

MINERVA



A JOURNAL OF RESEARCH AND CREATIVE ACTIVITY



THE UNIVERSITY OF NORTH CAROLINA
GREENSBORO

Inside This Issue
The Future: Our Children



Dr. Brad Bartel
Dean of the
Graduate School

This summer 1999 issue of *Minerva* highlights some of the research and orientation that historically has been the strength of UNCG: education and social science surrounding children. The university is blessed with numerous talented faculty who have devoted decades of time to understanding the processes of education our nation's youth, dealing with complex psycho-social variables, and making a difference for at-risk youth within and beyond North Carolina. The tragic shooting events in schools across the United States during the last two years points to how important it is to continue action-oriented research to find solutions to these social problems and to improve the educational climate of the nation.

We highlight some of our most notable education achievements in this issue. Drs. Calkins and Fletcher's research on preschool aggression and social well being respectively are timely in this regard. Many universities are constructing innovative approaches to science education. Dr. Sanford's approach, emphasizing the process of science and attracting women and minority students into the project is a notable accomplishment. Also included are stories about two of our major nationwide thrusts in education, *Reading Together USA*

and the *National Paideia Center*. *Reading Together USA* is an interesting case of what I would call 'reverse diffusion' of a concept from another country (in this case Israel), and then modified and expanded for American children. This peer reading program has been tested and evaluated extensively within North Carolina and found to give make a significant difference in child cognition and motivation to read. It has now expanded into five additional states. The Paideia concept of instruction presents another example of cutting-edge educational process where UNCG is making a difference.

As we go to press, the final calculations of external contracts and grants received by UNCG for fiscal year 1999 have been completed. For the first time in university history, our faculty have been awarded over \$23 million from all external sources. This is over a 28% gain from the previous fiscal year, and a dramatic increase of 300% over the last eight years. Our 'Research Vignettes' section presents a sample of the diversity of interesting research projects that are part of this explosion in funded research. In the winter 2000 issue of *Minerva* we will present a more complete listing of fiscal year 1999 faculty research projects.

MINERVA



A JOURNAL OF RESEARCH AND CREATIVE ACTIVITY
Summer 1999 • Vol. 3 • Issue 2

C O N T E N T S

- Page 2** **Preschool Aggression**
Studying destructive behavior
- Page 4** **Social Network Closure and Child Well-Being**
Research on community-building
- Page 6** **Preparing Student for Science Careers**
Making a difference in undergraduate education
- Page 8** **Reading Together USA**
A significant peer reading system goes national
- Page 10** **The National Paideia Center**
New approaches to classical education
- Page 12** **Faculty Research Vignettes**

MINERVA

The University
of North Carolina
at Greensboro

Volume 3, Number 2

Minerva is a magazine published periodically by The Graduate School at The University of North Carolina at Greensboro. Each issue describes research projects undertaken by faculty of the University.

Inquiries should be sent to *Minerva*, The Graduate School, PO Box 26176, UNCG, Greensboro, NC 27402-6176. (336) 334-5375.

Chancellor
Patricia A. Sullivan

Provost
A. Edward Uprichard

Dean of the Graduate School
Brad Bartel

Advisory Board
Dr. Peggye Dilworth-Anderson
Human Development and Family Studies
Dr. Elizabeth Natalle
Communication
Dr. Terence Nile
Chemistry
Dr. Gerald Ponder
Curriculum and Instruction
Ms. Carol Sanders
Business Affairs

Writer
Roberta Brunstetter

Graphic Designer
Betsey Wells

Photographer
Bob Cavin

© 1999 The University of
North Carolina at Greensboro.
All rights reserved.

2,500 copies of this public
document were printed at a cost of
\$5,500 or \$2.20 per copy.

THE UNIVERSITY OF NORTH CAROLINA
GREENSBORO

On the cover: Alex Katz, *Ives Field II*, 1964, oil on linen canvas
Museum purchase with funds provided by Burlington Industries,
Weatherspoon Art Gallery, UNCG, 1965.



PRESCHOOL AGGRESSION



Dr. Susan Calkins
Associate Professor,
Psychology

Anger and the inability of children to handle it have had an explosive impact on our society. The need to identify students at risk for uncontrollable and unpredictable behaviors and to develop early intervention techniques is critical. One of the questions to be answered is, how early in development does anger and aggressive behavior manifest itself and why. In her study, *Developmental Precursors of Preschool Aggression*, Dr. Susan Calkins, associate professor of Psychology at the University of North Carolina Greensboro, is examining infant to toddler behavior to see if there is a way to determine who might be at risk for becoming aggressive in the future. "Perhaps my study can provide some insight into what's happening with children very early on that makes normal adjustment down the road difficult, then therapists can take that information and determine the appropriate intervention," she says.

