I am pleased and excited to introduce the first issue of the *Western Scholar*, a new publication devoted to recognizing some of the variety of scholarly contributions being made at Western Kentucky University. As reflected in Western’s Mission, “The University places a premium on teaching and learning, (and) its faculty engage in creative activities and diverse scholarship, including basic and applied research, designed to expand knowledge, improve instruction, increase learning, and provide optimum services to the state and nation.” This commitment also forms the core of the University’s Strategic Plan, *Challenging the Spirit*, in which Western “aspire to be the best comprehensive public institution in Kentucky and among the best in the nation” and “shall be the University of choice for students and faculty who are dedicated to academic excellence.”

In this and subsequent issues of the *Western Scholar* there will be articles featuring some of the outstanding scholarship of the faculty, staff, students and alumni of the University. This work can run the gamut from traditional basic research, to problem-oriented applied research, to the development and adaptation of technology, to the scholarship of teaching, and to the expansion of learning opportunities for students. What unites those engaged in this scholarly work is the creative application of knowledge, skill, and intellect to enhance our understanding of the world around us, to solve problems, to respond to needs of the community, and to incorporate students as learners and contributors to the process.

You will find included in this issue articles focusing on pioneering work in the area of elemental analysis being done by Dr. George Vourvopoulos of Western’s Applied Physics Institute; the creativity reflected in the widely-recognized musical compositions of Dr. Michael Kallstrom from the Department of Music; the significant scholarship being produced in the fields of organizational behavior and conflict management by Dr. Afzalur Rahim from the Department of Management and Information Systems; the successful efforts of Dr. Julia Roberts of Western’s Center for Gifted Studies to provide recognition and support for high potential gifted and talented students, their parents, and their teachers; the innovative work of Professor Haiwang Yuan, University Libraries Web Site and Virtual Library Coordinator, to adapt new technologies for accessing library resources while also bridging cultural gaps between his native China and the United States; the inventions and discoveries of Dr. Frank Etscorn III, WKU alumnus and inventor of the highly successful nicotine patch that helps people stop smoking; and a notable research project by a graduate student in applied experimental psychology, Donna Gregory, studying certain behavioral characteristics of young children.

Thanks to all those who contributed to the creation of this new publication. It will fill an important niche in the life of the University and give appropriate recognition to the creativity, research, and commitment to excellence in scholarship that defines Western Kentucky University.

Barbara G. Burch
Provost and Vice President for Academic Affairs
The Western Scholar is published semiannually for members of the public interested in Western Kentucky University scholarship and research.

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“The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.” Anatole France
Dr. Afzalur Rahim may be the quintessential example of a self-made man. From his birth and education in Bangladesh to his current role as the world-traveling founding editor of two major journals, Rahim took a little job on the side.

Conflict Management and Emotional Intelligence in the Workplace

By Matt Batcheldor

Rahim is a 17-year veteran professor of Management at Western Kentucky University. This is not to say that Rahim’s teaching is not a major passion in his life. Indeed, Rahim teaches classes on the Hill, ranging from organizational management at the undergraduate level to a graduate class on organizational theory.
It seems that every minute that Rahim isn’t teaching, he’s studying in the library or his home. Yes, even his home is his workplace. It is the home of the International Journal of Conflict Management — and his publishing company, the Center for Advanced Studies in Management. It’s the site where he has written most of 18 books and more than 140 articles, book chapters, case studies and research instruments.

Rahim said he wouldn’t do any of this if it weren’t fascinating — trying to measure the elusively intangible field of management.

“There are no easy answers to some difficult problems,” he said. “It’s not like chemistry or biology where you have definite answers to problems.”

In simplest terms, Rahim seeks to discover why, with all factors seemingly equal on the surface, some organizations succeed while others fail. He wants to discover more fully how the fields of psychology and sociology contribute to management.

To this end, Rahim is now studying Emotional Intelligence, or EQ. The study of EQ has become popular of late, because it completely shatters earlier impressions of intelligence. Theorists believe there are more types of intelligence than just the mental recall measured by the traditional IQ (Intelligence Quotient) test.

“For a long time, we thought IQ was the most important thing,” Rahim said. “Now, we’re realizing IQ is not the only thing to be considered. It’s actually EQ,” Rahim’s interest in EQ began just last year when it was discussed in detail at the American Psychological Association convention in San Francisco. With the aid of a fellowship from Western, Rahim began what is now his greatest interest: the study of EQ.

