showed that some strands were installed by nearly all schools by year's end, whereas other strands were more varied in implementation. Furthermore, principals' comments revealed early benefits from and unanticipated obstacles to the implementation of each strand.

UNDERSTANDING TEACHER RELATIONSHIPS DURING A MANDATED REFORM

Joan T. Gremillion, Jefferson Parish (LA) Public School System,
and Caroline Cody, University of New Orleans

This study looked at Title I mandated school-wide decision making in one school seeking to understand the relationships between and among teachers that existed and/or developed during the change process. The study was inspired by SarasonÆs (1971, 1995) reminder to researchers that teacher relationships are complex and that these complex relationships have rarely been the object of study. The study focused on micropolitical relationships as they underlie subgroups/subcultures in the school and used WeissÆs (1995) conceptual framework to guide the study. She proposes that interests, ideologies, and information that teachers bring to the change process as well as aspects of the institution influence decision-making (reform) processes in the school. Despite an evolving literature that employs a micropolitical perspective on schools, there is very little empirical or theoretical work that approaches micropolitics in schools from the teacher-to-teacher perspective.

The study employed a qualitative design to gain a rich understanding of the phenomenon in question. In this case, the phenomena of micropolitical relationships were studied in the real-life context of the school, and all data sources--documents, sociograms, field notes, focus group interviews, elite interviews, and follow-up teacher interviews--existed within the confines of the school and were interactive with the context throughout the study.

Micropolitical theory explains some but not all that happened as this school faculty navigated the requirements of Title I schoolwide planning. The data supported two findings that brought new understandings about how teacher relationships affect the process: (1) there are

individuals who bridge the subcultures of the school functioning in multiple subgroups, and (2) teachers make mental calculations about where their energies should be spent during reform, and (3) relationships affect those calculations.

Future research efforts need to be directed toward further understanding of the impact of teacher relationships and harnessing the power they hold to influence reform. Policy makers responsible for initiating reform efforts should craft policies that value the interests, ideologies, information, and institution of those that must actively participate and change. Institutional factors must be designed to promote and not constrain interaction. Administrators can design ways to spread commitment to the reform by acknowledging and activating the influence of relationships, particularly those involving people who function in more than one subgroup.

2:00 p.m.-2:50 p.m.	**MINORITY ISSUES AND DIVERSITY**
	(Discussion Session) .... **Ursulines Salon**

PRESIDER: Nola Christenberry, Arkansas State University

THE FACTORS AFFECTING THE CAREER CHOICES OF AFRICAN AMERICANS AND THREE CAREER COUNSELING SUGGESTIONS

Susan G. Harrington, Nicholls State University

Three major factors affect the career choices of African Americans. First, the future of the American Organizational Structure is strongly based in technology, yet approximately two-thirds of the African American population, which is projected to increase by 12.9% by 2000, reported their level of education at high school completion or lower. Second, African Americans have remained in careers (education, social work, medicine, law, government, mortuary science, and religion) that directly service their community. These "protected" careers have supported the cultural values, *Nguzo Saba,* of the Afrocentric perspective, that are vital to the maturation of African American youth. Finally, career counselors are encouraged to identify and explore their own prejudicial thinking and discriminatory behaviors as well as offer career guidance to African Americans that incorporates all aspects of the Afrocentric perspective.

The educational level and cultural values of African Americans imply certain implications that must be included in career guidance programs for African Americans. The programs developed to guide African Americans must include techniques that help them advance within the American Organizational Structure while taking into consideration the needs of the culture. Counseling approaches that have been found to be effective include methods using social cognitive theory, a reality-behavioral combination theory, and the *I Have A Future* program that was designed specifically for African American high schoolers.

AFRICAN AMERICAN IDENTITY DEVELOPMENT: A REVIEW OF THE LITERATURE

Janeula M. Burt and Glennelle Halpin, Auburn University

Knowing and understanding who we are and what we are capable of is essential in the development and maturity of all human beings. Possessing a clear sense of who we are as individuals as well as where we fit into society is one of the most often neglected tasks of adulthood. Establishing one's identity is an extensive obligation for which there is no one set blueprint or how-to guide that will

unequivocally develop the single best personality or identity. Although researchers (cf. Chickering, Marcia, Erikson, Freud) have generated standard theories of human personality development, admittedly, researchers also acknowledge the gap that exists in the literature with regard to African Americans and other cultural and ethnic minority group members.

Although there are some models of black or racial identity, most fail to incorporate Erikson's epigenetic or basic ascendancy principle of development; focus upon how negative or deviant assumptions shape the African American personality; attempt to link the various non-majority ethnic groups together as being similar, at least, to one another; or demonstrate how much members identify with the cultural traditions, practices, and beliefs. In order to assess as well as understand the contemporary African American identity, it is important that the unique historical, cultural, economic, educational, and social experiences of African Americans also be incorporated. In studying the effect that race has on the development of African American identity, researchers must also understand and appreciate how the influences of family socialization, collective consciousness, social class, gender, world view, cultural connectedness, self-concept, spirituality, and other aspects of daily life affect African American identity development. In this review of the literature, theory and research related to African American identity development were presented.

THE FUTURE: REFLECTIONS OF URBAN AFRICAN AMERICAN ADOLESCENTS

Detris T. Honora, Southern University

Orientation to the future occurs within a certain cultural and historical context that often influences adolescents' perceptions of what is possible in the future. Adolescents use their cultural knowledge of anticipated life events and of current conditions to predict future options. This in-depth qualitative study examined the connection between future time perspective and academic achievement among 16 low-income, urban African American adolescents (four high achieving and four low achieving students from each gender group).

Data collection consisted of a sentence completion task, a future events listing, a 60-90 minute semi-structured interview, and a follow-up interview. The instruments identified a student's whole range of concerns and aspirations regarding the future in terms of content, affect, and extension.

High achieving girls tended to express more future goals and expectations, were more optimistic regarding the future, and tended to project farther into the future than all other ability groups, followed by high achieving boys. Low achieving students, on the other hand, were less certain regarding the future. For low achieving students, the future was something they had considered, but had given little thought to how they would reach their goals. The most notable difference across gender groups was in the feelings students harbored toward the future. Boys tended to discuss and were more aware of obstacles to their future goals and expectations than girls. Boys, regardless of their ability group, held a pessimistic and somewhat fatalistic view of the future.

This study provided a significant contribution to the study of the lives of low-income, urban African American adolescents, opening a dialogue for which educators could understand the hopes, fears, and aspirations of these adolescents, and how future outlook could impact student achievement. Information gained from this study can by used for career counseling and curriculum development.

2:00 p.m.-2:50 p.m.	**RESEARCH IN THE SCHOOL**
	(Discussion Session) .... **Beauregard Salon**

PRESIDER: Gerald Halpin, Auburn University

RESIDENTIAL AND NON-RESIDENTIAL SECONDARY EDUCATION PROGRAMS FOR THE GIFTED: A FOLLOW-UP STUDY BEYOND HIGH SCHOOL

Marian N. Jackson, University of Southwestern Louisiana

The purpose of this study was to examine the effectiveness of beyond high school of residential and non-residential secondary-level, gifted education programs. A total of 362 individuals who graduated from between 1988 and 1996 from three types of programs for gifted high school students in Louisiana responded to the Gifted Graduate Questionnaire and the Tennessee Self-Concept Scale. The Gifted Graduate Questionnaire included items on participants' demographic characteristics, college entrance test scores, post-secondary education, and career accomplishments. The Tennessee Self-Concept Scale measured self-esteem and self-concept in terms of identity, feelings, and behavior.

Findings from this study suggested that as a group, graduates from secondary education programs for the gifted appeared to be more similar than dissimilar on dimensions of college preparation, post-secondary education, and career accomplishments. The findings revealed that graduates in this research have above average college-completed GPAs (M=3.5), although these GPAs were not significantly different across program type. Program differences occurred for self-esteem showing higher self-esteem levels after completing undergraduate school from a system-wide program for gifted secondary students than graduates from a residential program for gifted secondary students.

DUAL PLACEMENT: MOVING TOWARD AN OPTIMAL MODEL

Anne Hamilton and Beth Counce, University of Montevallo

As our education programs incorporate additional field placements and as mandated requirements are addressed, it is critical to determine the best possible design for field placements. This study explored four models of 15-week student-teaching internships that included upper- and lower-level placements in the following formats: seven and seven (seven weeks at one grade level and seven weeks at another), ten and five (ten weeks in one grade level and five weeks in another), five and ten (five weeks in one grade level and ten weeks in another) and 15 weeks in one grade level.

Perceptions of concerns, strengths, and suggestions regarding the various models were identified by early childhood, elementary, middle and secondary interns after the completion of an internship. After internship, cooperating teachers, university supervisors, adjunct clinical instructors, and members of the Department of Curriculum and Instruction were also surveyed how their opinions related to the models. Following the internship, the researchers held random interviews with students, teachers, principals, supervisors and faculty to enrich the study.

Research-coded responses from interns, cooperating teachers, principals, supervisors and university faculty based on concerns, strengths, and suggestions. Audio-taped interviews included foreshadowed questions, such as: What were your perceptions about the model(s) of internship in which you participated this semester? What were concerns about the placement? What were strengths about the placements? Were there suggestions for future placements? Interviews were transcribed and coded.

Data from surveys and interviews were analyzed to determine strands and patterns. General conclusions indicated that the majority of participants supported dual placements. Strengths also supported dual placement models. Concerns and suggestions primarily revolved around the lengths of time for specific models and assignments required for the placements. The concerns, strengths, and suggestions of the various categories of respondents provided a basis for program improvement.

CORE VALUES: AFTER THREE YEARS OF RESEARCH, WHAT DO WE KNOW?

Deborah J. Grubb, Jeanne Osborne, and Daniel Fasko, Jr., Morehead State University

Because teen violence, crime, drug abuse, and teen pregnancies are a concern to parents and educators, the researchers studied the values that are important to adolescents and educators. The sample consisted of 550 high school students from three counties, 35 educators (in one study), and another 88 educators in a follow-up study. Teens completed a survey of their values, while the first sample of 35 educators completed a survey reflecting their perception of teen values. An additional sample of 88 educators completed a survey reflecting their own values. The survey instruments were a combination of Phi Delta Kappa's "How Would Teenagers Respond?", "What Do You Really Believe?" and a modified version for the educators to state their beliefs.

In synthesizing the results, comparisons were made between educators' perceptions of teen responses, educator-professed beliefs, and teen-professed beliefs. In general, eastern Kentucky educators believed that teens subscribe to democratic ideals over authoritarianism, are susceptible to peer pressure, yearn for parental understanding, feel that their generation faces tough situations, and are unclear about what values their parents hold or the role honesty should play in real-life situations. The educators reported that they thought teens would make more negative value statements than the teens actually did. What the educators thought that the teens would say, however, matched what the teens believed their peers would say. In addition, educators had conservative beliefs reflecting local and regional values. They also perceived themselves as ethical and honest citizens.

Implications for practice and future research were discussed.

2:00 p.m.-2:50 p.m.   TEACHING STATISTICS AND RESEARCH
(Display Session)   Cabildo Salon

**USING CONCEPT MAPPING TO DEVELOP UNDERSTANDING
OF IMPORTANT CONCEPTS IN EDUCATIONAL RESEARCH**

Vicki A. Wilson, Muskingum College

Graduate students in introductory educational research classes often have a superficial knowledge of the basic concepts of research. They are able to parrot definitions for a selected-response test but are unable to explain the concepts in depth or to demonstrate an understanding of the relationships between and among concepts. Borrowing "concept mapping," an instructional strategy from constructivist science teaching, may help students to better understand these concepts.

Small groups of students are given envelopes containing small pieces of paper on which are written the following: qualitative research, quantitative research, basic research, applied research, action research, experimental research, ex post facto, longitudinal, cohort, cross-sectional, panel, pilot, population, sample, survey, Likert scale, interview, response rate, validity, reliability, inter-rater reliability, intra-rater reliability, validity, inferential statistics, descriptive statistics, t- tests, ANOVA, and so forth. Students sort the pieces of paper into a map that "makes sense" to them; terms may be added or deleted as the group determines. They then transfer their "map" to posterboard and are encouraged to communicate the relationships between and among the terms by using words and/or metaphor. Posters are presented and explained to the class. Students are encouraged to compare and contrast the varying interpretations of the concepts and their relationships to each other. Artifacts shared included posters depicting the research process as a tree, a ladder, and a web. More traditional hierarchical structures were also presented.

Concept mapping appeared to be an effective strategy for assessing, correcting, and expanding graduate students' knowledge of educational research. It provided an opportunity to insert an engaging, higher-order thinking activity into the educational research instructor's pedagogical repertoire.

CONDUCTING RESEARCH OVER THE INTERNET
IN EDUCATIONAL PSYCHOLOGY COURSES

Andrew D. Katayama and Steven M. Crooks,
Southern Illinois University at Edwardsville

The purpose of this study was to investigate the effects of four types of note taking formats on posttest achievement and en-route behavior. Undergraduate educational psychology students interacted with a computer program that presented a text passage and provided the option to take notes on the passage. Results indicated that students given notes that were partially completed did significantly better on a posttest than those given a complete set of notes to study. We wanted to authenticate how students might take notes from a text passage on a computer using their own strategies and using their own judgments in their construction. The topics used in the studies included "Assessment and Evaluation," and "The Role of Statistics in Educational Research."

There were three dependent measures: a factual test (information that is explicitly stated in text), a structure test (to assess students' knowledge of concept structure within a hierarchy), and the transfer test. The researchers found that students in the partial conditions performed best on the transfer and structure tests because of the contextual cues provided for them as they constructed the rest of their notes. There were no differences found between the groups on the factual test.

A LONGITUDINAL STUDY OF TECHNOLOGY RESOURCES
AND USE AT AN ELEMENTARY MAGNET SCHOOL

Vivian H. Wright and Margaret L. Rice,
The University of Alabama

This study was a longitudinal case study designed to assess the technological resources and uses of technology at a magnet elementary school, and provide recommendations. This project was in its first phase and has been conducted for the first year.

The school used in the study was a magnet elementary school located in a city in Alabama. The participants in the study were administrators, faculty, and staff at the school. Four assessments were conducted at the beginning of the school year with a follow-up of the four same assessments at the end of the year. These assessments included: (1) discussions with the principal to develop a summary of technological resources available to teachers and students, (2) administration of a researcher-developed instrument called the Media Use Survey, (3) administration of a researcher-developed instrument called the Basic Computer Knowledge Test, and (4) personal interviews with teachers regarding technology training and integration issues. The session presented an outline of the study, the various instruments used, information about the workshops, and the results of the first phase.