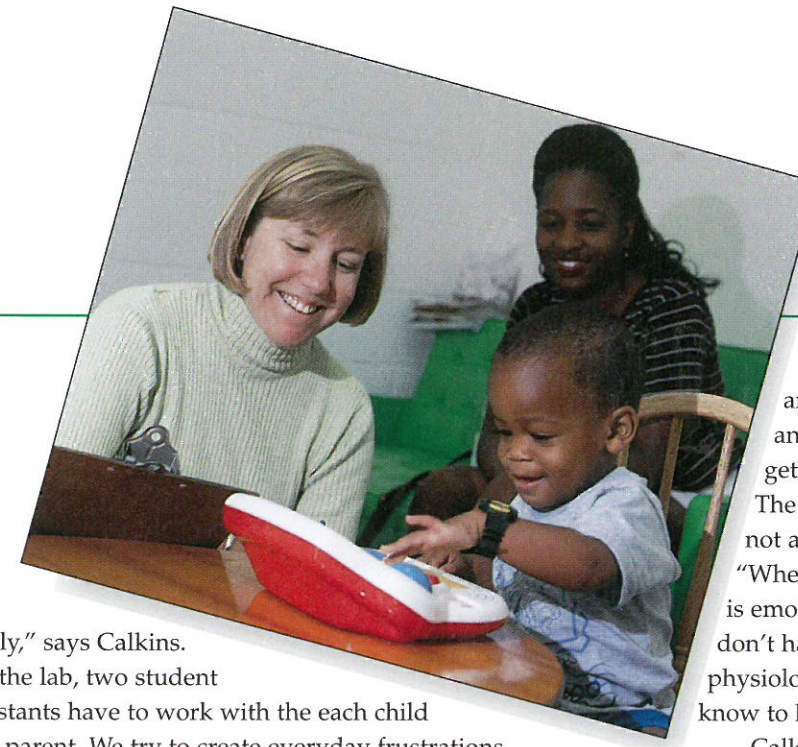
Calkins points out that researchers have studied the causes of aggressive behavior in older children, but very few have attempted to look into what it is that makes some two- or three-year-olds act out aggressively, or if there is a relationship between anger in infancy and later aggressive behavior. In an effort to trace the progress of antisocial behavior in preschoolers, Calkins spearheads a second study, *Developmental Trajectories of Early Problem Behavior*, which focuses on this age group.

Based on her hypothesis that aggressive, destructive behavior in early childhood may be associated with a high anger/frustration quotient in infancy, Calkins screened more than 300 randomly selected six-month-olds to find those who were temperamentally angry, got easily frustrated, and didn't develop ways to handle their anger. One hundred sixty infants who are highly angry and 80 who are low on anger were selected for follow-up assessments at 12, 18, 36 and 48 months of age. Calkins and her staff examine physiological and maternal influences

on the infants to determine if they exacerbate or ameliorate the behavior and to see if there may be ways to predict which infants will become angry children. The subjects are now two-and-a-half years old and will be studied through preschool. In the preschool-toddler study, Calkins is following two-year-olds who have been identified by their parents as displaying aggressive, destructive, disobedient behavior to determine if the means with which they deal with anger and frustration is predictive of future aggressive behavior.

Calkins along with Drs. Susan Keane, Terri Shelton and Arthur Anastopoulos, three UNCG clinical faculty members with whom she works collaboratively, plan to document the interaction of the children with their parents in the home environment and the laboratory. The children will be assessed for anger/frustration emotionality, compliance, impulsivity, and activity level. Maternal control and discipline will also be measured. In the school, the investigators will observe the children's academic achievements, their relationship with their teachers, and how they get along with their peers. These children will be followed through the second grade. Additionally, Anastopoulos will assess the children for Attention Deficit Hyperactivity Disorder (ADHD) to see if aggressive toddlers are likely to display early signs of ADHD.

The National Institute of Mental Health through their Child and Adolescent Risk Committee has funded Calkins studies. "They are very invested in trying to find out what puts children at risk for later problems," says Calkins. "And we have had exceptional cooperation with this project from the parents, the schools and of course, UNCG," says Calkins. "I really appreciate the help I've received from the university. They provided the seed money I needed to do a pilot study to support my original grant proposal, and they have also provided student lab assistants. "Our work is extremely labor intensive and



Dr. Calkins (l), working with Justice (r). Justice's mother Tamika Thompson-Bain is in the background.

costly," says Calkins. "In the lab, two student assistants have to work with the each child and parent. We try to create everyday frustrations the child encounters at home. In one measure of behavior, the assistants videotape the interaction of the mother and baby as the baby responds to the frustration of having a toy taken away, and then they score the behavior."

Parents play a big role in developing the strategies children need to handle anger, says Calkins. How a parent responds to the child's behavior greatly influences the child's responses to frustration. The strategies the mother uses to distract the child become part of the baby's strategy. If the mother is able to shift the baby's attention, the baby ultimately learns to shift its own attention. Over time, as the baby experiences interaction with parents and other caregivers, it starts to develop a ways to cope with behavioral challenges. When, as a toddler, the child starts to interact with peers, it has to learn to deal with the frustration of sharing or having another child take away a toy. Calkins wants to see whether the child's early strategies for coping with negative emotion translates to the peer environment. If a child learns good coping strategies, will it use them not just with mom, but with peers as well?

Calkins would like to determine how far back in development it is necessary to go to determine future aggressive behavior. At what point in development does a child learn to walk away, fight back, or tell the teacher when provoked? Calkins' studies also monitor the heart rates on the children they are studying. Their conclusions so far appear to refute a current theory that children who have difficulty controlling their

anger are under stimulated and are looking for ways to get aroused physiologically. The children she is studying do not appear to be under aroused. "When they're in a situation that is emotionally arousing they just don't have the same capacity either physiologically or behaviorally to know to handle their emotions."