He said he is just beginning to realize the implications that EQ has in the field of management.

“IQ really doesn’t do if you want to be a leader,” he said. “It has to be EQ.”

But Rahim is breaking from his peers’ conventional study of EQ. Until now, EQ has existed mostly as theory. Rahim is developing an instrument to actually measure it. Once he develops an instrument, he wants to study how a manager’s EQ scores affect leadership and his ability to manage conflict.

Conflict management is another of Rahim’s specialties. After addressing the subject in his doctoral dissertation before coming to the Hill, he developed Management 419: The Management of Organizational Conflict. He even wrote the book on it: Managing Conflict in Organizations — and has prepared a third edition for the book. He developed a diagram for use in studying conflict, with each category representing either a higher concern for one’s self or one’s concern for others.

Rahim’s third edition will include an extra chapter on management ethics, which he said he overlooked in his previous edition. “Without an understanding of ethics, conflict cannot be handled,” he said.

Rahim also seeks quantifiable results that have practical applications. “Faculty members have studies, but what is the impact?” he said. “One or two people will read it and it doesn’t go anywhere. That means other professors don’t find it useful.”

Perhaps Rahim’s most famous accomplishment is the Rahim Organizational Conflict Inventory (ROCI), cited in more than 150 doctoral dissertations and now marketed nationwide. The inventory, developed in the mid-1980s, is a questionnaire designed to determine how an individual handles conflict with his superiors, employees or peers.

Rahim said that ROCI is truly unique and is still the measuring stick for surveys of organizational conflict. His electronic mailing list for that questionnaire is testimony to the survey’s usefulness to people; 135 people correspond regularly with the professor.

He has had requests to translate the survey into different languages. The ROCI has been so popular, Rahim said, that the survey has been used to resolve other conflict management situations. For example, in one application of the questionnaire, the word “spouse” was substituted for “boss,” so that the survey could be used to counsel married couples.

All these accomplishments have turned Rahim into something of a world traveler. Before the end of the spring semester, Rahim was the keynote speaker at the 15th International Conference of the International Standards Association and Total Quality Management. He spent the last week of April in Singapore, speaking at the conference and at Asia’s largest business college at Nanyang Technical University. His speech was on how to improve quality in organizations and was well received.

What I found there, all were technical people,” he said. “They have forgotten why some people are effective and some are not.”

He blames that on consultants attending the conference who look at hard results too much and not at EQ. His goal was to provide the consultants with information on the newest research on organizational quality, so that they could bring the latest advice to the companies they represent.

Singapore is just one of the countries where Rahim has spoken. He has traveled the world ever since he picked up an undergraduate degree in commerce at the University of Dhaka in his native Bangladesh. “I wanted to come to the United States but that was very difficult,” he said. “I was looking for a scholarship and I was really lucky to get a full graduate scholarship.”

That scholarship was the prestigious Fulbright Scholarship, which paid his way through Miami University (Ohio). He picked up a master’s degree in marketing, then returned to Bangladesh for three years to work, as the Fulbright mandated. He then returned to the States, getting his doctorate in management at the University of Pittsburgh in 1976. Rahim was a business professor at Youngstown (Ohio) State University before making his way to Western in 1983.

Rahim said he is very happy in Bowling Green and he doesn’t think he will be bored with his management specialties anytime soon. “Management is always changing. It is always dynamic,” he said. “That is why I find it challenging.”

Matt Batcheldor is a senior print journalism major from Barboursville, Kentucky.

The study of EQ [Emotional Intelligence] has become popular of late, because it completely shatters earlier impressions of intelligence.

"Without an understanding of ethics, conflict cannot be handled.”
Dr. Julia Roberts, Director of The Center for Gifted Studies at Western Kentucky University, has devoted her academic career to developing opportunities. The Center’s mission statement echoes this commitment — to encourage excellence by providing educational opportunities and resources to three populations: gifted and talented students, educators working with gifted students, and parents of gifted students.

The gifted are an exceptional portion of our population whose needs vary — sometimes greatly — from what is traditionally taught in schools. In order for them to have continuous progress, special services must be provided. Sometimes that means a leadership forum or a special voice coach; other times it could mean that a second grader spends part of her day in a fourth grade classroom or that summer enrichment is provided. Since gifted and talented students may be identified in five areas (general academic ability, specific subject aptitude, leadership, creativity, and visual or performing arts), their educators must be able to meet those individual needs. This requires special training. And since these children typically have more intense social-emotional needs, parents as well as educators must have resources available to address these needs. This is the point where The Center comes in.