3:00 p.m.-4:50 p.m.　　　　**TEACHING AND LEARNING (Training Session)**...............**Bienville Room**

PRESIDER:　　　　　　Sue S. Minchew, Mississippi State University

**HOW TO USE COOPERATIVE EDITING TO HELP STUDENTS ELIMINATE
NONSTANDARD GRAMMATICAL ERRORS IN THEIR OWN WRITING**

Sue S. Minchew, Mississippi State University

This session taught participants to use a proven teaching strategy that enabled their students to eliminate nonstandard grammatical errors in their own writing. After a brief review of the nonstandard writing errors (subject-verb agreement, pronoun agreement, tense, case, fragment, fused sentence, and comma splice) and of cooperative learning strategies, the participants divided into groups to edit a student paper for the grammatical errors. They provided Editing Rules sheets, which included definitions and rules, to use during group editing. Participants identified and corrected the errors on the student paper, citing the appropriate rule for each correction -- the same process they can use with their own students. The edited papers were graded and discussed.

With the current emphasis on literacy and writing across the curriculum, the session proved valuable not only for teachers of English and composition but for teachers in a variety of other disciplines as well.

3:00 p.m.-3:50 p.m.　　　　**TEACHING AND LEARNING (Symposium)**......................**Cathedral Salon**

ORGANIZER:　　　　　　Judith A. Burry-Stock, The University of Alabama

TEACHING FOR CONCEPTUAL UNDERSTANDING

**Investigating the Role of Learning Conceptions in Reflective
Teaching Data from Practicing Classroom Teachers**
J. Douglas Cound, The University of Alabama in Huntsville,
and Asghar Iran-Nejad and Judith A. Burry-Stock,
The University of Alabama

This study was designed to explore the learning conceptions of a sample of practicing classroom teachers in Alabama. A Learning Conceptions for Reflective Teaching (LCRT) inventory was developed to accomplish this goal. This paper discussed the results and future directions.

**Investigating the Role of Learning Conceptions in Reflective Teaching:
The Influence of Training from a Wholetheme Approach**
Asghar Iran-Nejad and Madeleine Gregg, The University of Alabama,
and J. Douglas Cound, The University of Alabama in Huntsville

This study explored whether training from a whole-theme approach was effective in changing the learning conception of individuals. Participants were the students in three courses at The University of Alabama. An undergraduate educational psychology class was taught from an eclectic approach (control group), another undergraduate group of students was taught from a wholetheme

approach (training group I), and a third graduate educational psychology class was also taught from a wholetheme perspective. This presentation discussed the findings and their implication.

Students' Conceptual Understanding: Qualitative Evidence in Concept Maps
Sandra K. Enger, The University of Alabama in Huntsville

When students use concept maps to construct and represent their understanding, the maps can be analyzed for representation of understanding from both quantitative and qualitative perspectives. In this study a qualitative approach was utilized to extend the interpretations from the quantitative analysis of students' conceptual understanding represented in their concept maps. Elements qualitatively examined included such components as levels of reorganization in pre-maps and post-maps, changes in vocabulary usage, the nature of new knowledge representations, and the presence of misperceptions. Statistically significant differences may not be noted in pretest and posttest maps, but when analyzed qualitatively, changes in knowledge representations are identified.   The qualitative analyses provided data to inform instruction in the content areas.

Student Engagement Experience Inventory (SEE)
Judith A. Burry-Stock, The University of Alabama

The student Engagement Experience Inventory (SEE) was developed as part of the Expert Science Teaching Educational Evaluation Model (ESTEEM) as a means of determining the degree of engagement on the part of students in constructivist science classrooms. A maximum likelihood method of extraction with a varimax rotation yielded a four-factor solution with 90% of the variability. The four factors are: Student/Teacher Science Experience, Making Science Relevant, Learning and Understanding Science, and Student Initiated Involvement.   An item-response-theory analysis (IRT) provided information on items that students find easy to do and items that they find hard to do. The number of years a teacher spends in a reform program appears to have had little effect on students, which may mean that we are still not reaching students at a desirable level of engagement.

3:00 p.m.-3:50 p.m.   **TEACHING AND LEARNING (Discussion Session)**...............**Gallier Salon**

PRESIDER: Kathy K. Franklin, University of Arkansas at Little Rock

MANAGING THE INSTRUCTIONAL MINEFIELD: WHAT
REALLY WORKS FOR IMPROVING LEARNING?

Terrell M. Peace, Southwestern Baptist Theological Seminary;
Regina M. Watkins, University of Northern Alabama; and
Karen Embry Mayo, Stephen F. Austin State University

Graduate students in a Program Evaluation class in the spring of 1998 were charged with reviewing current literature and prioritizing methods and phenomena that significantly affected learning. They were asked to choose professional literature published primarily within the last three years.

Twenty-four graduate students participated in this qualitative research project. The researchers were described: thirteen were teaching, and, of those, six were elementary, five were secondary, and two were postsecondary. Six were fifth-year students, four were certified but non-

teaching, and one was in a non-teaching degree. Of the twenty-four students, 19 agreed to participate in this project by submitting their research projects for investigation.

From the research, three domains or themes emerged as the primary factors contributing to improved learning. These were identified broadly as the learning environment, teaching methodologies and student experiences, and assessment and evaluation.

The classroom environment has both cognitive and affective elements. In examining the improvement of learning, parental involvement, provision of a safe and challenging environment, and establishment of expectations were identified as particularly influential factors in the learning environment.

Within the domain dealing with teaching behaviors and the types of experiences students have in the classroom, the two factors cited most often for improving learning were cooperative learning and the use of technology. A third group, designated as brain research, described cognitive variables that teachers should understand and be able to manipulate to enhance learning. A fourth aspect was concerned with curricular modifications such as course structure and scheduling.

The factors and practices in the assessment and evaluation domain that surfaced as good predictors of student success and improved learning were: predetermined, curriculum-based learning targets; systematic, performance-based, authentic assessment; questioning; and the use of a variety of assessment strategies.

HIGH SCHOOL STUDENT PERCEPTIONS AND COLLEGE STUDENT PERCEPTIONS OF THE OZONE DEPLETION PROBLEM

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

The purpose of this study was to ascertain the knowledge concerning ozone depletion held by high school students, college students, and graduate students. Subjects were surveyed during the 1998 spring semester. They included high school biology students (grades 9-12) in a suburban school and in an urban school, undergraduate elementary education majors, and graduate students in an advanced elementary science methods course. The questionnaire contained 30 items pertaining to ozone depletion and was divided into three scales: (1) results of ozone depletion, (2) causes of ozone depletion, and (3) ways to alleviate ozone depletion.

ANOVA showed that, overall, graduate and undergraduate college students scored higher than the high school students ($p<.05$). However, subscale analysis revealed that graduate and undergraduate students scored higher than high school students for subscale #1; but, for subscale #2, the only significant difference ($p<.05$) was between graduate students and the urban high school. For subscale #3, the undergraduate students scored higher than the high school students ($p<.05$). There were no significant differences between graduate and undergraduate students. Comparison of the two high schools showed no significant differences overall. However, they did differ significantly on three of the questionnaire items.

High scores were described as 70% and higher, and low scores were defined as 30% and lower. Low score items revealed conflation of ozone depletion with aspects of global warming. High scores held in common by the groups showed recognition that UV radiation and CFC gases were associated with the ozone depletion issue. However, they were less aware that skin cancers were also connected with this phenomenon.

THE RELATIONSHIP BETWEEN TEACHERS' ORIENTATIONS TO READING INSTRUCTION AND STUDENT CONTROL

Marie Roos, Safian Forawi, and Gloria Dansby-Giles, Jackson State University

This study was concerned with examining the relationship between the theoretical orientation to reading and the pupil control orientation of graduate students. Teachers' responses on the DeFord's Theoretical Orientation to Reading Profile (TORP) instrument, and Willower, Eidell, and Hoy's Pupil Control Ideology (PCI) instrument were evaluated in terms of the nature of the relationship of these two measures. The TORP measured teachers' beliefs about subskills, skills, and whole language approaches to teaching reading; the PCI measured the personality indicators humanism and custodialism. Both instruments have had extensive validity and reliability established.

The sample for this study consisted of 30 graduate students enrolled in two graduate courses (RE 551 and EDCI 563) during the 1998 summer session at a southern university. The TORP, PCI, and a demographic data sheet were administered to students during a class session. The data were analyzed using a *t*-test comparing TORP and PCI mean scores. An alpha level of .05 was the designated level of significance. Relationships between beliefs about reading instruction (TORP) and pupil control variables of humanism and custodialism (PCI) were examined.

Discussion about whether personality indicator variables (humanism or custodialism) appeared to be determined by beliefs about reading instruction was included. Teachers views were noted, for example, about whether they became more custodial and less wholistic in instruction in response to the demands of the school demands. Conclusions and implications regarding the relevance of the findings of this study for graduate education were included, and recommendations were made for further research.

3:00 p.m.-3:50 p.m.　　　　**MATHEMATICS EDUCATION**
　　　　　　　　　　　　　　(Discussion Session)..**Pontalba Salon**

PRESIDER:　　　　　　　James E. McLean, The University of Alabama at Birmingham

A QUANTITATIVE STUDY OF THE EFFECTS OF CHESS INSTRUCTION ON THE MATHEMATICS ACHIEVEMENT OF SOUTHERN, RURAL, BLACK SECONDARY STUDENTS

James P. Smith, Grambling State University

This study investigated the effects of chess instruction on the mathematics achievement of a group of southern, rural, black, secondary students. Instruments used included the mathematics section of the CAT (Level 20), Group Embedded Figures Test (GEFT), Matrix Analogies Test-Short Form (MAT-SF), and Guilford-Zimmerman Spatial Visualization Test (SV). The treatment group, which received 18 weeks of chess instruction, consisted of 11 females and 8 males. The control group was comprised of 10 females and 10 males. All participants were high school juniors or seniors.

Analysis of variance of the pretests found no significant differences between the treatment and control groups. Posttest data were analyzed by 2 X 2 MANCOVA, which used statistically significant pretest scores as covariates. The treatment group scored significantly higher than the control group on posttest measures of mathematics achievement, $F (1, 38) = 4.14$, $p <.043$; field dependence/independence, $F (1, 38) = 6.02$, $p <.019$; spatial visualization, $F (1, 38) = 14.13$, $p < .001$; and nonverbal reasoning, $F (1, 38) = 6.09$, $p <.037$. Further analysis by one-way ANCOVA found that only

female members of the treatment group scored significantly higher on measures of mathematics achievement and field dependence/independence.

Factor analysis extracted only one variable from the five instruments used in the study. This variable was labeled "Spatially Based Cognition" (SBC). One-way ANCOVA of this extracted variable also found that only the treatment group females scored significantly higher than the control group females. No significant difference was found between the treatment group males and control group males for the extracted variable.

THE EFFECTS OF AN ACADEMIC GAME ON MULTIPLICATION FACTS

Katrina N. Rhymer, Karen I. Dittmer, Christopher H. Skinner,
and Bertha Jackson, Mississippi State University

Educators have been struggling to find effective mathematics interventions for elementary school students. These interventions must be creative, entertaining, and productive in order to be acceptable to the teacher and students. The current study investigated a combination of multiplication flash cards (one digit by one digit), peer tutoring, timing (using chess clocks), immediate feedback, and positive practice-over correction to increase the number of digits correct in multiplication problems. These teaching components were carefully packaged in an academic game that involved two peers.

Four students who scored below the 25th percentile on the mathematics section of the Iowa Test of Basic Skills were trained on the procedures for this academic game. Within the student dyad, one student was given two minutes to provide answers to the flash cards (learner) while the partner provided feedback (teacher) on the students' answers (i.e., correct or the correct is ___). The students within the dyads then switched roles as learner and teacher and participated in another two minutes of practice. Students within a dyad had different flash cards, and the student dyads used the chess clocks to monitor the amount of time for each partner in the game.

A combined multiple baseline with adapted alternating treatments design was used to determine the effectiveness of this intervention. Results indicated that the intervention was effective, especially on the flash cards practiced by the individual as a learner. However, students also improved when they acted as the role of teacher. Therefore, this study suggested that this academic game is effective at teaching multiplication skills when the student was both the learner and the teacher. A step-by-step approach for implementing this academic game in the classroom was provided for educators.

GETTING STUDENTS TO CHOOSE MATHEMATICS HOMEWORK WITH 20 TO 40% MORE PROBLEMS? AN INVESTIGATION OF THE STRENGTH OF THE INTERSPERSAL TECHNIQUE

Gary L. Cates and Christopher H. Skinner,
Mississippi State University

Two experiments investigated the strength of the interspersal technique. In Experiment 1, college students were exposed to three pairs of mathematcs computation assignments. Three of the assignments were controls and contained 15 three-digit by two-digit (3x2) multiplication problems. The remaining three assignments were experimental and contained additional one-digit by one-digit problems interspersed every third problem plus an additional number of 3x2 target problems (i.e., 20%, 40%, or 60% more). After exposure to each pair of assignments, students reported which of the two assignments would require the most time and effort to finish, which was most difficult, and which

assignment they would prefer to do for homework. Experiment 2 was carried out with high school remedial math students, and the number of target problems was increased by 0%, 20%, or 40%, versus 20%, 40%, or 60% in Experiment 1.

Results showed that interspersing not only increased choice responding for the experimental assignments but also resulted in significantly more students choosing the assignment that contained 20% 3x2 problems in both Experiment 1 and 2. Although the college students did not choose either of the other two longer assignments (i.e., 40 and 60% more) the high school students chose to do 40% more work when interspersing was used. The findings supported earlier studies that showed that the interspersal technique could be used to improve assignment perceptions. The current study extended this research by showing how this technique could be used to get students to chose to do assignments with over 40% more problems. Discussion focused on the applied value of interspersing, schedules of reinforcement, and theoretical implications of getting students to choose assignments or tasks that require over 40% more effort to complete.

3:00 p.m.-3:50 p.m.   **EDUCATION REFORM (Discussion Session)**...................... **Ursulines Salon**

PRESIDER: William Person, Mississippi State University

IMPROVING SCHOOLS THROUGH THE ADMINISTRATION AND ANALYSIS OF SCHOOL CULTURE AUDITS

Christopher R. Wagner and Mary Hall O'Phelan,
Western Kentucky University

The purpose of this program was to describe the administration of a school culture audit and to discuss the possible implications of analyzed data relative to the school improvement process.

A 13-item, school culture audit was administered to the teachers, teacher assistants, and school administrators of 44 schools in six public (five county and one city) school districts in North Carolina (N=1609). Respondents were asked to make two judgments for each item: to what degree was the item present in her/his school, and the degree of importance of the item. Responses were tabulated, and two indices were computed: the ratio of presence to importance and the difference between the presence and importance. Circular charts with 13 axes, one for each item, were constructed showing ratios and differences. Subsequent meetings were held with school personnel. Audit results were presented in graphic form and discussions were conducted relative to the significance and possible solutions for the most substantive gaps between items perceived "present" and "important."

Discussions with school personnel regarding ratios revealed opportunities for improvement and growth. The charts were also helpful in graphically depicting areas of strength. The charts, when used as a transparency overlay, compared the results of schools and the district composite score. School culture audits and their results provided a starting point for school personnel to discuss and plan school improvement measures.

DO CONTEXTUAL EFFECTS INFLUENCE KENTUCKY SCHOOL DISTRICT ACCOUNTABILITY SCORES?