Calkins typically has four graduate students and five undergraduate students working with her. She says that many of the undergraduates have earned the undergraduate research assistantships the university provides, which pays them a stipend to work with her for the year. "Undergraduate assistance is critical," says Calkins. "I absolutely rely on them. I also have had an honors thesis student working on the project. The students come to me because they want to work with kids. And they're good with them, that's what makes this work. We have to keep the child entertained and create an atmosphere where the family is happy to be part of the research, and we've been successful at doing that even though we're frustrating their child a little," she says.

Calkins, who received her doctorate in developmental psychology at the University of Maryland, has been at UNCG since 1994. She has published extensively on social and emotional development in infancy and early childhood.

STUDENT PROFILE

Lauren Davis, Undergraduate Psychology Major

Lauren Davis, who will graduate in December 1999, has been working as a student assistant in Calkins' lab since September 1998, measuring the attention span of six-month olds. "I plan to go to grad school, and this has been a great opportunity to acquire the research experience that will help me get in..." she says. During the summer, Davis hopes to assist in writing a paper on the project and to work on a presentation.



SOCIAL NETWORK CLOSURE AND CHILD WELL-BEING



Dr. Anne C. Fletcher
Assistant Professor
of Human Development
and Family Studies

Social relationships amongst children are acknowledged major factors in their development. To take this a step further, recent research at the University of North Carolina at Greensboro has demonstrated that children are even more profoundly influenced when these relationships include the parents of their friends. According to the data collected by Dr. Anne C. Fletcher, assistant professor of Human Development and Family Studies, in her two-year study, *Social Network Closure and Child Well-Being*, children benefit most when their parents not only know their friends, but also are involved socially with the parents of their friends, thereby creating what are termed "closed" social networks.

Fletcher's cross-sectional study looked at how networks of social relationships amongst groups of children and their parents influenced the children's academic achievement, psychological well being, involvement problem behavior, and social competence. Parent-to-parent contact might include such interactions as maintaining ongoing friendships, to simply talking on the phone to arrange play dates or talking with each other when picking children up at school. Parent-to-child contact might be experienced as parents meet their children's friends at sporting events or entertain them in their own homes. Fletcher said that an initial premise of the study was that "the more closure you have, the better the children should do."

Fletcher points out that the late James Coleman, sociologist and researcher from the University of Chicago, was the first to articulate the idea that these connections are important. He noted that children from Catholic schools were outperforming children from public schools even though the Catholic schools he studied had fewer resources. He speculated that what was really helping the children was the support and supervision they received from living in a community where everyone knew everyone else.

Inspired by Coleman's theory and her interest in childhood development, in 1996, while

at Chapel Hill as an National Institute of Mental Health postdoctoral fellow, Fletcher proposed a study to empirically document to what extent the parents of a core group of students interacted with each other and their children's friends, and the extent to which these relationships made a difference in children's lives. Just before coming to UNCG in early 1997, Fletcher received funding in excess of \$108,000 from the William T. Grant Foundation, a private group that focuses on ways to enhance the well being of youth, to pursue her data collection.

The purpose of Fletcher's study was to demonstrate the extent to which social closure actually existed and, if it did, how it affected children's well being. Also, did it make a difference for some children but not others. Finally, if the study found that social closure did affect children, Fletcher was interested in figuring out the "why." Is it because parents who know each other exchange more information about school, other children and teachers? Or is it because connected parents keep their eyes on one another's children? Does it in fact take a community to raise a child, and if so, how do we build these communities? How do we work with schools and communities to rebuild the connections we had in past generations that allowed and encouraged cross parenting?

Fletcher's study looked at approximately 160 fourth graders and their families. After the children had a couple of months to make friends, Fletcher administered a questionnaire to the students to identify their social groups. In a pilot study, Fletcher had noticed the children and their parents did not agree on who the children's friends were. To overcome this problem, Fletcher used a procedure developed by Robert Cairns at UNC Chapel Hill, called the Social Cognitive Mapping Procedure, which yielded a "map" of children's social relationships. In the follow-up portion of the study, Fletcher sent two research assistants to the students' homes to interview parents and



children about social network closure and children's well-being. At the school, teachers completed questionnaires about participating children's academic and social competence. The research team was given permission by parents to access academic grades and achievement scores at the end of the term, as well. At the time of this writing, all two years of data have been collected except for a portion of final academic grades and achievement test scores.

"The preliminary analysis of our data suggests that closure plays a major role in children's lives, and may be as important as the parenting they receive at home," said Fletcher. "We have found that closure is equally as important for boys as for girls. The higher the levels of closure, the greater are children's levels of the academic achievement. In terms of social competence, social adjustment, popularity, involvement in aggressive and problem behavior, social network closure is tremendously helpful for European American children, but not necessarily for African American children.

"We have also found that closure seems to have the strongest effect when parents are themselves having a difficult time parenting, but are forming social connections with highly competent parents." UNCG has been very generous in its support of this research, particularly through the Human Environmental Sciences Foundation, said Fletcher who has also obtained external supplementary funding to

analyze and report her data this summer. "What's more," said Fletcher, "UNCG has really outstanding graduate and undergraduate students, and we've been able to involve them in this project." She explains that this year undergraduate Pam Nickerson has been working on this project for her departmental internship placement. Ms. Nickerson has worked on all aspects of the project all year and is now learning to do analyses and write a research paper. By the time she enters graduate school she will have co-authored papers published in professional journals.