Roberts explains that the vision of The Center for Gifted Studies is to become an internationally preeminent center. This includes expanding services in five areas: 1) offering educational programs for gifted youth and children; 2) providing professional development opportunities for educators; 3) enhancing communication and advocacy for gifted children; 4) conducting research and developing curriculum to remove the learning ceiling; and 5) building a testing and counseling component for gifted children and their families. Through her strong commitment to research and provisions for gifted students, she has made The Center a growing, challenging program ranked among the top 15 Centers in the United States.

“We hope to become one of the top five Centers in the nation,” Roberts said.

Much of the research done by The Center is used to benefit the quality of learning for gifted students by getting rid of the learning ceiling.
And she is certainly the one to lead the way. Roberts has been the director of The Center for Gifted Studies since it originated nineteen years ago. Her strong educational background and national leadership roles have contributed to The Center being what it is. She serves on the Board of the National Association for Gifted Children and currently chairs the Legislative Task Force. She is also an active board member for the Kentucky Association for Gifted Education as well as The Association for the Gifted and Co-Chair of the Kentucky Advisory Council for Gifted Education. In 1998 the National Association for Gifted Children honored her as Educator of the Year. That same year Western Kentucky University named her Distinguished Professor, a prestigious honor awarded to only two a year.

In accordance with its vision, much of the research done by The Center is used to benefit the quality of learning for gifted students by getting rid of the learning ceiling. Research is primarily funded through grants focusing on specific partnerships with schools designed to achieve certain goals. For example, federal grants totaling more than one million dollars have focused on primary and middle school achievement with the most recent being the Eisenhower Middle School Mathematics and Science Project. The goal of the Eisenhower Project is to improve the teaching of science and math to Kentucky middle school students by teaching educators to differentiate the curriculum so that all students’ needs, regardless of ability, are being met.

The student programs offered by The Center provide enrichment opportunities for gifted and talented young people — another part of their vision. Since 1983, The Summer Camp for Academically Talented Middle School Students (SCATS) has provided a diverse curriculum and a wide range of enrichment courses for almost 200 residential and non-residential middle school students annually. For two weeks, students take four classes a day that stimulate and challenge — anything from chess to clowning to computers. Most SCATS teachers are fulfilling the practicum component for earning a specialist in gifted education endorsement (an opportunity for educators provided by The Center in conjunction with Western). The Duke Talent Identification Program is another summer program offered in conjunction with The Center. The Summer Program for Verbally and Mathematically Precocious Youth (VAMPY) is a three-week residential program for students entering grades eight through eleven who scored exceptionally well on standardized grades on college entrance exams (SAT/ACT). VAMPY campers take only one class that focuses on one subject. Offerings this year include such classes as The Holocaust and Nazi Germany, Psychology, and Chess. The camp provides a balance of educational, cultural, and recreational experiences.

Elementary school students also have opportunity for enrichment through a program called Super Saturdays. Five Saturday afternoons in the months of January and February, high ability children take a course that interests and challenges them. These give students the opportunity to interact with other bright young people while broadening their knowledge and abilities. Classes, ranging from Bridge Building and Super Science to Choir and The Medieval World, emphasize hands-on learning.

Fifteen years later, I can say your program helped shape my life in a positive way, and I will never forget it.”

The Center for Gifted Studies annually offers travel/ study opportunities for both students of high ability and interested adults. Since 1986, The Center has taken groups to Russia, China, Great Britain, Italy, France, Belgium, Hong Kong, and The Netherlands where they learn about the history and culture of the places visited. Next year, The Center will host The British Experience and Spring Break in Paris. These programs are designed to broaden experiences by offering a global perspective.

The Center for Gifted Studies not only provides opportunities for students, but also for the teachers who instruct them. Two major programs are offered in cooperation with The College Board Southern Region, one being The Advanced Placement Summer Institute. Since 1983, The Center has offered this institute which annually trains over 300 beginning and experienced high school AP teachers from the United States and abroad. The Center prepares teachers for the intense learning environment that will be needed for the academically gifted students in their schools. The second program is The Vertical Team Institute. Offered in both Mathematics and English, The Vertical Team Institutes are designed to ease the transition between middle school and high school curricula by vertically articulating the curriculum to help more students reach world-class standards. The College Board piloted The Vertical Team Institutes at Western Kentucky University.