Edward B. Reeves, Morehead State University

Kentucky's system of high-stakes accountability raises an issue of fairness: Should teachers and administrators be held accountable for student test results if the scores are influenced by

external factors over which these educators have no control? The goal of this study was to investigate if such external factors, or "contextual effects," influenced the accountability scores. The study focused on school district accountability index scores for the 1992-94 and 1994-96 biennia. Three contextual effects were considered: median household income in the district, teen birth rate, and rural-metropolitan differences among districts. The differences between independent and county school districts were controlled.

Two ways of determining the influence of contextual effects were operationalized. First, contextual effects could retard or promote a school district's ability to improve its scores from one biennium to the next. Second, contextual effects could influence the differences in scores between school districts. The major findings were: (1) contextual effects had little influence on the change in scores over time within districts (this finding vindicated accountability advocates who have asserted that, since improvement is measured within the district, comparative advantages or disadvantages between districts will not contaminate the results), (2) contextual effects substantially influenced differences in the scores between districts - 30-40 % of the variation (this finding points to a hefty bias if school districts are ranked according to their accountability scores without controlling for contextual effects); (3) after controlling for the other contextual effects, rural school districts were found to outperform metro districts, and the success of the rural districts varied with the size of their largest town; and (4) contextual effects increased with grade level.

The results generally validated the short-term objective of Kentucky's accountability system but raised concern about the prospect of narrowing the gap between lower- and higher-scoring districts.

UNDER-UNDERSTANDING SOLID RESEARCH

C. M. Achilles, Eastern Michigan University, and
J.D. Finn, State University of NY at Buffalo

Correct policy depends upon clear understanding and use of research that forms the base for the policy. Since about 1990 some states (est. n=27) and since 1998, some national policy initiatives (e.g., President Clinton's class-size initiative in grades K-3) have emerged based upon class-size research conducted since 1984 and upon earlier meta-analysis reports.

Project STAR, Tennessee's class-size study, has been touted as the "research base" for state and federal initiatives to get smaller K-3 classes. Although policy makers seem to hear part of the class-size message, they seem not to have understood all of the results well enough to plan clear implementation of major class-size benefits.

This discussion reviewed the full STAR results, not just the academic gains, as a base for the proper policy use of research evidence. Project STAR, in its full scope, includes not only the basic experiment which is equally a study of class size and use of teacher aides (1985-89) but four additional, closely related studies of: (1) policy applications of STAR results, (2) student participation in schooling, and (3, 4) long-term benefits of early use of small classes.

If policy persons understand all of the STAR and other class-size information, implementation efforts would seem quite clear: begin small classes the first year the student enters school, move the small-class implementation along one grade per year, and consider a K-2 (or pre-K to 2) implementation if funds are not available for K-3. Avoid having teacher aides in the classroom.

3:00 p.m.-3:50 p.m. **STATISTICAL METHODS (Discussion Session)** .... **Beauregard Salon**

PRESIDER: Deborah L. Adler, University of Central Arkansas

BASIC CONCEPTS IN PROFILE ANALYSES OF MEANS

Matthew L. Shelton, Texas A&M University

In some studies researchers are interested in comparing means of members of discrete treatment groups on one or more dependent variables. At other times researchers repeatedly measure the same variable over time and are interested in patterns of change or trends in the means. A third alternative involves the measurement of two or more different variables, each measured once, in which case researchers may be interested in comparing the profile of the means (as against, only comparing the mean on an English test in group 1 with the mean of the same English test taken by group 2). This last analysis is "profile analysis."

Profile analysis could be used, for example, to compare the pattern or the "profile" of means on English, math, and science tests of high school senior boys versus girls. Profile analysis typically addresses a hierarchy of three questions. First: Are the mean profiles of the groups parallel (e.g., boys' English, Math and Science mean scores were 10, 12 and 15, while girls' means were 8, 10, and 13)? Second: If the profiles are parallel, are the means on coincident pairs of variables the same (e.g., the mean English score of the boys equals the mean English score for the girls, and so forth)? Third: If the profiles are "coincident" within a given profile, do the means across the variables equal each other (e.g., the boys' means are 13 on all three variables)?

The paper reviewed the statistical approaches to conducting analyses of profiles. The approaches were illustrated using commonly available statistical packages.

**THE EFFECT OF SAMPLE SIZE AND VARIANCE
ON THE JOHNSON-NEYMAN TECHNIQUE**

Brian M. Wind, Middle Tennessee State University

The Johnson-Neyman (J-N) technique is used to determine areas of significant difference in a criterion variable between two or more groups in situations of linear regression. In utilizing this technique, researchers have encountered difficulties with results, possibly related to the J-N techniques's sensitivity to violations of certain assumptions and conditions. For this study, Monte Carlo simulations were performed to determine the effect that sample size and variance have on the J-N technique. The simulations examined the hypothesis that unequal ratios of sample size and variance between two groups may create anomalies in the results of the J-N computation. The results did not show anomalies in the output, and further showed that the J-N technique produces wider regions of significance as the total sample size increases. The size of variance ratios, as well as the equality of variance and sample size ratios did not seem to affect the results dramatically.

CHARACTERISTICS OF THE JOHNSON-NEYMAN TECHNIQUE

Jwa K. Kim, Middle Tennessee State University

The Johnson-Neyman technique has been used in order to detect a region of significance on the predictor variable for the value of the criterion variable when comparing two regression lines

with different slopes from two different groups. This technique is known to be superior to ANCOVA and can also be used as an alternative for a two-way factorial design. However, this method produces anomalies in certain situations. Possible causes of the anomalies of the Johnson-Neyman technique were investigated through Monte Carlo simulation procedures.

A total of 2200 cases for each of the nine different situations were generated based on various values of sample size, regression slope, and regression intercept between two groups. Each situation was examined in terms of the effect of sample size ratio, slope, and intercept difference on the anomalies of the Johnson-Neyman technique.

The results revealed three conditions of anomaly: anomaly associated with an identical slope, anomaly due to the square root of negative value, and anomaly related to a small difference in the regession slope. Across all the situations sample size (n) played an important role in producing anomalies of the technique. Cautions for the application of the technique to real data analysis settings were presented.

3:00 p.m.-3:50 p.m.   EVALUATION (Display Session).. **Cabildo Salon**

EVALUATING EXISTING PROGRAMS USING THE ACCOUNTABILITY PROCESS

Anne M. Stanberry, University of Southern Mississippi

Planning the evaluation component during program development is optimal but not always realistic. Evaluating existing programs requires "backing in to evaluation." Founded in Baldwin and Ford's work on transfer and impact of professional training programs, and in Berardinelli and Burrow's accountability process, Vella, Berardinelli, and Burrow described the accountability process of program evaluation. The accountability process was implemented to evaluate a Parents as Teachers program after one year. Evaluation included determining goals, identifying objectives, and determining the focus (a combination of educational outcomes and educational process). For educational outcomes, critical elements were identified, key stakeholders' needs and priorities were identified, learning tasks/materials were identified, expected outcomes were identified, evidence of change and documentation were identified, and analysis of evidence was determined. For the educational process, elements to evaluate and learning tasks/materials were determined, expected outcomes and evidence of change were identified, data gathering procedures were developed, and analysis of evidence was determined.

Existing program data were put in one of six columns: objectives and program content; learning tasks/materials; changes in learning, transfer and impact; evidence of change; and documentation of evidence. The researcher filled in analysis of data. Existing data determined program effectiveness except for a few circumstances. A telephone survey gathered data not found elsewhere.

Results showed school district, state department of education, legislators, and other key stakeholders the effectiveness of the Parents as Teachers program. Even though limitations might exist when fitting an evaluation plan into an existing program, a few modifications can often allow the data for missing outcomes and process elements to be gathered. The comprehensive nature of the accountability process functioned as a template laid over the program. Underdeveloped elements readily emerged, indicating areas for redesign. Evaluation results will be used as base line data for a longitudinal study of program effectiveness.

DIFFERENTIAL PREDICTION OF COLLEGE PERFORMANCE BETWEEN GENDER

Timothy Kendrick Patton and Jwa K. Kim, Middle Tennessee State University

Researchers in the past have found discrepancies in the prediction of college grade point average (CGPA) between gender with the use of standardized tests such as the Scholastic Achievement Test (SAT) and the American College Test (ACT). The present study was designed to identify these differences and to determine if the potential differences could be attributed to differential course selection across gender.

Subjects were selected from 1995 and 1996 graduating seniors at two large universities within Tennessee. Johnson-Neyman analyses and classical hypothesis testing procedures with the dummy-coding General Linear Model were performed for the total sample and for each of the five selected majors.

Differences in the prediction of CGPA using ACT-Composite (ACT-C) score across gender were found for the total group. However, these differences were essentially eliminated when course selection was controlled by analyzing data within majors. Findings from this study supported the position that differential prediction of CGPA across gender using ACT-C is an artifact of differential course selection.

ADVANCED PRESERVICE-EDUCATION MAJORS' BRAIN HEMISPHERICITY, LEARNING STYLES, ENVIRONMENTAL PREFERENCES, AND COURSE-RELATED BEHAVIORS

Chhanda Ghose, Roy L. Jacobs, and Jimmy D. Lindsey, Southern (LA) University;
Johan W. van der Jagt, University of West Alabama; and Rangasamy
Ramasamy, Florida Atlantic University (FL)

The purpose of this study was to determine if advanced preservice-education majors by general and student characteristics (e.g., gender, geographic area, laterality, major, etc.) had different brain hemispheric processing modes, learning styles, environmental preferences, and course-related behaviors (e.g., note taking). The population for this study was 90 juniors and seniors enrolled in three sections of an undergraduate Measurement and Evaluation course at an historically-black, doctoral-level university. Fifty (50) of these students were selected to participate as subjects and completed at least three of the four research instruments. Between- (e.g., gender) and within-subjects (e.g., environmental preferences) designs were used to conduct the study. Dependent variables included the subjects' Hemispheric Mode Indicator, Learning Style Inventory, and Productivity Environmental Preference Survey findings and selected responses on a four-part questionnaire.

SPSS/PC+ 7.5 descriptive and inferential statistical procedures were used to analyze the data. Null hypotheses were tested at the .05 alpha level. Results indicated that the subjects had different hemisphericity, learning styles, laterality, and selected course-related behaviors. Specific findings, conclusions, limitations, and recommendations for future research were presented to conferees attending the display session.

4:00 p.m.-4:50 p.m.   **SCHOOL ADMINISTRATION (Discussion Session)**.............. **Gallier Salon**

PRESIDER: William Person, Mississippi State University

**COMPARISON OF PERCEPTIONS OF CONSTRAINTS BETWEEN U.S.
AND CALIFORNIA WOMEN SUPERINTENDENTS**

Donna Hagen McCabe and Margaret G. Jamison,
University of Louisville

The percentage of women superintendents in the past 15 years has more than quadrupled, from 1.2% in 1982 to 7% in 1989. Some states, however, have a larger percentage of female superintendents, such as 18% in California and 10% in Missouri. The passage of time and increased numbers of women superintendents may have changed the perception of constraints or obstacles overcome by these women.

This study determined if there were significant differences between means of constraints identified by survey questions answered by two populations of women superintendents of schools: A national study and a California study. Previous literature identified seven concepts that served as a conceptual basis for these 35 survey questions. The 35 questions were based on the role of the superintendent, gender expectations of women, and structures and processes of organizations serving to facilitate or constrain women's careers. The Survey of Influences on Female Superintendents' Careers, used in several research investigations, was sent to 735 U.S. superintendents and 192 California superintendents. Respondents (n=273 U.S. and n=103 CA) evaluated perceived constraints on their careers using a five-point Likert scale.

Descriptive statistics were computed and compared for significant differences using two-sample t-tests. The comparative results for U.S. and California superintendents were grouped into the seven concepts. The mean constraint for U.S. superintendents was significantly different from the mean constraint for California superintendents for three of the seven concepts. This may indicate fewer career constraints since the eighties or a different climate in states with a greater percentage of women superintendents.

**GENDER-RELATED DIFFERENCES IN CAREER PATTERNS AMONG
ALABAMA PRINCIPALS: A STATEWIDE STUDY**

William A. Spencer and Frances K. Kochan,
Auburn University

This paper was an analysis of differences in career patterns among male and female principals in Alabama schools. Based upon a state-wide survey of all principals in Alabama, the data collected dealt with variables such as length of formal education and experience, type of undergraduate preparation, certification differences, prior administrative positions, patterns of career progression, retirement prospects, and factors inducing the respondent to consider retirement. Based on a sample of 550 principals, distinct and statistically significant differences were found between males and females. Females generally had higher levels of formal education and certification, had been in their position for less time, and were disproportionately underrepresented in school levels, including junior high/intermediate and high schools. Females were also more likely to have come to the principalship from either the central office or from the classroom, whereas males were more likely to have come from other principalships or to have been an assistant principal. Female principals were more likely to have come from within the system where they were a principal than were male principals. Males were more likely to have been eligible for and to have been considering retirement in the near future.

4:00 p.m.-4:50 p.m.   **HIGHER EDUCATION (Discussion Session)** ....**Pontalba Salon**

PRESIDER: Judith A. Burry-Stock, The University of Alabama

UNDERGRADUATE STUDENTS' DESCRIPTIONS OF DESIRABLE AND UNDESIRABLE COLLEGE INSTRUCTOR BEHAVIORS AND CHARACTERISTICS

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

Although the literature on college teacher effectiveness concludes that most evaluation instruments used are generally valid measures, there is little research exploring what college students actually consider to be desirable or undesirable behaviors associated with effective instruction. This study investigated undergraduates' descriptions of effective and ineffective behaviors of instructors using both quantitative and qualitative analyses.

Participants included 75 undergraduates from a variety of majors who completed a three-part instrument comprised of (1) statements from a typical college instructor evaluation form in which they were to list descriptors of excellent, neutral, or poor instructors, (2) five scenarios describing fictional instructors that the students were to rate as excellent, good, satisfactory, or poor, and (3) an 11-item, Likert-type set of statements that questioned their opinions regarding how evaluation forms are used.

For the first part, a qualitative analysis was done on the descriptors provided. Clear patterns emerged. For example, the excellent instructor who could hold the student's attention was most likely to be cited as being enthusiastic, using relevant examples and demonstrations, speaking clearly and moving around the room, while the poor instructor bored them, and read monotonously from a book. In the second part, fictional instructors who gave grades of A or B in various scenarios were likely to be rated as excellent or good, while the more difficult instructors were more likely to be rated lower. Using maximum likelihood ratios, only one statistically significant difference was found between upper and lower classmen. The same procedure was used for the Likert section, but no statistically significant differences were found. Students indicated that they allowed their personal feelings to enter their decisions, and most said that they took the evaluations seriously but were unsure whether their instructors or administrators did. Sixty-three percent indicated that having received a teaching award was no indication of an instructor's effectiveness.

These findings offered further evidence that teaching evaluations are a complex issue with many variables affecting their outcomes. This study offered new insights into effective teaching and suggest further avenues for research.