Last spring, with a new faculty grant from UNCG, and assistance from the UNCG Institute for Health, Science and Society, Fletcher began a probe of closure among middle school students to see if it was linked with drug and alcohol abuse. "Our pilot study showed us that we would have to proceed differently with this age group to measure closure," said Fletcher. "Our next step is to use this data to help tell us what's going on over time as children transition into adolescence."

This year, the UNCG School of Human Environmental Sciences Foundation provided seed money to fund a follow-up of 75 of the children who participated in the larger project. "We know that cross-sectional social closure is associated with children doing well. The next step is to find out if it affects them longitudinally over time," said Fletcher.

" CLOSURE
PLAYS A
MAJOR
ROLE IN
CHILDREN'S
LIVES, AND
MAY BE AS
IMPORTANT
AS THE
PARENTING
THEY RECEIVE
AT HOME ".



PREPARING STUDENTS FOR SCIENCE CAREERS



Dr. Mary Kay Sandford
Associate Dean of the
College of Arts and
Sciences

“SCIENCE ISN’T
DONE IN
ISOLATION;
IT’S DONE IN
COMMUNITY
WITH OTHER
SCIENTISTS”

By encouraging women, minorities, and the physically impaired to participate in the National Science Foundation grant, “Preparing Students for Science Careers,” Dr. Mary Kay Sandford, associate dean of the college of arts and sciences and associate professor in the department of anthropology, and Dr. Grace E. Kissling, professor of statistics in the department of mathematical sciences at the University of North Carolina in Greensboro, are attempting to improve the ratio of those groups in the sciences.

Although women comprise at least 55 percent of all college students, with the rate expected to soar another 27 percent by 2006, a 1996 report of the National Center for Education Statistics shows a very low percentage of women earn degrees in the sciences. According to a 1988 study published by the National Science Foundation, women represent 44 percent of the entire work force, but only 15 percent of the scientific and engineering community; African Americans, comprise 10 percent of the work force and only 2.5 percent of all scientists; and Hispanics comprise 7 percent of the work force but only 2 percent of all scientists.

“In the past, we haven’t made science very attractive, and we haven’t made the benefits of a science education readily apparent,” said Sandford. She believes that science education can be more than just preparation for a career. “It needs to be more holistic, not just to help young people become better scientists but to help them grow as human beings, as well.”

To select undergraduates for their program, Sandford and Kissling canvass local university and private college systems for recruits. “We’re trying to pull from a larger pool than might ordinarily apply, a biology major who is interested in going to medical school, or a chemistry major interested in forensic science, or perhaps a student who might be interested in becoming a nutritionist,” said Sandford. To do first hand original research examining skeletal materials for signs of disease and nutritional disorders, ten undergraduates were selected in

the fall of 1998 for the year-long segment of the multifaceted project. In addition to the research, they took courses in the analysis of human skeletons, professional development and research methods.

The students learn how science is done, how to come up with a research question and the steps needed to answer that question. The process requires training in theory and methods, interaction with Sandford and Kissling, and is an exercise in active and collaborative learning.

“This is not a simulation of students doing research, it is students doing research,” said Sandford. With collaboration a critical component of the program, the students not only work with the principals, but they are required to work with each other. “Science isn’t done in isolation; it’s done in community with other scientists,” she said. During the course of the year, the students are taught a variety of research, work, and life skills, including communication styles, teamwork and group processing skills, listening, and time management. “An important part of their professional development is their ability to work together, to function as a group. That involves listening to one another in a discerning, not a judgmental manner. It involves giving each other the opportunity to be heard and respecting other people’s opinions,” said Sandford.

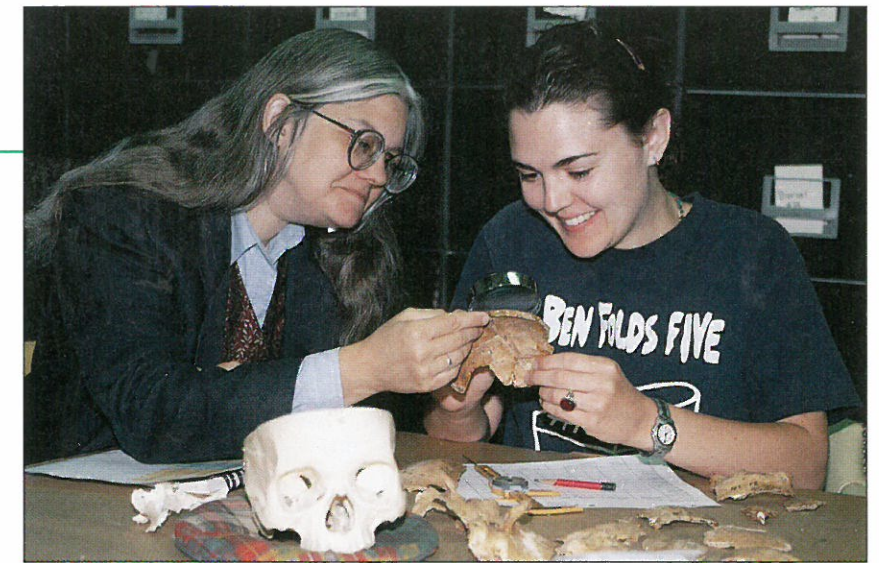
Ethical standards and professional conduct are critical components of the program and from Sandford’s perspective, should be part of any scientific training. Students are encouraged to think about their own personal codes of behavior and, from there, to think about situations in which individuals might breach a given standard of conduct. Through readings, lectures and discussions, ethical issues from academic integrity, cheating and plagiarism to conduct in scientific research are examined. The students look at issues regarding honesty in handling one’s data, in designing one’s experience, and in reporting the results of one’s study, as well as other types of ethical considerations. “We look at all sorts of ethical situations because we want the