Another opportunity for educators is the Leadership Institute, which is designed to aid teachers, administrators, and counselors in developing leadership skills among youth. This program helps to ensure that gifted young students have ample resources and polished skills to work well in leadership roles. Educator opportunities abound. Almost two decades after The Center’s creation, Roberts is well on her way to achieving the vision and actualizing the mission. The Center has made a difference in hundreds, maybe even thousands of lives. Roberts continues to receive notes from alumini of the various programs sponsored by The Center. In one e-mail, a woman who participated in a program 15 years ago thanked Roberts for her “lifelong of work with programs for gifted children, their teachers and their parents. Fifteen years later, I can say your program helped shape my life in a positive way, and I will never forget it.” Indeed, old friends drop occasional notes, send unsolicited e-mails, and stop by just to keep in touch. After all, the needs of these people have been met — at least partially — through The Center. “The success stories are numerous, and I feel honored that The Center has played a small part; I hope, in those successes,” Roberts said.

Erik Meadors is a senior public relations major from LaCentre, Kentucky.
At first glance, he doesn’t look like a music composer. At least not like a man writing classical music and operas. At 6 foot 5 inches, and with his brown hair hanging down most of his back, Michael Kallstrom is a case of contrast. His looks imply Metallica, but his works more resemble Mozart.

Kallstrom, a music professor at Western for 13 years, is the creator of more than 100 compositions, ranging from five-minute pieces to a full-scale opera. His music is being played not only at Western, but also by some of the finest musicians from all over the country, and even by some performers in Europe.

The long hair is a remainder from his younger days, when Kallstrom played in rock bands, performing in clubs around the Miami area. Because he was tall, he was able to play in bars at age 15 by letting his hair hang down his face and putting on sunglasses. No one ever thought he was under age.

“I grew up as a rock’n’roller,” Kallstrom said. “One of my students usually asks me every other year if I was a hippie, and I’ll say ‘What do you mean was?’”
Kallstrom, along with his two brothers and sister, would join in. The adults would begin with a song everyone knew, and after the meal, one of the Kallstrom family—which would always sing—would often go to a local family restaurant. After the meal, one of the Kallstrom kids would often sing a song they loved. As a 5-year-old, growing up in a small town in Florida, Kallstrom’s music-loving family would always sing, and he would join in.

And we wouldn’t just join in singing the melody, we’d join in and harmonize,” Kallstrom said. “We had at least four parts, and sometimes five and six parts of harmony that we’d just improvise.

“What made it fun for us as children was that it was completely acceptable ... people would just stop eating and listen, because, actually, it was pretty good.”

Today, Kallstrom is still a singer at heart, an operatic bass, and also teaches music theory and composition. But while music has been in his blood since childhood, he makes a living as a teacher. Kallstrom has written several shorter one-man operas that he performs at universities and stages around the country. Kallstrom has recorded the music he’s composed for the pieces, which is played electronically at all of his performances.

When he’s not teaching, Kallstrom has a hectic schedule. He’s teaching at Western last year. The two-act score is about a family sitting around a table reading the Sunday New York Times. As they read, the stories, which range from humorous columns to serious topics like teen suicide, come alive. In the second act, the stories even start interacting with the family.

Kallstrom has also written several shorter one-man operas that he performs at universities and stages around the country. Kallstrom has recorded the music he’s composed for the pieces, which is played electronically while he performs the opera by himself on stage, with some help from large puppets he’s built.

Composing music has been a part of life almost as long as Kallstrom can remember. As a 5-year-old, growing up in a small town in Florida, Kallstrom’s music-loving family—which would always sing—would often go to dinner at a local family restaurant. After the meal, one of the adults would begin with a song everyone knew, and Kallstrom, along with his two brothers and sister, would join in.

“Sometime when I’m beginning a new instrumental work,” he said, “I’ll go back and look through those ideas and I may find one that clicks with me, or that calls out to be used for this particular piece.”

Whenever his ideas are coming from, chances are they will keep coming for quite some time, because Kallstrom has no thoughts of quitting composing.