GRADE EXPECTATIONS OF RURAL COMMUNITY COLLEGE STUDENTS

Doug Adams, Mississippi Delta Community College; Reid Jones, Delta State University; and William E. Wilkins, Mississippi Valley State University

While some studies exist that investigated the relationship between anticipated college grades and actual college grades, very few of these addressed rural, community college students. Most often, these students come from small, rural high schools, and they have frequently been the first members of their families to attend college. With this many differences from "traditional" college freshmen, published research gives very little understanding of what expectations these students have concerning the grades they will receive.

First-semester community college students (N = 190) enrolled in a university transfer program were asked to estimate their future grade point average (F-GPA) and to provide some background information. These data were compared with the actual GPA (A-GPA) that they obtained at the end of the semester and with their ACT performance. All data were then subdivided by Sex and Ethnicity of subject, producing four groups (Black Males, N = 28; Black Females, N = 60; White Males, N = 56; White Females, N = 46). Because students were asked to predict grade point averages using a form based on ordinal categories, both F-GPA and A-GPA were converted to ranks, and Spearman's rho was computed. Three of the four groups were able to demonstrate significant ($p < .01$; rho = .5817, .4855, .4697) accuracy, while Black Females were not (rho=.1959). Other significant associations were found between ACT and A-GPA and ACT and F-GPA. Selected students were interviewed to provide greater insight into this pattern of results.

ATTACHMENT AND SELF-ESTEEM ISSUES IN THE LIVES OF FEMALE COLLEGE STUDENTS

Karlin S. Evans, University of Southern Mississippi

This study addressed the relationship between attachment and self-esteem in African American and white female college students. The impact of race and SES was also considered. The Inventory of Parent and Peer Attachment was used to assess the affective dimensions of students' relationships with their parents and close friends. The Self-Perception Profile for College Students was used to measure judgments of competence in twelve dimensions. Questionnaires were distributed to 139 female college students.

Results indicated positive correlations between attachment and self-esteem, attachment and SES, and self-esteem and SES. Results further depicted white females as more attached to fathers than were African American females. In addition, white and African American females both indicated significantly higher attachments to mothers than to fathers. Discriminant analyses indicated that African Americans perceived higher competency in the dimensions of social acceptance, intellectual ability, and physical appearance, while the white females perceived higher competency in the areas of close friendships and scholastic competence.

Results suggested a need to further investigate the relationship of race and SES to self-esteem and attachment. Additional studies should include larger and more diverse samples, information on household composition, and additional indicators of self-esteem and attachment to fully understand these results.

4:00 p.m.-4:50 p.m.   **TECHNOLOGY (Discussion Session)**................................... **Ursulines Salon**

PRESIDER: Jim Flaitz, University of Southwestern Louisiana

TECHNOLOGY EFFECT: THE PROMISE OF ENHANCED ACADEMIC ACHIEVEMENT

Lary C. Rampp and J. Stephen Guffey, Arkansas State University

This review of the literature examined over 150 relevant articles in 20+ journals publishing conceptual, experimental, quasi-experimental, meta-analyses, and research reports. All learning media (books, computers, television, interactive video, interactive television) and individual

learning domains (verbal, affective, psychomotor) were examined to identify the level of academic achievement linked to the application of technology.

The review began with the Clark Declaration (Clark, 1983). The goal was to assess the accuracy of his declaration [technology has no achievement effect], counter his declaration [technology does enhance academic achievement], and/or assess situational value (technology has only selective effect when related to learning setting, attitude, material, and learner control).

From these myriad findings, eight representative articles were identified as illustrative of the state of learning achievement using technology; the technology effect:

Study	Population	Medium	Results
Boschee (1997)	Meta-analysis	Technology	No change
Brush (1997)	65 5th graders	ILS	+/groups
Cennamo (1993)	42 female students	Domain/medium	+learning
Chen (1997)	None	Distance leaning	+w/limits
Cockayne (1991)	216 bio students	I- videodisc	+w/limits
Justen (1988)	64 students	CAI/CBI	No change
Whetzel (1996)	1177 workers	Satellite	+ change
Young (1996)	26 7th graders	CBI/CAI	+w/limits

The studies suggested that positive academic achievement could be related more closely to factors other than technology. This review of the technology-effect literature confirmed that the appropriate question relative to technology effect and learning was being posed: Do the students experience real academic achievement improvement when technology is applied? More recent literature has introduced cognition and brain science as evolving areas of positive research. The overall findings have shown that the promise of technology has not yet been fulfilled.

COMPARISON OF THE EFFECTS OF INSTRUCTIONAL DELIVERY ON ATTITUDE AND ACHIEVEMENT: INTERACTIVE TELEVISION VERSUS TRADITIONAL CLASSROOM

J. Stephen Guffey, Lary C. Rampp, and Candance Lacey, Arkansas State University

This study compared the effects of interactive television and traditional classroom instruction of college undergraduates in a teacher education course dealing with school administration.

The study posed two questions: (1) Do ITV students perform as well as students from traditional classroom on a paper and pen test? and (2) Do ITV students at a remote site perform as well as students at a host site? This study investigated the difference in academic achievement between students in an ITV environment and students in a traditional classroom setting when both groups were enrolled in the same school administration course and were simultaneously taught by the same instructor. A quasi-experimental research design was used for this study.

The entire study took place during the 1998 school year. Three sections of the same course were simultaneously taught by the instructor. One section (host) was taught using the traditional face-to-face approach. Two remote sites participated in the course via ITV as the host site received

instruction. The ITV students completed a questionnaire to determine the level of technology anxiety. All subjects completed the School Attitude Measure and a pretest and posttest (course final exam) developed by the researchers to determine learning achievement in school administration. Communication levels were measured by videotaping several weeks of instruction using a predetermined taping schedule. The interaction of the ITV students was measured using the Taxonomy of Affective Behavior in the Classroom.

The data suggested that ITV is a valid instructional method for knowledge-content instruction. Both the students in the ITV class and students from the traditional setting demonstrated mastery of content. Both groups were equivalent in attitudes, motivation, and on-task/off-task behavior. The data indicated that neither group was effected by the presence of the technology in the classroom. The presence of the technology did facilitate a type of face-to-face student contact that led to discussions and interaction.

INTERACTIVE DISTANCE EDUCATION AND THE ADULT LEARNER

Alex Carter, Mississippi Gulf Coast Community College-Jackson County

The purpose of this research was to determine the attitudes of adult students taking courses utilizing a compressed video network. The subjects for this research were students who were 25 years of age or older and enrolled in interactive distance education courses within a two-year college setting. The subjects were both full- and part-time students enrolled in academic and vocational or technical programs of study. Subjects were divided into three groups based on the type of interactive course they were taking. Group one contained students who took courses at the origination or broadcast site on the network. Students at the receive sites for the above broadcast courses made up group two. Group three were the students taking courses provided by other community colleges within the state. This research was conducted over a seven-semester time period.

A questionnaire was developed to determine student attitudes in the areas of course design, course presentation, course interaction, and equipment/technology as it applied to their individual course. The subjects completed the questionnaires at the end of the semester in which they took an interactive distance education course. Analysis of the results from the questionnaires was expressed utilizing descriptive statistics.

Results from this research were generally positive, although differences did exist among the three groups concerning certain items. The results also indicated the need for effective instructional planning on the part of the institution before offering any courses through an interactive distance education format. The results from this research were also important for the institution based on the increasing number of adult students attending college and the proliferation of interactive distance education as a mode of delivering instruction.

| 4:00 p.m.-4:50 p.m. | **RESEARCH IN THE SCHOOL** |
| | **(Discussion Session)** .... **Beauregard Salon** |

PRESIDER: Cynthia M. Gettys, The University of Tennessee, Chatanooga

PTR AND CLASS SIZE: WHAT IS THE DIFFERENCE?

C.M. Achilles and Mark Sharp, Eastern Michigan University,
and J.D. Finn, State University of NY at Buffalo

Fueled by recent contradictions between (1) common sense, observation, and class-size research and (2) reports that pupil-teacher-ratio (PTR) does not influence student outcomes (achievement, behavior), this study explored misuse of the terms "class-size" and "PTR." Boozer and Rouse (1995) reported that PTR and class size were different and that class size, not PTR, accounts for student achievement. Results of other studies agree.

Because it is relatively easy to compute (and actual class size is difficult to obtain), PTR (usually derived by dividing the number of youngsters at a site by the number of professionals serving that site) is used frequently as a surrogate for class size in outcome studies of education. Studies labeled as "class size" may really be PTR. Economic studies using PTR usually conclude that small classes and money do not matter. Krueger (1997) used class size and found positive achievement and economic benefits. Major research such as Project STAR (Word et al., 1990) and other class-size studies continuously show a small-class effect size (ES) from .30 to .60 (Achilles, Harman & Egelson, 1995). Evaluations of small pupil-to-teacher projects (e.g., Reading Recovery) consistently also show positive ES for student outcomes.

For this exploratory, descriptive, and comparative study, researchers reviewed research, collected class-size and PTR data, and compared available results in two categories: Class size and PTR. Preliminary results showed that PTR and class size (the number of youngsters a teacher faces and for whom the teacher is responsible) were different. Actual class size was about 10 students more than the reported PTR. Research must be reported accurately so that class-size benefits will become available for young students. Examples of how to reduce class size at the building level were provided.

TEACHING IN SMALL CLASSES: WHAT IS DIFFERENT?

Paula Egelson, SERVE

Smaller classes (e.g., 15 - 18 to 1 or 18:1) rather than larger classes (e.g., 25:1) in elementary grades are attracting attention and being implemented (approximately 27 states have class-size initiatives) or proposed nationally (State of the Union Address, 1/28/98). Among other things, critics argue that small classes will not do any good unless teachers do things differently in the classroom.

The purpose of the present study was to collate information on teaching in small classes, compare results of the few studies of these efforts, summarize the findings, and draw conclusions about teaching in small classes.

Five sources of data were available: a summary of teacher benefits (Glass & Smith), a review of small-class outcomes (Cooper), a report of Olson's study (in Cavanaugh), data collected from "Success Starts Small" or SSS (Achilles, et al.), and data from Project STAR (Bain et al.; Word et al.) and Indiana's Project Prime Time (e.g., Mueller, Chase, and Walden). Excluded were studies of tutoring, special classes (e.g., gifted, special education), and projects (e.g., Reading Recovery). Comparisons, not meta-analysis steps, were used.

Small-class teaching differences emerged into three groupings: (1) Teacher/teaching differences, (2) student differences that influence teaching, and (3) outcomes related to teaching. The differences were classified as (1) perception, (2) behavior, and (3) affect or attitude.

Small classes allow teachers to use what they have been taught in their preparation and to try new things. The affective dimension is positive (better attitudes, less "burned-out" feeling). Complementary student benefits are evident. There was considerable consensus among all data sources about time use, individual instruction effort, and student benefits that were verified in student outcome measures.

A QUALITATIVE STUDY OF MIDDLE GRADE STUDENTS' PERCEPTIONS OF THEIR SCHOOLS, TEACHERS, AND CLASSES

Gahan Bailey, Louisiana Tech University

In the mid-sixties the middle school movement was born, and it has been growing ever since. The movement continues to gain legitimacy because it attends to the unique educational needs of the young adolescent. For middle school teachers to be effective, they need knowledge of young adolescents, their unique needs, and the pedagogy appropriate for that age level.

The purpose of this study was to investigate what middle school students (grades 5-8) liked about their schools, their teachers, and their classes. The interview was the dominant strategy for data collection. Eighty-five middle-grade students were interviewed using interview questions designed by middle school researchers and educators. The data were analyzed by using coding categories.

The results indicated that the middle school participants shared strong feelings regarding their classes, their teachers, and their schools. The participants in this study openly discussed areas such as the friendliness of their teachers, the meanness and bad tempers of their teachers, school violence and devil worshiping, the condition of the physical facilities, and other various negative and positive aspects of their respective middle schools.

This paper addressed the history of the middle school movement, the ideal middle school, and what a group of middle school students have had to say about their educational experiences. Recommendations of how to serve the unique needs of the middle school student were offered.

4:00 p.m.-4:50 p.m.   **COUNSELING (Display Session)**.. **Cabildo Salon**

ETHICS TRAINING IN SCHOOL PSYCHOLOGY: A NATIONAL STUDY

Christine E. Daley, Georgia Public Schools, and Anthony J. Onwuegbuzie, Valdosta State University

Given the many ethical concerns confronting school personnel today, it has become imperative to incorporate ethics training into psychology graduate programs. Thus, the purpose of this investigation was to assess the current status of ethics education in school psychology programs nationwide. No such study has previously been undertaken.

A survey was mailed to directors of all 182 school psychology training programs listed in the 1996 edition of Peterson's Guide to Graduate Programs in the Humanities, Arts, and Social Sciences. The return rate was 29.7%.

Most programs (88.7%) introduced ethics within the first semester of training, with 63.0% offering one or more courses dealing specifically with ethical issues. The majority (94.3%) of these courses were required at least at the doctoral level.

The most common rationale (65.0%) for not providing ethics courses was that relevant content is embedded throughout the curriculum. Confidentiality, including matters related to records and conversations, was regarded as having primary importance by 27.7% of directors. Overall, 40.7% ranked this issue among their top three ethical concerns. The second most frequently-cited consideration (33.3%) involved limits of professional training and competency, including the provision of services by unqualified individuals. Issues involving the use of tests, including outdated/invalid measures, test

security, adherence to standards, interpretation of data, and matters concerning professional integrity, including dual/multiple relationships, were listed by 27.8% of the directors.

Several respondents reported using course and comprehensive examinations, site supervisors' evaluations, observations, discussions, and reaction papers to evaluate student competency in ethics. Ninety-six percent of respondents believed that their programs provided at least moderately effective training in ethical awareness and decision making. Nevertheless, many indicated that they had no formal evaluative procedures in place and acknowledged the difficulty in assessing proficiency in this area.

Implications and recommendations for future directions in ethics education and supervision were presented.

GOALS 2000 GRANT TO DEVELOP AND PILOT PRACTICE GUIDES FOR THE MISSISSIPPI SUBJECT AREA TEST - ALGEBRA I, BIOLOGY I, AND U.S. HISTORY

Arlene T. Amos, Choctaw County (MS) Public Schools

Student performance on subject area tests is a significant variable in the school accreditation process in Mississippi. Therefore, significant efforts have been made over the past few years to improve educational opportunities for students to gain insight into the instrumentation of these subject area tests.

The United States Office of Education awarded a grant of $120,000 to the Choctaw County (MS) School District to develop practice materials and study guides to help teachers prepare their students for success on the state-wide subject area tests.

Program of Research and Evaluation for Public Schools, Inc. (PREPS), a private consortium of 87 school districts housed at Mississippi State University, was contacted to develop the practice modules and to pilot them in six of the consortium districts during the 1998-99 school year. Training sessions for teachers in PREPS were held during the summer and fall of 1998, and approximately 500 teachers were trained to use the practice materials. This training took place during the year prior to the spring testing.