students to leave the program with a very broad perspective on scientific research.”

In addition to the mentoring of two other team members, Dr. Eileen Jackson and Ms. Georgiann Bogdan, the students are exposed to a variety of local and national guest lecturers, consulting scientists and scholars representing a wide range of career tracks. This year they had the opportunity to interact with UNCG Chancellor Patricia Sullivan, whose doctorate is in biology; Dr. Charlotte Roberts from the University of Bradford in England, author of a project textbook, who began her career as a nurse; and the eminent scientist, Dr. Jane Buikstra, who holds a distinguished teaching chair at the University of New Mexico in the department of anthropology. A physical anthropologist, Buikstra conceptualized an area of study called bioarcheology and is also one of the few anthropologists who is a member of the National Academy of Sciences, the most distinguished science organization in the country, said Sandford.

The primary source of funding for the project is from the National Science Foundation through a special directorate called the Research Experience for Undergraduates (REU). In addition, the project gets some matching money from the University, which was also helpful in supplying start up money for the research. Sandford credits the University’s commitment to the project and its underlying support for helping to acquire the NSF funding. “The National Science Foundation really requires a high level of institutional support in order to be eligible to get funding,” she said.

Sandford’s current laboratory research assistant is a graduate student. Over the past four years she has had four undergraduate research assistants. “In the 11 years I have been at UNCG, I’ve worked with over 50 undergraduates in my laboratory in various types of research capacities. I believe nothing substitutes for a student actually working in the laboratory. In fact, a new study from the National Research Council, chaired by



Dr. Sandford (l) with April Morgan (r).

STUDENT PROFILE

April Morgan, Undergraduate Anthropology Major

“I feel very fortunate to have had the opportunity to work on a research project with a professor who has inspired me,” said April Morgan, an anthropology major who graduated from UNCG in May. Morgan spent the past year as the undergraduate research assistant on Dr. Sandford’s project, looking at skulls for lesions that are indicative of infection. Just before graduation, April presented a poster at the Elliott Center that described the research methods and results of the project. “Opportunities like this are what make this department strong,” said Morgan. “It has helped me build a resume which will strengthen my application to graduate school,” she added.

Marye Anne Fox, chancellor of North Carolina State University, urges academe to require all undergraduates regardless of their major to take courses in science, mathematics, engineering and technology and to allow as many students as possible the opportunity to participate in research projects. Personally, I’m committed to that. Research and teaching are inextricably related. Both students and professors benefit from the involvement of students in the research process. It’s truly a win-win for everyone. It is however, labor intensive teaching. When you make your laboratory a learning environment, you have stepped up to the next tier of intensive interaction with students. As a professor, it is the most rewarding experience you can have.”



READING TOGETHER USA



Dr. Treana Adkins-Bowling
Director, Special Projects

"That's my tutor," says the smiling second grader eagerly pointing to the fifth grader across the hall. She gets a wave and a "see you later," in return. This happens all the time explains Dr. Treana Adkins-Bowling, director of special projects at The University of North Carolina at Greensboro including Reading Together USA. Tutors and tutees enrolled in the program establish a unique bond. "They are very proud of their relationship and enjoy wearing their Reading Together USA tee shirts." This is a win-win situation," she adds as she describes the successful cross-age tutoring program. "Not only do the second graders who have been selected to participate learn to read independently and improve their comprehension, but their fifth grade tutors benefit, too. They develop problem solving and organizational skills, patience, and a profound understanding of what teachers have to do to prepare to teach."

Modeled after *Yachad*, a successful peer-tutoring program operating in over 400 schools in Israel for the past 15 years, Reading Together USA was developed through the collaboration of the University of North Carolina at Greensboro, Guilford County Schools, and the National Council of Jewish Women Research Institute for Innovation in Education at Hebrew University in Jerusalem.

"We first learned about the Israeli program in 1994," said Adkins-Bowling. "We were very impressed and spent a year preparing a pilot study, which was launched in early 1996 in three elementary schools in Guilford County: Allen Jay, Sternberger and Northwood." The study consisted of only the first phase of what has developed into a three-phase program. "We wanted to determine if the process we had developed worked, to be assured it was appropriate for the students selected for tutoring. We made some modifications in the fall of '96 and in a second pilot, we added phases two and three."