Copies of the practice materials and the training modules were available for preview at the display. Representatives from Choctaw County and PREPS were available for discussion.

CORRELATES OF ANXIETY AT THREE STAGES OF THE FOREIGN LANGUAGE LEARNING PROCESS

Phillip Bailey, University of Central Arkansas; Anthony J. Onwuegbuzie,
Valdosta State University; and Christine E. Daley, Georgia Public Schools

In recent years, there has been an increase in the number of college students required to enroll in language courses as part of their degree programs. Unfortunately, many students have negative experiences while learning a foreign language at the secondary and college levels. In fact, foreign language courses have been found to be more anxiety-inducing than any other course in a student's program of study.

Foreign language anxiety is a complex phenomenon that has been found to be one of the best predictors of foreign language achievement. Recently, foreign language anxiety has been conceptualized as occurring at each of the following three stages: input, processing, and output. Specifically, input anxiety refers to the apprehension when receiving information in the second language; processing anxiety refers to the apprehension experienced when learning and thinking in the

foreign language; and output anxiety refers to the apprehension experienced when speaking or writing in the target language.

Each stage-specific anxiety has been found to be significantly related to several stage-specific tasks. However, no other study appears to have investigated the antecedent correlates of these three stage-specific anxieties. Thus, this study of 136 college students attempted to identify a combination of variables that might be correlated with these three anxiety components.

Canonical correlation analyses revealed that students who were older, who had lower expectations of their achievement in foreign language courses, who did not like to learn in competitive environments, who had low perceived scholastic competence, and who had taken little or no high school foreign language courses, tended to have higher levels of input anxiety, processing anxiety, and output anxiety.

The educational implications of these findings for understanding foreign language anxiety and for increasing foreign language learning were discussed, as were suggestions for future research.

SELF-CONCEPT AND LIBRARY ANXIETY

Qun G. Jiao, Baruch College/CUNY; Anthony J. Onwuegbuzie, Valdosta State University; and Christine E. Daley, Georgia Public Schools

Library anxiety, which is experienced by approximately 75% of undergraduate students, is an unpleasant feeling or emotional state with physiological and behavioral concomitants, which comes to the forefront in library settings. Typically, library-anxious students experience negative emotions, including ruminations, tension, fear, and mental disorganization, which prevents them from using the library effectively.

Library anxiety has been conceptualized as comprising several dimensions, including barriers with staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers. Although librarians have long recognized the pervasiveness of library anxiety, only recently has this construct been the focus of research. Even fewer studies exist at the graduate level. Yet, recent evidence has suggested that the anxiety experienced by graduate students can be debilitating, preventing them from conducting effective research, and perhaps, consequently, from completing theses and dissertations necessary for the attainment of their degrees.

Because library-anxious students tend to perceive that other students are proficient at utilizing the library, whereas they alone are incompetent, and that their ineptness is a source of humiliation, it is likely that self-perception is an antecedent of library anxiety. However, this possible relationship has not been tested empirically. This was the purpose of this study.

Participants were 148 students enrolled in graduate-level research methodology courses. A canonical correlation analysis was used to determine the relationship between seven dimensions of self-perception and five library anxiety dimensions. The first canonical function ($Rc1^2 = 24.4\%$) revealed that students with the lowest levels of perceived academic self-competence, intellectual ability, creativity, and social competence tended to have the highest levels of library anxiety associated with affective barriers and comfort with the library. A comparison of the function and structure coefficients suggested that perceived self-worth, barriers with staff, and mechanical barriers served as suppressor variables. Implications were discussed.

Thursday, November 5, 1998

5:30 p.m.   **MSERA BUSINESS MEETING**.....................................**Queen Ann Ballroom**

PRESIDER: John M. Enger, Arkansas State University
                       President, MSERA

                       Joint Universities Reception

7:30 a.m.-8:45 a.m. **PAST PRESIDENTS' BREAKFAST**................................... **Queen Ann Parlor**

9:00 a.m.-9:50 a.m. **COLLEGE OF EDUCATION DEANS '**
        SPECIAL SESSION.. **Beauregard Salon**

PRESIDER: Angela M. Sewall, University of Arkansas at Little Rock

9:00 a.m.-9:50 a.m. **TEACHING AND LEARNING**
        (Symposium) .... **Cathedral Salon**

ORGANIZER: Thelma J. Roberson, University of Southern Mississippi

**ISSUES RELATIVE TO THE SUPERVISION OF TEACHING
AS SEEN BY DOCTORAL STUDENTS**

Overview

One of the most important, though often underutilized, processes for improving the performance of schools is instructional supervision, which provides a vehicle whereby teachers and their supervisors can develop open dialogue regarding teaching performance, effectiveness of instructional strategies, and links between teacher behaviors and student achievement. In recent years, a number of new developments in supervisory practice have emerged; simultaneously, there are many enduring issues relative to the practice of instructional supervision. Consequently, the purpose of this symposium was to explore several key issues affecting the work of instructional supervision from the viewpoint of doctoral students in education. Students' papers, each of which was grounded in appropriate supervisory theory and a thorough review of the literature, were received prior to the annual meeting by a faculty member in educational administration who served as a discussant in the session.

Collecting Data on Classroom Observations: Issues Relative to Validity and Reliability
Thelma J. Roberson, University of Southern Mississippi.

Many factors can contribute to the psychometric integrity of data collected using various observational recording formats. The author provided a number of examples of these factors and discussed implications of these issues on supervisory practice.

Supervisory Styles and Leader Behaviors of School Administrators
April Regina Lee, University of Southern Mississippi

For several decades, researchers and theorists have sought to develop schemas for explaining the behaviors of educational administrators. Simultaneously, a growing literature base has developed on the diversity of supervisory styles of instructional supervisors. In this paper, the author presented several models for linking various administrative behaviors to preferred styles of supervision.

Documenting Teacher Performance via Professional Portfolios
Carolyn Myrick, University of Southern Mississippi

The development of innovative methods for supervising teachers was addressed in "Documenting Teacher Performance via Professional Portfolios." The move toward performance-based assessment has prompted many to consider various forms of a teacher professional portfolio as a means for facilitating instructional supervision. The author developed several views of the professional portfolio, discussed items that might be included in the portfolio, and presented alternate ways that portfolios might be utilized in the supervisory process.

Professional Growth Through Teacher Self-Evaluation
Beverly Bullard, University of Southern Mississippi

Based on the assumption that instructional supervision is not necessarily other-directed, the author developed several means by which self-evaluation strategies may become an integral part of the instructional supervision process. Kathy K. Franklin, University of Arkansas--Little Rock, served as the session discussant. Based on her insights as a professor of educational administration, she provided key comments relative to the merits of the several papers and offered insights about the practice of instructional supervision.

9:00 a.m.-9:50 a.m.   **AT-RISK STUDENTS (Discussion Session)** .... **Gallier Salon**

PRESIDER: Deborah J. Grubb, Morehead State University

**A SUMMARY OF STUDENT PERCEPTIONS TO AN INTERVENTION
PROGRAM FOR AT-RISK STUDENTS IN A SCHOOL DISTRICT**

Pamela B. Weed, The University of Alabama at Birmingham

Students who have failed more than one grade are at extremely high risk for dropping out of school. A primary contributing factor to their high risk status is the fact that they are not enrolled in the same grade as their age mates. The Back On Track program, developed in a large school system in a southeastern school district, provides students the opportunity to be placed in their appropriate grade. The purpose of this study was to examine the effectiveness of the program by evaluating program goals: Improved self esteem, increased school attachment, and improved relationships with school personnel and peers.

The program consisted of a six-week summer school intervention. Successful completion of this program has resulted in placement in the appropriate grade level. Students participated daily in both large group counseling sessions as well as academic remediation in reading, language and math. The academic remediation is provided using both traditional and computer-assisted and classroom instruction. Students spend one-third of their school day involved in the counseling component as compared to a traditional summer school program in which no time is spent in counseling activities.

The population for the study was all students who have been involved in The Back On Track since 1993. These students were asked to complete a researcher-developed questionnaire through which their perceptions regarding their participation in the program were examined. The data were analyzed using descriptive statistics and content analysis.

Results indicated that, during the five-year period, 42% of these students remained in school. Students reported that they felt better about themselves and had a stronger attachment to school. Program participation was described as strongly influencing the decision to remain in school.

PROGRAMS FOR AT-RISK STUDENTS: WHAT ARE THE REAL GOALS?

Rodney W. Roth, The University of Alabama

This study evaluated the effectiveness of two different programs for at-risk students in an Alabama school system. One program, called Program A for this paper, served students in grades six to eight. The other program, called Program B for this paper, served students in grades six to 12. The primary goal for Program A was to reduce the dropout rate. The primary goal for Program B was to provide an alternative approach to learning.

Program descriptions and goals were obtained from written documents and interviews with the two principals. Data were collected from the teachers and counselors concerning the implementation of the educational programs and the various program objectives. Student follow-up data from the two programs were obtained from the director of student records.

Data collected from the teachers in the two programs indicated that: they had adequate information about achievement levels; achievement levels were obtained from standardized tests; achievement gains were assessed by using teacher made tests; instructional programs were based on state curriculum guides; they did not have adequate information about behavioral problems; and they spent about 30% of a typical class period on discipline. The dropout data indicated that almost all of the students drop out of school when they reach the legal age to quit school.

The paper represented the various changes by the school district in the two programs based on the evaluation results. In addition, the paper discussed some alternative goals for programs for at-risk students. This section was based on the evaluation and a literature review.

STUDY BUDDY CLASSROOM PILOT ADOPTED SCHOOL-WIDE

Jahn M. Miles, Ryan School (AL), and Michelle Acker-Hocevar,
The University of Alabama

An initial needs assessment suggested that a school program be developed to help students with study skills. A pilot was conducted with special education students buddied with regular education students. Enthusiasm for the program spread school-wide, resulting in a school-wide participation with the exception of one teacher. The purpose of the study was to use survey feedback research to improve the attitudes and practices of elementary and middle school students to determine the facts of the buddy system to: (1) assess academic grades, (2) student attitudes, and (3) social skills.

The sample consisted of 162 students in kindergarten through eighth grade. The student population was white, in a rural setting, with 60% on free and reduced lunch. The research initially met with teachers for collaborative planning, then, periodically at six, nine, and twelve weeks, respectively, for data collection.

A pilot group of students was instructed on study skills during the first three weeks. These students were then grouped with various partners for the remainder of the intervention phase. Surveys, interviews, and observations were conducted with teachers and students. The researcher asked students to respond to 10 open-ended survey questions such as: (1) Do you feel you know how to study and make good grades? (2) Do you study better with another student? and (3) What would you change in your class to enable you to learn more? To the teachers, the researcher posed questions: (1) Has the student come to class prepared? (2) Is the student more willing to ask for help? and (3) Does the self-esteem of the student appear to be improved?

Data were analyzed and presented in tables for participants to discuss. Patterns were identified from the data collected. Overall findings were drawn that indicated positive implications for continued use in the classroom. These findings included improved student attitudes, social interactions, and academic performance.

9:00 a.m.-9:50 a.m. **SCHOOL ADMINISTRATION (Discussion Session)**...........**Pontalba Salon**

PRESIDER: Scott C. Bauer, University of New Orleans

LEADERSHIP IN REDUCING STRESS RELATED COMMUNICATION PROBLEMS WITHIN A SCHOOL THAT LEADS TO CAPACITY BUILDING

Dan Carden, American Christian Academy (AL), and Michele Acker-Hocevar, The University of Alabama

Differences in conflict styles may induce stress related communication problems that lessen the ability of faculty to solve problems. The purpose of this study was two-fold: (1) to increase teachers' awareness of their individual personality and conflict styles, and (2) to examine the possible relationships, if any, that might exist between both personality and conflict resolution styles.

Three sources of data were collected in this study. First, 30 faculty members took the Uniquely You Personality Profile developed by Mels Carbonell and Robert Rohm. Then, these same individuals responded to the Thomas-Kilmann Conflict Mode Instrument. Lastly, teachers discussed the results of the two instruments in interviews with the principal. An action research approach actively engaged teachers in the process of making sense of responses to the surveys during an interview. This conversation was later extended to a discussion among the faculty.

Findings indicated that most teachers were introverted and quite passive in resolving conflict. Teachers stated that understanding how other teachers approached conflict played a major role in reducing their stress associated with dealing with so many different personality and conflict styles on a daily basis. Faculty expressed that, through a better understanding of themselves, they gained a better understanding of the differences among their colleagues.

The study is considered to be significant for all educational leaders trying to build more collaborative systems of communication. Principals can benefit from having concrete ways to build capacity among teachers to solve complex schooling problems. Further, principals who better understand their own conflict and personality styles might be better able to lead their faculty in solving problems. Self-understanding and listening to the teachers proved the most beneficial part of the process.

SITE-BASED MANAGEMENT: RETROSPECTIVE UNDERSTANDING AND FUTURE DIRECTIONS

Friday, November 6, 1998

Joyce C. Levey, Central High School-West (AL), and Michele Acker-Hocevar,
The University of Alabama

Site-based management requires a set of complex skills built over time by teachers, parents, and administrators that shifts authority for decision making from the central office to the local school. The ability of the local school leader to share authority and responsibility for decision making requires many school-wide competencies, with an ongoing evaluation process of both schools and the district.

The methods used in this study were document analysis and a focus group interview. First, training materials and surveys reviewed and analyzed the effects of training on the actual implementation of site-based management at one local high school. Second, a focus group interview sought information on how newer teachers understood their roles. The study was significant because it provided a retrospective understanding for making recommendations for future directions for both school and district organization development.

Overall findings and recommendations concluded that training would be enhanced by a model for school leaders to assess both their competencies and the school's readiness in relation to moving to a shared governance process. Additionally, clear expectations were critical for altering teachers' roles under site-based management, with continued resource support for developing new competencies. Further, ongoing evaluation of the process was necessary for determining the future direction of site-based management implementation practices. Lastly, building information systems, with indicators of positive effects of site-based management on such practices as: (1) increased parent involvement, (2) greater teacher participation, and (3) the types of decisions made in relation to student learning could be used to evaluate school performance over time.

THE EFFECT OF SCHOOL CHARACTERISTICS AND COMMUNITY DEMOGRAPHICS ON THE ROLE VARIATIONS OF ALABAMA SECONDARY SCHOOL PRINCIPALS

Mark Bazzell, Pike County (AL) Schools, and William A. Spencer, Auburn University

The purpose of this study was to determine how school characteristics and community demographics influence the role and daily activities of secondary school principals functioning in diverse settings in Alabama. The instrument developed for the study was constructed to collect data related to five dimensions: (1) relative school system wealth, (2) the percentage of minority students present in the school, (3) school size, (4) the rural/urban context of the school, and (5) the frequency in which principals engage in specific tasks. A total of 153 high school principals, located in a wide range of school settings, completed and returned the instrument.