During phase one of the yearlong program, tutees read simple passages developed by the reading committee team. This phase consists of fifteen 45-minute sessions and runs from October to December. In the second phase, near the end of January, tutors and tutees take turns reading from trade books. By the end of this phase, tutees are permitted to take their books home to read to their families. In phase three, tutors help the second graders select reading materials from the media center to take home to read. Tutors, who receive support and management from the school-based coordinator, are trained to help tutees become independent readers. They provide reading strategies that tutees can use at home, in the classroom and in the library. They learn how to put tutees at ease, to engage them in conversation and to ask questions that challenge the tutees' comprehension of the reading material. "The program is successful because it has a very structured framework, and both tutee and tutor have a well developed support system," says Adkins-Bowling.

Potential tutors are chosen after careful consideration of their academic backgrounds, ability to read, and desire to help younger children. "It has become a status symbol to be selected to be a tutor," says Adkins-Bowling. In order to be considered, students must apply, be interviewed, and have parental permission to participate. Once selected, details of the program are reviewed at a parent/tutor orientation and tutors are reminded that they are responsible for making up the class work they miss during Reading Together sessions.

Tutees are children, who are at risk of failing if they don't receive help, says Adkins-Bowling. "They are not non readers nor do they have discipline problems. Although the tutees are able to decode or call words, they lack fluency and comprehension." Together, the second grade teacher and the in-school coordinator select between eight and 14 students to participate in

Dr. Adkins-Bowling with readers Jody McCullum (l) and Jazmyne Hale (r).



the reading program.

It is the coordinators' responsibility to train and supervise the tutors. Tutors meet with coordinators once or twice a week to prepare for their twice a week meetings with the second-graders. The tutor and tutee meet for 45-minutes each session. Coordinators receive their comprehensive training from the Reading Together staff, Treana Adkins-Bowling, Mary Lou Kyle, Karen Hagler and Betsy Ashburn.

Reading Together USA, which began in North Carolina in 1996, was able to expand nationally in September 1998 due to a \$750,000 grant from the U.S. Department of Education. The program is currently in operation in Florida, Texas, Illinois, Pennsylvania and Missouri, as well as in 25 schools in 12 counties in North Carolina. "Last year, we were able to provide all the materials for the five states because of the Federal grant. State funding made it possible to provide all 25 North Carolina school sites with program materials at no cost. We also received financial support from the Guilford County School System," said Adkins-Bowling.

Reading Together USA has earned many kudos from parents, teachers, tutors and tutees. Teachers reported not only improved reading skills for the tutees, but also improved class performance, higher self esteem and a better attitude towards school. Teachers noted the continued high academic performance and leadership ability demonstrated by tutors. Parents commented on the tutees' newly learned reading skills, and the pleasure tutees now get from reading, learning, and working with their "buddies." The parents of the tutors were very pleased with the development of the personal and organizational skills their children acquired.

"It would be very beneficial to document the long-term benefits of this program for tutors," said Adkins-Bowling, who has been on the UNCG faculty since 1987.

STUDENT PROFILE

Diane Johnson, Graduate Student

Most professional jobs require management and leadership skills, says Diane Johnson, and that is one of the things the tutors involved in the Reading Together USA program learn. "I wish I had had that opportunity when I was a child," she adds. A May graduate, with a masters in library and information studies, Johnson was a graduate assistant in the Reading Together USA offices for two years. Johnson learned the most, she says, from working with Dr. Adkins-Bowling, whom she sees as the consummate professional. In addition, Johnson grew to appreciate the dedication and commitment of the teachers. Johnson now works in the "Winston-Salem Journal" library.

QUOTES

(taken from letters written to Reading Together USA):

Tutor: "I think my tutee will like the story because it's about a small person doing big thing. I am getting better at being a tutor. I think this project has been real successful."

Parent of Tutor: "Having to prepare for a lesson and organize her materials have taught her that teaching isn't something that just happens. Her terrific excitement over the daily success of her tutee have been the topic of many dinner conversations lately."

Parent of Tutee: "My only regret is that the program is ending."

Teacher: "Students have become better 'word attackers'."



THE NATIONAL PAIDEIA CENTER



Dr. Terry Roberts
Director, the National
Paideia Center

"In reality, we are translators of the theory," said Terry Roberts, director of the National Paideia Center, which recently moved from The University of North Carolina at Chapel Hill and is now affiliated with UNCG and located in downtown Greensboro. The theory Roberts refers to is the one proposed by philosopher/educator Mortimer Adler and a cohort of business people, educators and scholars called the Paideia Group.

In 1982 they published *The Paideia Proposal*, a critique of American public school education. In it, they claimed that although America provided a good education for 20 to 30 percent of its children, it did an abysmal job of educating the other 70 or 80 percent, and they proposed how the schools might be improved. Virtually ignored by the general public, the book was widely read among educators and significantly influenced people who would become the education reformers of the next generation. Although considered more philosophical and theoretical than practical, Adler's work was widely discussed and read and a number of schools were built based on the model.

In 1988, at the urging of UNC President William Friday, the aging Adler established The National Paideia Center on the Chapel Hill campus. The Center pursued a rocky course until the 1993 appointment of Roberts as its director. Roberts gradually built a staff of former teachers, principals, and public school educators. Since that time, the program has grown consistently, says Roberts. "In fact, in the past two years it has grown dramatically. Our biggest struggle now is how to answer all the requests." Known in educational circles as a systemic school reform network, the Center supports a network of schools in 13 states across the country interested in regenerating their schools and the way in which they go about the business of teaching, assessment, scheduling, community relations, etc.