The data were analyzed in an effort to describe and understand to some degree, the nature of relationships existing between specific school environments and job tasks performed by principals.   The study revealed that significant differences existed in the frequency in which high school principals engaged in specifically defined tasks and that these differences were based, in part, on variations in school and community characteristics. Significant differences were found to exist in three of the nine factors defining tasks of the principal on the basis of the school's degree of association with rural/urban environments: organizational direction, organizational linkage, and curriculum improvement. Implications for principal training were presented.

9:00 a.m.-9:50 a.m. MINORITY ISSUES AND DIVERSITY
(Discussion Session) .... **Ursuline Salon**

PRESIDER: David T. Morse, Mississippi State University

PRAXIS SCORES AT AN HBU: A FIVE-YEAR TREND ANALYSIS

William E. Wilkins, Mississippi Valley State University,
and Reid Jones, Delta State University

This study analyzed Praxis scores over a five-year period. Successful completion of the Praxis Series is a major variable in the significant teacher shortage in the Mississippi Delta. Mississippi Valley State University, an HBU, has a major role in the training of teachers for the Mississippi Delta.

Starting with an analysis of 1993 Core Battery/Content Knowledge results, the study followed trends in results and compared the success rate with the Praxis I and PLT scores from 1996-98. Analysis of Content Category scores was also completed. A comparison with State and national normative data was made. A sample size of 551 was available for the Core Battery/Content Knowledge analysis. There is a sample size of 80 for the Praxis data. Tentative indications of the results of the adoption of the Praxis Series were assessed.

While the majority of the examinees were African American, other race examinees provided a pool significant enough to make local ethnic comparisons (N for other race students = 35 for the Core Battery Series and a minimum 20 for the Praxis Series). These findings were reviewed in terms of local cultural and educational issues.

During the length of the study, special efforts to increase the scores of MVSU education majors were incorporated into the instructional program. These efforts included workshops and extensive use of the Learning Plus System, which is a computer-based study program developed by ETS designed to assist student success on the Praxis I Series.

Discussion of findings included specification of learning needs and implications for instructional programs and supplemental training programs. Tentative discussions related to recruitment and retention of minorities in teacher education programs were also presented.

PRESERVICE TEACHERS' BELIEFS AND PERCEPTIONS IN TWO
DIFFERENT MULTICULTURAL FIELD EXPERIENCES

Janet C. Richards, University of Southern Mississippi

This qualitative inquiry examined the influences of two different multicultural field contexts on preservice teachersÆ acquisition of content-specific knowledge, beliefs about teachersÆ roles, and perceptions about teaching children from diverse cultures. The first program, located in a permissive, student-centered, K-8 urban school in a large southern city, was presented the American Association of Higher EducationÆs PresidentsÆ Award for ôExemplary Service to Minority Children.ö The second program, located in a mid-sized town on the Mississippi Gulf Coast, has attempted to connect preservice and classroom teachers, students, parents, and a university professor as equal partners and co-learners. Guided by a constructivist view of learning, both literacy programs focus on integrated, literature-based pedagogy. The same instructor was in charge of both programs. Of the 88 junior or senior year preservice teachers majoring in elementary or special education, 85 were female, three were male, 85 were Caucasian, two were African American, and one was Hispanic. All were from middle socioeconomic backgrounds. Their ages ranged from 21 to 42 years.

Date were collected for two semesters and included preservice teachersÆ dialogue journals, metaphors, semantic maps depicting their teaching experiences, and final reflective statements. At the end of each semester, the researcher collated all of the data sets for study participants. She conducted content analyses of the preservice teachersÆ journals, metaphors, and reflective statements.

She also made two separate listings of the items mentioned in the preservice teachersÆ semantic maps and then tallied the frequency of the items on each list.

Twelve major themes emerged from the inquiry, pointing to the efficacy of field-based programs for preservice teachers and suggesting that contextual conditions unique to a particular school may influence what preservice teachers learn and think about teaching

UNDERACHIEVEMENT OF AFRICAN AMERICAN TEACHERS IN RESEARCH METHODOLOGY COURSES: POSSIBLE IMPLICATIONS FOR THE SUPPLY OF MINORITY SCHOOL ADMINISTRATORS

Anthony J. Onwuegbuzie, Valdosta State University,
and Christine E. Daley, Georgia Public Schools

The purpose of this study was to compare levels of achievement in research methodology courses between African American (n = 29) and Caucasian American (n = 145) inservice teachers.

A series of *t*-tests revealed that African American teachers had lower levels of achievement than Caucasian American teachers with respect to: (1) evaluating research articles, (2) writing research proposals, (3) mid-term conceptual knowledge, (4) end-of-course conceptual knowledge, and (5) overall course average. These differences ranged from .61 to 1.44 standard deviations, indicating large effect sizes. Significant differences remained after adjusting for students' grade point averages, with effect sizes ranging from 0.60 to 1.37 standard deviations.

In fact, using the predefined grading scale of the course instructor, most African American teachers in the research methodology courses would have been awarded grades that were typically one letter-grade below their Caucasian American counterparts. Given both the real importance of grades for students and the self-defining characteristics of perceived importance, this is a substantial difference.

Furthermore, the grading scale indicated that, whereas Caucasian American teachers were obtaining a "B" grade, on average, African American teachers were attaining a "C" grade. Bearing in mind that, in many graduate institutions, students are disqualified from pursuing their degree if they obtain a "C" grade on more than one occasion, obtaining a "C" grade or lower in research methodology courses has the potential to prevent students from completing their graduate degree programs. This, in turn, might prevent them from being certified in educational administration.

Thus, research methodology courses may act as a potential barrier that hinders African American teachers from obtaining certification in educational administration. Underachievement in research methodology courses also may prohibit some African American teachers from being certified, by making it more difficult for them to complete theses, dissertations, and other extended assignments that require research skills. Recommendations for future research were provided.

10:00 a.m. - 10:50 a.m.   **MSERA OUTSTANDING RESEARCH AND DISSERTATION**...**Cabildo Salon**

AWARD WINNING PAPERS

PRESIDER: Jim Flaitz, The University of Southwestern Louisiana

Friday, November 6, 1998

A special session to acknowledge the winning papers in the competition for Outstanding Research and Outstanding Dissertation Paper. The winning papers will be presented at this session.

10:00 a.m.-10:50 a.m.   **TEACHER EDUCATION (Symposium)** .... **Cathedral Salon**

ORGANIZER: Cynthia M. Gettys, The University of Tennessee, Chattanooga

COLLABORATION ON THE TEACHER EDUCATION SCENE:
AN ACADEMIC YEAR IN THE CLASSROOM
The Vision: Establishment and Development of the PDS Program
Thomas Bibler, Teacher Preparation Academy; Mary Tanner,
College of Education and Applied Professional Studies;
and Sandra Black, Hamilton County (TN) Public Schools

The Action: Selection and Staffing of PDS sites
Barbara Ray, Doug Kingdon,
and Jeanette Stepanske, PDS

The Outgrowth: Expansion of the PDS Program
Kathleen Puckett, Valerie Rutledge,
and Barbara Wofford, PDS

The Evaluation: A Connection to the State of Tennessee Framework for Teachers
Cynthia M. Gettys, Daniel Baker, and Caryl Taylor, PDS

One trend in teacher education is the emergence of the Professional Development School (PDS), a program that combines theory and practice in real-life experiences for prospective teachers. Such schools, analogous to teaching hospitals in the medical profession, involve practicing teachers in preparing and training future teachers. Because both public school systems and colleges of education have significant interest in preparing new teachers, PDS's serve as centers for preparation and research.

Another trend in teacher preparation is in response to the growing inclusive education movement, where special needs students are educated as much as possible in a general education environment with support from special education teachers. This particular delivery model calls into question the separate methods courses typical of teacher training and encourages a closer look at collaborative practices in methods courses for preservice general and special education teachers.

Since the fall semester, 1995, The University of Tennessee, Chattanooga has implemented the PDS as a semester-long experience. Students enroll as a cohort and become an extension of the faculty at the school to which they are assigned. Rather than spending hours in a college classroom discussing theoretical ideas of education, students learn methods and strategies of teaching along with specific ideas for classroom management and immediately move into a classroom of real students to put these concepts into practice.

As UTC's Professional Development School has evolved, it has expanded from serving only elementary majors to include secondary and special education majors. Beginning with the spring of 1998 a new cohort was added. Student teachers were assigned to a PDS II configuration and moved as cohorts from school to school. This mixture of students enabled the faculty of the university to adapt their courses and present them in an integrated format that more closely resembled the educational setting in which students would be employed after graduation. Besides enabling the college students to

gain a broader perspective of the education profession, they also learned about the interdisciplinary nature of their fields and the need to understand how it relates to a wide range of subjects, grades, and settings.

PDS semesters provide other intangible benefits. Graduates of this experience have developed a network of contacts with teachers and administrators in whose schools they have worked. They have been a part of the everyday activities of the school and have seen for themselves the myriad requirements and expectations facing the faculty of a school. In addition, they have learned about the day-to-day responsibilities that demand much of the teacherÆs time but are not directly related to classroom instruction. The research demonstrated that these students with expanded classroom experience were sought by administrators to fill openings for the 1998-99 academic year.

This symposium chronicled the establishment, development, and expansion of this program through the presentation of papers outlining the program overview, processes involved in developing collaborative teams, and forms to replicate the collaboration between the university and the public school system.

10:00 a.m.-10:50 a.m.   **COUNSELING (Discussion Session)**...**Gallier Salon**

PRESIDER: Edie Hall, Morehead State University

IMPLEMENTATION OF A PROBLEM-SOLVING SKILLS TRAINING PROGRAM FOR ENHANCEMENT OF ASTHMA MANAGEMENT IN AN ADOLESCENT

Karen I. Dittmer, Mississippi State University

The majority of asthma management programs mentioned in the literature have been geared toward children and adolescents. Very few programs have been developed solely for adolescents. This study extended previous studies implementing a newly-developed asthma management program for adolescents that focuses on problem-solving skills training. This protocol for adolescents differs from protocols for children in that it is sensitive to developmental issues present in the adolescent.

The subject in the present study exhibited asthma of a mild severity yet had difficulties in complying with medication intake. Results from several measures indicated a modest change. The subject's comfort level in her ability to manage her asthma increased during intervention. In addition, use of as-needed medication increased slightly from the first week of baseline. Discussion included the need for implementing this program with more adolescents with various severities of asthma and the need for other measures that could better assess the effectiveness of an asthma management program implemented with adolescents exhibiting less acute asthma.

FAMILY PERCEPTIONS OF PERSONALITY CHANGES OF TRAUMATIC BRAIN INJURY SURVIVORS

Edith A. Miller and Leigh T. Aiken,
Auburn University

This study was designed to examine the utility of the Katz Adjustment Scale-Relatives' Version (KAS-R1) in providing helpful information to primary caregivers (family and professional) for survivors of traumatic brain injuries (TBI). Developed by Martin Katz and Samuel Lyerly to examine personality characteristics of schizophrenic patients, the KAS-R1 has been used successfully with other

populations. Ground-breaking work with TBI survivors has been done by other researchers, and this study was planned to update and extend this work.

The sample for this study was 62 caregivers of TBI survivors who responded to a request for this information distributed for the researcher by the Alabama Head Injury Foundation. (Roughly, 300 instruments were mailed with a return of 22% usable responses.) The KAS-R1 is a 79-item scale that is completed by the primary caregiver for the TBI survivor. In this study the caregiver was asked to complete instruments based on the individual's pre-injury and post-injury personality characteristics. Ten subscales are available with the instrument: (1) Belligerence, (2) Apathy⁄ A Motivational Syndrome, (3) Social Irresponsibility, (4) Orientation, (5) Antisocial Behavior, (6) Speech⁄Cognitive Dysfunction, (7) Bizarreness, (8) Paranoid Ideation, (9) Verbal Expansiveness, and (10) Emotional Sensitivity.

The central research question of this study was "How can the information attained from the KAS-R1 be used to develop information regarding the personality characteristics of the TBI survivor to help in understanding and responding to needs for new skills, attitudes, or coping mechanisms?" The most productive result of this exploration was the development of a profile based on pre- and post-differences on the 10 subscales. Translated into standard scores, the subscales were presented on one profile to enhance interpretation.

EATING DISORDERS AND LOCUS OF CONTROL AMONG AFRICAN AMERICAN AND CAUCASIAN AMERICAN FEMALE UNIVERSITY STUDENTS

Eugenie Joan Looby and Keith Hudson, Mississippi State University

This study examined the prevalence of eating disorders, and also locus of control regarding eating behaviors among African American and Caucasian American female university students. Three hundred female subjects participated in the study, including 146 African Americans and 127 Caucasian Americans. The Bulimia (BULIT) test was administered to assess bulimic symptoms and binge eating. The Eating Self Efficacy Scale (ESES) was administered to measure locus of control regarding eating behaviors. Demographic information on dieting patterns was also collected and analyzed.

Results from the BULIT test indicated no significant differences in the prevalence rates of bulimia and binge eating in both groups. Results from the ESES, however, indicated significant differences between both groups on eating self efficacy. Caucasian American females had more difficulty controlling their eating behaviors in social circumstances, while African American females seemed to eat more when experiencing negative emotions or situations. Dieting demographics for both groups revealed significant body image dissatisfaction, discrepancies between real and desired weight, and frequent dieting and engaging in other compensatory behaviors to lose weight. Implications for prevention and treatment, and suggestions for future research were discussed.

10:00 a.m.-10:50 a.m.   **HIGHER EDUCATION (Discussion Session)** ....**Pontalba Salon**

PRESIDER: Hae-Seong Park, University of New Orleans

EDUCATIONAL STOCK AND ECONOMIC OUTPUT: A QUANTITATIVE ANALYSIS

Yuxiang Liu, University of Arkansas at Little Rock

The problem of this study was to investigate the strength of the relationship between educational stock and economic output. Educational stock was measured by the percentage of state residents with different levels of education. The gross state product (GSP) per capita was used as an indicator of economic output.

The 50 states and District of Columbia of the United States were selected as the sample of this study. A series of multiple linear regression analyses was used to investigate the data. The GSP per capita was used as the dependent variable. Used as the five independent variables were the percentages of state residents with a high school diploma and above, with any level of higher education, with an associate degree and above, with a bachelor's degree and above, and with a graduate or professional degree.

The results of the multiple linear regression analysis indicated that about 19%, 21%, 25%, 40%, and 50% of the variance in GSP per capita can be explained by the percentage of state residents with a high school diploma and above, with any level of higher education, with an associate degree and above, with a bachelor's degree and above, and with a graduate or professional degree, respectively.

There was a pattern in the results of this study. The percentage of state residents with progressively higher levels of education could explain a progressively larger percentage of the variance in GSP per capita. The results may have several implications. First, college-educated people may be more productive than high school graduates. Second, people with higher levels of education may become more productive than people with lower levels of education. Third, education, as a form of human capital embodied in the work force, may contribute a fairly large part to economic output.

EFFECTIVE AND INEFFECTIVE ASSESSMENT PROGRAMS IN HIGHER EDUCATION

Angela M. Sewall and Tom E.C. Smith, University of Arkansas at Little Rock

Universities have long been in the business of assessment, primarily assessment of students and, if requested, assessment of programs. Rarely, however, have universities traditionally engaged in self-assessment programs. Recently, several national and regional accreditation agencies have mandated that universities engage in self-assessment programs. The result has been a flurry of activity on most campuses to develop and implement assessment programs. What has often been discovered is that frequently university faculty, who have long been engaged in assessing students, have a much more difficult time developing and implementing their own assessment programs.

Regardless of the difficulties experienced on some campuses to develop assessment programs, there are strong reasons to do so. Too often, faculty teach courses using the same content and methods that have been used for years. And often, there has never been an effective assessment to determine if what students are taught in courses results in their abilities to accomplish specific actions later. The Educational Testing Service (ETS) states that "to affect significant improvement in teaching and learning, institutional assessment calls for a comprehensive plan--one that employs measures both internal and external." Therefore, to be effective, assessment plans must include more than simply assessing students using a comprehensive examination or scores on a standardized test.

The session reviewed how the assessment program at the University of Arkansas at Little Rock (UALR) was implemented. The program, begun three years ago, was initially met with a great deal of confusion and criticism from faculty. This past year, deans from the campus units implemented significant changes in the campus assessment program. This presentation provided details about how the assessment program was initially implemented, and the problems that resulted, how the program was revamped, and the positive outcomes.

Friday, November 6, 1998

STUDENT PERCEPTION OF ACADEMIC ADVISEMENT SERVICES

Andy Gillentine and Jeff Schulz, Mississippi State University

Student advisement is an integral component of our educational system. The quality and quantity of academic services offered to students can play a major role in not only the collegiate experience but also in the introduction to the professional world. The purpose of this study was to identify factors important to the student in academic advisement. The study utilized qualitative techniques to investigate students' perceptions of factors they perceive as important in the academic advisement process. One hundred ninety-one graduate and undergraduate students completed the open-ended questionnaire. Responses were analyzed using frequencies and percentages and according to graduate and undergraduate classification.

The need to evaluate advisement quality is important because of the increased scrutiny of academic institutions. Accountability demands, decreased public confidence, and competition for students have served as catalysts for the reevaluation of academic services. Research indicates that the quality of undergraduate education in colleges and universities could be significantly improved if existing understanding about three critical conditions of effectiveness (student involvement, higher expectations, and assessment and feedback) were consistently utilized. These elements can be determined through the implementation of student evaluation of their academic experience.

The broad variance in services and responsibilities offered through academic advisement programs presents a problem in the preparation of advisors to aid students in determining the best possible course of study to achieve her/his professional goals. While it is important that programs be able to design their own academic services, it is also important that some level of standardization be evident. This standardization will occur through the identification of core areas of academic preparation and through the identification of student perceptions of academic advisement needs. Through studies such as this, universities can develop academic training and support for current faculty and modify the academic preparation of future educators.

10:00 a.m.-10:50 a.m.	**TEACHER EDUCATION (Discussion Session)**.................... **Ursulines Salon**

PRESIDER:	Huey-Ling F. Lin, Auburn University

PRESERVICE TEACHERS' ERRORS IN THE CLASSIFICATION OF DEVELOPMENTALLY APPROPRIATE AND DEVELOPMENTALLY INAPPROPRIATE PRACTICES: A DESCRIPTIVE STUDY

Dianne Lawler-Prince and David A. Saarnio,
Arkansas State University

This study examined preservice teachers' selections of developmentally appropriate (DAP) and inappropriate practices (DIP). Practices for selection were from the Developmentally Appropriate Practice Guidelines (Bredecamp and Copple, 1997). Forty-two statements were used, of which half were DAP and half were DIP for kindergarteners. Preservice teachers (n=95) participating in an undergraduate Early Childhood Education methodology course served as participants. A Q-sort technique was utilized which required participants to select items on a continuum of "most" DAP and "most" DIP. Participants' responses were tallied and examined using simple frequencies and binomial probabilities. Five DAP and DIP statements were chosen by the students as "most appropriate" and "most inappropriate." Results indicated that there were some practices considered the "core" of DAD.

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Preservice teachers appeared to understand the nature of DAT and DIP; misclassification, however, that did occur.

Fifty statements were misclassified as either DAP or DIP. Interestingly, students were much more likely to classify DIP statements as DAP statements (incorrectly) than they were to classify DIP statements as DAP. Further analysis revealed two statements most frequently selected as "most DAP" (within the top 5 statements) had counterpart (opposite DIP) statements incorrectly misclassified as DAP by 12 different students (13%). More than two-thirds of the participants classified 100% of the statements correctly. Further analysis of incorrect responses as well as teaching observation practices is necessary. Results revealed that additional examination of the relationship between theory and observation recordings (theory and practice) was needed.

USE OF CONSTRUCTED SPEECH TO IMPROVE CLASSROOM PERFORMANCE

Kathleen P. Glascott and Larry L. Burriss, Middle Tennessee State University

The purpose of this study was to explore how constructed speech could be used to improve undergraduates' understanding of course content. Using Vygotsky's concept of private speech, 231 students in 12 education classes at three universities were assessed.

The project took place in two stages. First, students were asked to prepare audio tapes of class projects. Later, they were asked to self-report the efficacy of their taping in terms of information retention and understanding of concepts underlying their projects.

One of the authors, an education professor, is visually impaired, and the students were told that they should provide both printouts of their class reports as well as tape recordings of the same material, which would be sent to the author for evaluation.

Materials, including mid-terms, final exams, projects and term papers were submitted to the instructor throughout the semester. The students were not told that their work would be part of a project on constructed speech, only that the professor needed both hard copy and a taped version of class projects. (NOTE: The authors are aware of the ethical concerns regarding what may be perceived as involuntary participation. However, they felt the need for "uncontaminated," that is, honest reports about their taping experiences, outweighed this minor deception). After all of the course materials had been submitted, students were asked to complete a short questionnaire concerning the impact of taping on their learning.

Students' written comments were analyzed using Spradley's Domain Analysis. Quantitative data were analyzed using standard and chi-square tests. The Domain analysis yielded several categories that described both the taping process itself, as well as educational benefits received. More than 71% of the students reported the taping of their class material helped them better understand their own learning processes and course content. There were no significant differences among classes or schools.

MASTERY LEARNING AND CONTEMPORARY ISSUES IN EDUCATION

Vahid Motamedi and William J. Sumrall, Mississippi State University

Issues concerning applications of mastery learning continue to interest educators (Montazemi and Wang, 1995). This study examined the historical background of mastery learning. Both Bloom and Carroll are credited with the development of the mastery learning model. In addition, this presentation described three contemporary educational areas of emphasis as they related to mastery

learning. Specifically, both the differences and similarities of the topic areas -- computer-assisted instruction, cooperative learning, and constructivist learning theory were compared to mastery learning.

Computer-assisted instruction is described as a tool to assist the teacher when using mastery learning. Multiple research articles (Dunkleberger and Heikkinen, 1983; Milkent, 1986; Milkent and Roth, 1989; Vockell and Mihail, 1993) report that computer-assisted instruction provides students opportunities to retake, practice, and improve scores through various computer programs. Furthermore, researchers report that these two areas (i.e., mastery learning and computer-assisted instruction) have been effectively used together through the eighties to the present.

Similarly, comparisons between cooperative and mastery learning were discussed in detail. While the computer is considered an aid to the mastery learning strategy, the authors concluded that cooperative learning does not assist nor is it directly related to mastery learning. Cooperative learning involves students working in groups, students with specific job roles, and students assisting one another to learn. Mastery learning, on the other hand, is usually seen as an individualized process of learning the subject matter. Support for research combining both strategies was recommended by the authors of this presentation.

Finally, literature describing similarities and differences between constructivism and mastery learning is non-existent. Research using mastery and constructivist learning in combination was an additional recommendation within the presentation.

10:00 a.m.-10:50 a.m.   **EDUCATION REFORM (Discussion Session)**.................. **Beauregard Salon**

PRESIDER: Linda W. Morse, Mississippi State University

EMPOWERING ELEMENTARY TEACHERS IN RESTURCTURING SCHOOLS: DIMENSIONS TO GUIDE THE MISSION

Beverly M. Klecker, Eastern Kentucky University, and
William E. Loadman, The Ohio State University

Teacher empowerment is a cornerstone of many educational reform efforts. The purpose of this study was to define and measure dimensions of teacher empowerment with a census of the 3677 teachers working in 169 Ohio public elementary schools initiating self-designed, state-funded restructuring programs. Research questions were: (1) What is the level of elementary teachers' empowerment as schools begin reform efforts? and (2) Are there differences in the level of empowerment by teacher demographic variables (gender, age, race/ethnicity, academic degree held, and years of teaching experience)?

Mailed survey returns were received from 1888 teachers (51%) in 108 elementary schools (64%). On the 38-item School Participant Empowerment Scale (Short & Rinehart, 1992), teachers' mean rating of their overall empowerment was 3.93 on a five-point, Likert-type scale (1=SD to 5=SA). Dimensional ratings were: Status (4.17), professional growth (4.29), self- efficacy (4.21), decisionmaking (3.50), impact (3.69) and autonomy (3.38). Teacher demographic data were collected through self-report. Statistically significant ($p<.001$, effect size .01 or greater) differences in ratings of empowerment by elementary teacher demographic characteristics were described.

There were no statistically significant differences in empowerment ratings by the demographic characteristics of age, race/ethnicity, academic degree held, or years of teaching experience. The finding of no difference in teachers' ratings of empowerment across "years of teaching experience" indicated that programs to increase skills and knowledge should be implemented at both preservice and inservice levels. Female elementary teachers rated their sense of empowerment higher than did male teachers on the dimensions of: (1) status, (2) professional growth, (3) self-efficacy, and (4)

autonomy. Differences in ratings of empowerment by gender suggested that educating elementary teachers may require gender-specific guidelines.

PERCEIVED BARRIERS TO IMPROVEMENT IN EDUCATION

Otis K. LoVette, Northeast Louisiana University; Joseph Savoie,
McNeese State University; and Anthony Armenta,
Southeastern Louisiana University

This research identified various factors, situations, and circumstances within the school environment and in society that were perceived as limiting improvement in education in K-12 schools. For the purposes of this investigation the researchers defined a ôbarrierö as that which hinders or restricts progress. ôPerceptionö was defined as personal conceptions that are formed by individuals as a result of their experiences and impact that individualÆs physical and emotional reactions. The researchers also posited the following: If persons ôperceiveö the presence of ôbarriersö that limit their ability to perform effectively in their working environment, these ôperceived barriersö will limit their performance. Even though perceptions vary from individual to individual, if it can be determined that a ôlarge numberö of individuals have the same or similar perceptions, it then becomes very important to consider these perceptions, especially when they relate to ôbarriersö to performance.

The researchers used a Barrier Inventory which was developed using student input regarding possible barriers. The Inventory was administered in the spring of 1997 to 151 teachers and administrators representing 29 of LouisianaÆs 66 school districts. Respondents were graduate students in school administration at three Louisiana universities. Respondents were asked to use a scale that ranged from ô 5 - A major barrier; very importantö to ô1 - We have an excellent situation in this area.ö Responses were to 39 items relating to the ôIndividual Schoolö and 24 relating to ôSystem-Wide.ö Statistical analysis was performed using chi-square with a .05 significance level to identify significant ôperceived barriers.ö Responses were also tabulated by parish or school system and by group: "Administrator" or "Certified Professional/Non-administrator."

The investigation revealed a number of significant ôperceived barriersö at both the ôIndividual Schoolö and ôSystem-wideö levels that must be addressed before school personnel will be able to make ôsignificantö progress in efforts to improve education in K-12 schools.

PARENT AND FACULTY PERCEPTIONS OF AN EXTENDED SCHOOL CALENDAR

Linda Houghton, Birmingham (AL) City Schools, and James E. McLean
and James M. Ernest, The University of Alabama at Birmingham

The purpose of this study was to determine the perceptions of parents, faculty, and staff of a large school system regarding an extended school calendar. Realizing that changing the school calendar from a traditional nine-month schedule to a continuous learning calendar spanning the full year could not be successful unless it was supported by the parents, faculty, administration, and staff, a school board commissioned a survey of these groups.

A one-page, 12-item survey form was developed. The 12 items were stand-alone, 4-point, Likert-scaled items (from "Strongly Agree" to "Strongly Disagree" with no neutral point). Survey forms were distributed to all students (to take home to a parent), faculty members, administrators, and staff members. A total of 17,671 surveys were collected and processed. After entering and checking the data, they were analyzed using frequencies, percentages, means, and standard deviations for each of the

12 items. No inferential statistics were run, as this was a total population voluntary sample. Comparisons were made among schools and among the stakeholder groups. Comments were submitted to a content analysis.

Overall, the data were split almost equally between positive and negative perceptions of the continuous learning calendar. Teachers displayed more negative perceptions of the change than did parents. The samples of administrators and staff were too small to permit definitive conclusions, but some general statements were made. As a group, the administrators were the most agreeable that a continuous learning calendar would lead to improvements in education. On the other hand, staff displayed the strongest negative perceptions. Qualitative comments illuminated the quantitative findings, particularly the negative ones. Based on the results of this survey, it was recommended that the school system reconsider its decision to implement the continuous learning calendar until more support is generated among parents and teachers.

11:00 a.m.-11:50 a.m.   **TECHNOLOGY (Discussion Session)**.....................................**Cathedral Salon**

PRESIDER: David T. Morse, Mississippi State University

TUTORING ON THE INTERNET

Mike Zenanko, Marsha A. Zenanko, and Franklin L. King, Jacksonville State University

Distance education is changing the way students communicate with professors. Tutoring on the internet is becoming a useful way to allow asynchronous communication between teachers and students. The study was based on three years of monitoring tutoring groups on the Internet and a pilot study done at a Teaching/Learning Center. The presentation explored tutorial methodologies, contemporary tutorial sites, business uses of Internet tutoring, and sources available to tutorial programs.

When a teacher tutors by e-mail, a maieutic teaching methodology serves the learner best. Several sites on the Internet offer tutorial services. Most of these sites respond to questions directly. The more effective tutor will involve the learner through a series of questions, rather than responding directly to the question.

Tutoring sites exist on the Internet in many subject areas. Some tutoring sites act to coordinate tutors and students needing their specific skills. Writing centers offer analysis and feedback to submissions. Businesses supplement their training through contact with students by e-mail. Businesses have found that Web Chat and other chat lines are not effective. Distance learning at universities has created guidelines for tutorials.

This research has given teachers who are about to embark on using a tutorial methodology sources of information. A web page at http://www.jsu.edu/depart/edprof/zen offers on-line links to the information presented.

REFLECTIONS ON TECHNOLOGY TRAINING FOR K-12 EDUCATORS: A CASE STUDY

Elizabeth K. Wilson, Margaret L. Rice, and Beverly Wallace, The University of Alabama

A 1995 U. S. Congress Office of Technology Assessment study demonstrated that most teachers believed that they had not received adequate training to be able to use technology effectively in teaching.