The Center process is based on a "classical education" model, focusing on more than just

one aspect of education, such as reading. Its goal is to change how every subject is taught over a course of three or four years. The term "classical education" means "a rigorous core curriculum of integrated subjects, ambitious mastery of fundamental communication, computation, teamwork, and problem-solving skills, learning to a depth of intellectual understanding often missing in our schools. Furthermore, it means that all these characteristics should define the learning life of each and every child," writes Roberts in a recent article.

Schools dedicated to the full Paideia model usually are standard public or charter schools. One of their greatest challenges is to achieve the highest standards without leaving any students behind. "Paideia has always believed it is not only possible to create a rigorous academic education readily accessible to all children, but it is desirable," said Roberts. Paideia teaches two specific teaching techniques. One is the Paideia Seminar; a formal discussion designed to teach children how to think critically and creatively and how to articulate their thinking. It is consciously designed to engage every child in the classroom, not just those considered gifted, says Roberts.

The second teaching technique is the Coached Project, designed to show youngsters that their academic work has some real world application and relevance. "We want the students to know that Algebra I isn't just a punishment the state of North Carolina foists off on its children, but that it has some relevance to the world outside the classroom," he says.

These techniques are designed to achieve practically what Adler argued for philosophically, the universal engagement of kids in the classroom, notes Roberts. "One of the big dilemmas in our culture is the achievement gap between majority and minority students," he continues. "In terms of Paideia, and in Guilford County specifically, we've seen very real gains in



Dr. Roberts (l) with
graduate student
Jim Mascenik (r).

closing that gap for kids who for social, cultural or economic reasons haven't been engaged in school. This is one of the reasons why, in the last couple of years, schools around the country increasingly are interested in what we do. They don't necessarily come to us for philosophical reasons; they come because they see this as a way of getting kids more universally engaged."

The Center partners intensely for at least three years with a school or school system to train the teachers and administrators, and in some cases, the parents. In order to get the Center's support the school must commit to train all of its teachers. Center trainers regularly spend time in the schools to teach model lessons, teach the teachers, observe, critique and coach their teaching. Their goal is a state of continuous improvement in every single classroom. Like a small business, funding for the Paideia Project comes from grants or contracts with individual schools or school systems.

In 1997, the National Paideia Center received a \$1 million grant from the Joseph M. Bryan Foundation of Greater Greensboro to fund a four-year training program for teachers and administrators in Guilford County. This year, the Center also begins a partnership with Forsyth County in six schools. Although UNCG provides only a small percentage of funding, what they supply in nonfinancial terms is even more valuable, says Roberts. Besides offering technology, graduate students and general support, UNCG integrates the Paideia concept

into preservice training through a Paideia Professional Development School at Jamestown Elementary. In addition, UNCG has offered to support the center in its fundraising efforts, and to further integrate Paideia preparation into the curriculum so more graduates in education will receive informal certificates documenting their training to teach in a Paideia school. "The University has been visionary enough to recognize our position and have taken an entrepreneurial attitude about the project," says Roberts. "The teachers we graduate will be in great demand. Not only will they have a teaching certificate, but they will also have experience in Paideia teaching in North Carolina. Kudos to UNCG for recognizing this and for acting with us to make this a reality," says Roberts.

Graduate students also benefit from the Paideia experience. Currently Jim Mascenik from the school of education and Omkar Sankar from the School of Business assist at the Center. Roberts' ultimate goal is to engage six graduate students in either research based on the Paideia model or inservice training. Education is a fluid environment, says Roberts. The best teachers and the best schools continue to get better. "The hard lesson we've learned over the years is that we must adapt; the attitude of continual improvement is critical."

STUDENT PROFILE

*Jim Mascenik, Graduate Student,
Educational Research Methodology*

"Graduate student Jim Mascenik sees his 20-hour-a-week stint at the Paideia Center as an opportunity to study the school reform movement from within. Mascenik, who will complete his masters in educational research, measurement and evaluation in the spring of 2000, says his major research interest is in teaching methodology and alternative school curriculum. He sees a future need for formal evaluation of school reform movements and plans to pursue that career track in addition to becoming involved in the training of teachers in Guilford County."



FACULTY RESEARCH VIGNETTES

John Rife and **Raleigh Bailey**, Social Work, created North Carolina's AmeriCorps Cross-Cultural Education Service Systems (ACCESS) program in 1994. Bailey and Rife still head the program today, expanding their commitment to the service of immigrant populations in North Carolina. The ACCESS program helps to organize new immigrant communities by recruiting and training AmeriCorps Members, over half of whom are from within the communities they serve, to provide information and referral, ESL, translation, transportation, employment, and health services, as well as citizenship education. Dr. Rife and Dr. Bailey envision a future of opportunities for economic self-sufficiency, citizenship, and acculturation for these populations.

As so much current research looks toward progress and the future, **Mark Gottsegen**, Art, has been involved in a project that may eventually lead to toward improvements in the preservation of color in the use of colored pencils. The effect of this research will touch on a variety of fields, from architecture to botany to fine art. Gottsegen's work and research in materials of painting and drawing led to the publication of two different materials reference books: *The Painter's Handbook* and *A Manual of Painting Materials and Techniques*. His articles have appeared in such journals as *Technology and Conservation*, *Art Materials Trade News*, and *American Artists*. Gottsegen has had numerous solo and group exhibitions of his own art work in the past twenty years.