In an attempt to provide adequate technology training for teachers in Alabama public schools, the state of Alabama mandated a technology scholarship program. Results of a 1996 study of the participants in the scholarship program demonstrated that training teachers in the uses and integration of technology positively changed their attitudes toward technology, raised their skill levels, and could lead to new opportunities and resources for their students.

This study was an extension of the previous study and was designed to provide an in-depth examination of one of the technology scholarship participants. The participant was a social studies teacher who participated in the technology scholarship program during its first year. He was teaching world history and world events. Data were collected over three years, and data sources included e-mail, dialogue, classroom observations, and lesson plans/course materials.

The major purposes of this study were to determine what changes in technology use took place over the time of the study; how the participant integrated technology into the curriculum; to demonstrate that training, such as the scholarship program, can positively affect practicing teachers' attitudes toward technology and encourage the use of technology in classrooms; and that adequate training in technology use and integration must be implemented for technology to be used in the public schools in an efficient and effective manner.

Results indicated that the participant changed the manner in which he used technology in his classroom for instruction and management. The various ways that he integrated technology into the curriculum and the activities he used with his students were discussed. Also discussed were his reflections on technology use in schools and how technology use benefited his students.

UTILIZING COMPUTER TECHNOLOGY TO ENHANCE
HEALTH EDUCATION INSTRUCTION

Catherine E. McMillan and Stacey Stevens,
Texas A&M University

Health education is a rapidly changing field of study. Information is constantly changing and in need of updating. As computer technology becomes more integrated in universities, college instructors are beginning to utilize this technology in the delivery of their classes. Educating and building relationships with students is a priority for many college professors. Various forms of computer technology will facilitate this process.

The purpose of this review of literature was to investigate current computer technology and how college instructors utilize different technology regarding health education instruction. Numerous forms of computer technology were discovered to enhance lectures and correspondence between the student and instructor. Advantages and disadvantages for each form of computer technology were uncovered and presented. An extensive review of the literature was conducted to determine the most applicable forms of computer technology to the college classroom setting. This review of literature allowed for the development of strategies to incorporate the use of technology into the diverse teaching methods of various instructors.

Utilizing these forms of technology in the college classroom will allow instructors to more effectively communicate health education information, as well as enhance the health status of their students.

Friday, November 6, 1998

11:00 a.m.-11:50 a.m.   **AT-RISK STUDENTS (Discussion Session)** .... **Gallier Salon**

PRESIDER: Deborah J. Grubb, Morehead State University

HELP REJECTORS: WE KNOW THEY DON'T SEEK HELP - WHAT WE DON'T KNOW IS WHY

Stephen O. Wallace, The University of Alabama

Many college students who seem to need academic assistance the most do not take advantage of available services, which often results in their placement on academic probation or academic suspension. Most learning assistance professionals know that this phenomenon exists, but they do not understand why it exists or what to do about it. Therefore, this population of students remains underserved and continues to be a significant factor in college and university attrition rates.

Whereas much research has been directed at understanding students who do seek needed assistance, little research has been directed to understanding help rejectors. The beginning point in assisting these students to achieve their academic goals must be to seek a better understanding of the phenomenon of help rejection and of the factors that account for the lack of responsiveness to offers of help in students who need it to succeed in college. This paper proposed a theoretical model that provided a basis for needed systematic research into the phenomenon of help rejection and a better understanding of the educational, social, and psychological needs of help rejectors.

EXAMINING THE LINK BETWEEN VISION, LEARNING, AND DELINQUENCY

Roger A. Johnson, Old Dominion University

The seriousness of juvenile delinquency in our society is undisputed. Treatment programs for delinquents have had limited effectiveness. It is difficult for a treatment program, particularly an academic one, to be effective if the adolescent lacks adequate vision. Few schools utilize a comprehensive vision screening program. Important visual skills needed for learning are not being detected. Undetected visual problems may lead to academic difficulties, which is a prime contributor to juvenile delinquency. Thus, the relationship between vision, learning, and delinquency needs to be investigated.

Fifty adjudicated male adolescents with an average age of 19 were screened using the New York State Optometric Association Vision Screening Battery. This vision test included the following eight separate measure of visual ability: Tracking, fusion, acuity-distance, acuity-near, stereopsis, convergence, hyperopia, and color vision. The youth offenders were compared with an equal number of graduate students.

According to a chi-square statistical analysis, significantly more youth offenders failed one or more of the visual screening measures than did the graduate students. The youth offenders had a particularly difficult time with tracking, the ability to move the eyes across a printed page. If one lacks the ability to efficiently move one's eyes across a page of print, one's ability to read will be significantly hindered. Adolescents with undetected visual impairments may believe that they have reading or learning problems. This misconceived self-perception along an undetected visual impairment is likely to frustrate adolescents. Unless at-risk adolescents with visual impairments are properly diagnosed and treated, many, such as the subjects in the present study, may end up in the criminal justice system. In addition, a multiple regression model revealed that tracking and convergence predicted achievement scores.

ADOLESCENT DELINQUENT BEHAVIOR AND INFLUENCING VARIABLES

Keith L. Hudson and Eugenie Joan Looby, Mississippi State University

This position paper examined the origins of delinquent behaviors as suggested by a proposed path model. The influencing variables included parenting style, family cohesion, and deviant peer involvement. The model suggested a linear causality, implying that (1) parenting style has a direct effect on family cohesion, deviant peer involvement, and delinquent behavior, (2) family cohesion has a direct effect on deviant peer involvement and delinquent behavior, and (3) deviant peer involvement has a direct effect on delinquent behaviors.

The three parenting styles--authoritarian, authoritative, and laissez-faire--were compared. Specifically, the level of autonomy that each style permits, and its impact on the development of delinquent behaviors were discussed. Family cohesion, and its relationship to parenting style, was also analyzed. Research suggests that low family cohesion implies a weak family bond that can also influence the development of delinquent behaviors. Social learning theory posits that the acquisition of social behavior is obtained through both direct conditioning and modeling, while control theory suggests that a negative, aggressive, interaction style and inconsistent discipline by significant individuals in the adolescentÆs life can lead to poor bonding and support seeking through deviant peer group association. These theories were used to explain the development of deviant peer involvement, the most critical component of the model.

Implications for decreasing the manifestations of delinquent behaviors, and suggestions for future research were indicated.

11:00 a.m.-11:50 a.m.   **MATHEMATICS EDUCATION**
(Discussion Session) ....**Pontalba Salon**

PRESIDER: Mary Ruth Reynolds, University of West Georgia

THE EFFECTIVENESS OF AN INTEGRATED APPROACH FOR TEACHING MATHEMATICS AND SCIENCE TO GIFTED HIGH SCHOOL STUDENTS

Tandra L. Tyler-Wood, University of North Texas, and Dawn Putney
and Michael Cass, State University of West Georgia

Project GaGEMS (Georgia's Project for Gifted Education in Math and Science) viewed the effect that placement in an integrated, hands-on math and science curriculum had on the achievement of academically talented high school students. Over a two-year period a team composed of eight high school mathematics and science teachers met and developed a curriculum that incorporated higher-level thinking skills and more real life laboratory experiences into mutually reinforcing math and science lessons. An identification matrix was employed to identify 32 student participants, completing eighth grade, who met subject-related criteria in science and math for participation in the GaGEMS program. Student participants attended a large rural high school in Georgia. The curriculum was developed to incorporate higher level thinking skills and more real-life laboratory experiences into mutually reinforcing math and science lessons. Course work was arranged so that lessons complemented and supported interrelated areas of study in mathematics and science. For example, when set theory was covered in mathematics, classification systems in Biology were also addressed.

After the conclusion of the two-year program, GaGEMS participants and a comparison group were given the mathematics and science sections of the ACT as they exited the tenth grade. The GaGEMS students scored significantly higher on the Science, Math Total, Pre-Algebra/Elementary Algebra, Intermediate Algebra/Coordinate Geometry and Plane Geometry/Trigonometry sections of the ACT. To determine if the GaGEMS students retained their higher scores throughout high school, the SAT scores of both groups were compared as the students exited high school. Significant differences in the areas of Total Score and mathematics were noted.

The findings of the Third International Mathematics and Science Study indicate the United States continues to fall further and further behind other industrialized nations in the areas of mathematics and science. Clearly, it is time we considered major modifications and a more demanding curriculum for highly capable students. Project GaGEMS offers a feasible alternative for educating high functioning students in the areas of mathematics and science. Replications of the project to further study effectiveness are certainly indicated.

AN INVESTIGATION OF TEN ELEMENTARY TEACHERS' QUANTITATIVE LITERACY INSTRUCTION AS A RESULT OF PARTICIPATION IN THE ALABAMA QUANTITATIVE LITERACY WORKSHOP

Sondra J. Yarbrough, C. J. Daane, and Amy Massey Vessel,
The University of Alabama

The Alabama Quantitative Literacy Workshop was established through the collaborative efforts of the College of Commerce and Business and the College of Education at The University of Alabama to enable teachers to address the NCTM Curriculum Standards and state objectives related to probability and statistics. The study investigated the implementation of instructional strategies presented at the workshop and the extent to which the teachers implemented these in their classroom instruction in quantitative literacy.

Ten of the 20 elementary teachers who participated in the workshop during the summer of 1997 were selected for the study. The primary researcher conducted classroom observations and individual interviews with the teachers during a 13-week period in the spring of 1998. All fieldnotes and interviews were transcribed for data analysis. Additional data collected included open-ended surveys and various documents gathered during the study. Qualitative methods were used to identify, code, and categorize the data into themes.

Findings from the data analysis included the following: (1) activities and instructional strategies from the workshop were being implemented in the classrooms, (2) instructional time in quantitative literacy increased, (3) class discussions occurred during quantitative literacy lessons, and (4) quantitative literacy skills were being integrated across the curriculum. The study also revealed that: (1) teachers valued the opportunities in which they shared ideas with one another, (2) the encouragement and support provided by the workshop instructional team was effective, and (3) some teachers needed more support with implementation of quantitative literacy lessons.

The results of the study indicated that the Alabama Quantitative Literacy Workshop has had a positive impact on the teachers who participated in the study. The investigation also provided evidence that the instructional goals established by the National Council of Teachers of Mathematics, the American Statistical Association, and the *Alabama Course of Study: Mathematics* were being supported by the Alabama Quantitative Literacy Workshop.

11:00 a.m.-11:50 a.m.   **RESEARCH IN THE SCHOOL**
               (Discussion Session) .... **Ursulines Salon**

PRESIDER: Sonya Carr, Southeastern Louisiana University

**FACTORS THAT INFLUENCE PERCEIVED STRESS LEVELS AMONG
HIGH SCHOOL STUDENTS IN NORTHEAST TENNESSEE**

Rick C. Mason and Kenneth T. Clawson,
Eastern Kentucky University

This study investigated the effects of various factors on perceived levels of stress among high school students in Northeastern Tennessee. The specific variables examined were gender, grade point average, parental composition, total number in household, and number of hours employed per week. A stress assessment was developed and administered to 200 students enrolled at Claiborne County High School in Tazewell, TN. Whole classes were chosen at random for participation, and each grade level was represented as evenly as was feasible.

Raw scores were tabulated, and other pertinent data were arranged into tables. Based on *t*-test analysis of the results, it was clear that perceived levels of stress were significantly higher for girls than for boys. The data indicated that students with below-average GPA's reported significantly higher levels of perceived stress than students with above-average GPA's. Variances in parental composition, household number, and employment hours were found to be insignificant. Implications for teachers and counselors were discussed.

**UNDERACHIEVEMENT IN FOREIGN LANGUAGE COURSES: THE ROLE OF
COGNITIVE, AFFECTIVE, PERSONALITY, AND DEMOGRAPHIC FACTORS**

Phillip Bailey, University of Central Arkansas; Anthony J. Onwuegbuzie,
Valdosta State University; and Christine E. Daley, Georgia Public Schools

Whereas some students excel in foreign language acquisition, many students underachieve in this area. To understand this phenomenon, researchers have investigated the potential role of many factors--typically cognitive variables. Surprisingly, virtually no study has simultaneously examined the role of cognitive, affective, personality, and demographic variables in relation to foreign language achievement. This was the purpose of the present study, that is, which classes of variables best predict second language acquisition among college students was investigated.

The variables selected comprised three cognitive (academic achievement, study habits, and grade expectation in foreign language courses); four affective (foreign language anxiety, perceived intellectual ability, perceived scholastic competence, and perceived self-worth); four personality (levels of cooperativeness, competitiveness, and individualism, and locus of control); seven demographic (gender, age, semester course load, number of countries visited, number of high school foreign language courses taken, status of present foreign language course, and foreign language proficiency of immediate family members). Eighteen variables were selected to keep the subjects-to-variable ratio greater than 10 to 1, and, thus, obtain reasonably stable effect size estimates.

The sample comprised 184 students enrolled in Spanish (60.3%), French (27.2%), German (9.8%), or Japanese (2.7%) introductory-level courses at a mid-southern university. The responses of all participants were combined, since no difference in foreign language achievement among students enrolled in the four courses was found. Subjects completed a battery of instruments. Foreign language achievement was measured using students' course averages (converted to *z*-scores).

The selected multiple regression model ($F[5, 178] = 18.47$, $p < .0001$) revealed that students with the lowest levels of language achievement tended to have the following characteristics:

male, low academic achievers, high levels of foreign language anxiety, low grade expectations in language courses, and valued cooperative learning. These variables, which explained 34.2% of the variance, comprised two cognitive, one affective, one personality, and one demographic variable. Implications were discussed.

EVALUATION OF FIRST-YEAR TEACHERS' ABILITY
TO ASSESS THEIR LESSON OBJECTIVES

Qaisar Sultana, Eastern Kentucky University

The study examined the ability of first-year teachers to assess the attainment of their lesson objectives, Standard IV of Kentucky New Teacher Standards. Lesson objectives and proposed assessment given in lesson plans by 60 first-year teachers were recorded in an instrument. This instrument was given to two randomly-selected regular education teachers, two special education teachers randomly-selected from a matched group, and two teacher educators, one each from special and regular education. Respondents marked each of the 60 items with a yes if the proposed assessment was appropriate for evaluating the given lesson objective or a no if it was not appropriate.

The data were recorded and analyzed. One regular education teacher marked 41 items with a yes while the other marked 31 items with a yes. One special education teacher responded with a yes to 14 items, while the other marked 41 items with a yes. The regular teacher educator marked 33 items with a yes, while the special teacher educator marked 21 items with a yes. The two regular education teachers agreed in their markings on 40 of the 60 items. The two special education teachers agreed on 26 items. Two teachers educators agreed on 35 items. Of the 60 items, all six respondents agreed in their marking on nine items.

According to these respondents, 14 to 41 of the 60 first-year teachers proposed appropriate assessment of their lesson objectives. Lack of agreement among the six respondents may have been attributed to the vagueness of the lesson objectives as well as to their proposed assessment. Further investigation is needed to draw conclusions. The study had implications for teacher preparation and teacher educators. It raised reliability and validity questions for the Kentucky New Teacher Internship Program.

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