Neal Stewart, Biology, researches the ecological risks associated with the release of transgenic plants. The UNCG Office of Research Services recognized Stewart for his submission of ten proposals during the fiscal year 1998 at an internal awards reception in December. He has received two, three-year grants from the United States Department of Agriculture, in 1997 and

another in 1998. Additional funding for Dr. Stewart's research has come from the National Science Foundation as well as various corporate funding agencies. Dr. Stewart's research recently appeared in *Nature Biotechnology*, *Journal of Evolutionary Biology*, and *Biological Journal of the Linnean Society*.

With the marked increase in globalization of economic markets in recent years, researchers have begun to study 'supply chains,' the links between suppliers and buyers of a specific product. **Vidyaranya Gargeya**, Information Systems Operations Management, was recently awarded a grant from VF Services to study the supply chain in the apparel and clothing industry. Dr. Gargeya's other business research interests include total quality management and continuous improvement systems, just-in-time manufacturing, and planning and control.

Judith Niemeyer, Specialized Education Services, studies the social world of young, disabled children, including relationships among family members, affection and other social interactions. Dr. Niemeyer has been involved in the Parent Education Plan: Parent Power, a project intended to assist families in gaining access to quality childcare and other education/intervention programs. She is a member of the executive board of the Family Support Network of Greater Greensboro as well as a member of the Personnel Development Committee of the North Carolina Interagency Coordinating Council for young children with disabilities. Dr. Niemeyer's research has appeared in a variety of journals, including *Early Childhood Education Journal* and *Infants and Young Children*.

Denise Tucker, Communication Sciences and Disorders, heads up the Learning to Hear Project, an outreach program created to provide aural rehabilitative services throughout the Piedmont Triad Community. The Learning to Hear Project

was originally started with a grant from the Kate B. Reynolds Foundation. The Project has recently received additional funding from the Community Foundation of Greater Greensboro to enable greater outreach for needy hearing impaired individuals as well as to provide counseling and rehabilitative therapy to the elderly with hearing loss. Dr. Tucker's other research interests include pediatric medicine and neuroscience.

Paige Hall Smith, Public Health Education, examines violence against women in terms of public health and public health policies. Dr. Smith heads a study assessing the treatment needs of North Carolina battered women, entitled Demand and Needs Assessment Studies: Alcohol and Other Drugs. She has published numerous articles on violence against women that have appeared in *North Carolina Medical Journal* and *Women's Health Issues*, among others. Recently, Dr. Smith received funding for her project, Schools and Community: A Collaborative Approach. This study proposes to incorporate intimate partner violence prevention in response to the ongoing safe schools initiatives and efforts at two southern rural high schools in Rockingham County, North Carolina.

Randy Kohlenberg, School of Music, currently serves as the chair of the Music Education Division. Dr. Kohlenberg has performed in concert and at trombone workshops in a variety of locales, including the Czech Republic, Australia, and Great Britain. He is the founder and curator of the Glenn D. Bridges Archive Library as well as the Secretary and Archivist of the International Trombone Association. Dr. Kohlenberg has published numerous pedagogical and trombone-related articles, and is currently an active member of the Market Street Brass. He teaches in the UNCG Summer Music Camp, and his students have been consistent winners of teaching positions, ensemble auditions, solo competitions, and all-state tryouts.

The Wellness Program at Senior Living Centers, a program run by the School of Nursing at UNCG, provides care to residents of three HUD-operated Independent Living Housing Centers for the elderly in Greensboro. **Jayne Lutz**, School of Nursing, recently undertook a study that determined that expanding the program to a year-round basis would result in greater participation by the elderly. Lutz was the recipient of the UNCG School of Nursing Teaching Excellence Award during the 1996/97 academic year, and she has written articles for *Nursing Matters* and the *Greensboro News and Record*.

Gail McDonald, assistant professor of English, has been awarded a \$35,000 research Fellowship from the Pew Foundation for support of her research during 1999-2000. She is one of sixteen scholars nationally selected for support by the Pew Evangelical Scholars Program. During her research leave, McDonald will complete her book manuscript, *Collaborative Sin: American Naturalism and the Languages of Responsibility*. McDonald's previous book was *Learning to be Modern: Pound, Eliot, and the American University*, which received an honorable mention for the Gustave O. Arlt award from the Council of Graduate Schools.

Film and video production is an expanding field in academia. **Emily Edwards**, Broadcasting/Cinema and Theater, explores popular culture in her film projects, which include documentaries, animated shorts, experimental shorts, news and educational programs. Her latest project, *Bad Love: A Video Documentary* explores the social construction of romance in our culture. Dr. Edwards has written articles for many journals, including *Southern Folklore*, *Current Research in Film*, and *National Academy of Recording Arts and Sciences Journal*.

THE UNIVERSITY OF NORTH CAROLINA

GREENSBORO

The Graduate School
PO Box 26176, UNCG
Greensboro, NC 27402-6176

Non Profit Org.

US Postage Paid

Greensboro, NC

Permit 30