Today, however, the 44-year-old’s music has changed direction. His opera, “Sunday Pages,” received rave reviews by both colleagues and students when it was performed at Western last year. The two-act score is about a family sitting around a table reading the Sunday New York Times. As they read, the stories, which range from humorous columns to serious topics like teen suicide, come alive. In the second act, the stories even start interacting with the family.

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Today, Kallstrom is still a singer at heart, an operatic bass, and also teaches music theory and composition. But while music has been in his blood since childhood, being a teacher hasn’t. It wasn’t until he was working toward his master’s degree from the University of North Carolina that the thought started sinking in.

He then got the opportunity to teach at Westminster Choir College in New Jersey. He took that job partly because it was close to New York City, and he thought he could “tap into the performance scene going on there.” Instead, he got hooked on teaching, which many Western students are grateful for today. Letchfield senior Travis Miller is one of them. Miller took private lessons with Kallstrom for three semesters and also had him for an orchestra class. Kallstrom, Miller said, is not only very knowledgeable, but also very personable and “really, really good to work with.”

“He’s so unassuming about it, though,” Miller said. “You know, the saying about no question is a dumb question—he lives by that.”

In fact, students’ questions are a big part of why Kallstrom enjoys teaching.

“You always have those students who are very good at asking questions that make you, as a teacher, sometimes reevaluate what you think about some things,” he said. “That happens all of the time. If you pay attention to those sorts of questions, I think it keeps you fresh as a teacher.”

One could wonder, however, how Kallstrom stays fresh as a person. Between teaching classes, tutoring students, attending performances, working on his own creations and spending time with his wife and two children, it’s sometimes hard to find time for everything.

“It’s tough, I’ll tell you,” he said about the task to fit everything in. But he still tries to set aside two hours everyday to work on his compositions, and another hour to practice for whatever performance he will be in next. Despite the heavy workload, or maybe because of it, he never seems to be fresh out of ideas for new creations.

“I’m never sure where the ideas come from,” Kallstrom said, “But I think they come to me because I work at this on a regular basis.” One of my favorite quotes is ... “I may not be inspired every day, but at least inspiration knows where to find me.”

He also gets help from the musical journal he keeps, where he jots down ideas and notes as they come to him. “Sometimes when I’m beginning a new instrumental work,” he said, “I’ll go back and look through those ideas and I may find one that clicks with me, or that calls out to be used for this particular piece.”

Whenever his ideas are coming from, chances are they will keep coming for quite some time, because Kallstrom has no thoughts of quitting composing.

“You always have those students who are very good at asking questions that make you, as a teacher, sometimes reevaluate what you think about some things.”

“I think composers compose because they must,” he said. “It’s just a part of who we are, and when we’re not creating something, we feel out of balance. When we are creating, even if it’s an agonizing process, we feel more in touch with ourselves, and the way things should be with the world. So for me, it’s an inner compulsion, that if I try to ignore, it has bad consequences.

“When I’m working, there is a very physical and spiritual uplifting that I get from that process. When you’re actually working and composing and putting the notes down on the page, there is very often a sense of timelessness. For me, I always talk about it in terms of entering a different dimension.”

A dimension that Kallstrom will probably enter for years to come.

Mattias Karén is a senior print journalism major from Uppsala, Sweden.
Haiwang Yuan envisions his research as a bridge between two cultures. His office reflects his Chinese heritage. The walls contain prints of Chinese art and his computer screen may be full of Chinese characters. Or, it may contain the latest version of the Topper Information Portal, a search tool on the WKU Libraries’ home page, reflecting the American influence in his life.

Professor Yuan, Web Site and Virtual Library Coordinator for University Libraries, has been in the U.S. since receiving a Fulbright Grant in 1988. While he and his family have adapted to the American way of life, he still maintains contacts in China.

“If you want people to respect you, you have to respect your own culture, your roots,” he said. “Because I have the two cultural backgrounds, I think I’m in an advantageous position to try to do something to bridge the two cultures. That’s why I’m so interested in anything that’s related to those cultures.”
That respect for his culture led Yuan to his first major Web project—the China Page. The page is a collection of links to selected resources on Chinese culture, art, facts and many other aspects. It began as a class project while he was a student at Indiana University’s School of Library and Information Science.

“What happened at Tiananmen Square in 1989 antagonized many Chinese citizens living in the U.S.,” Yuan said. “While they wanted to denounce their country, I realized that no matter what may change, the Chinese culture was a constant.

“That’s why I did the China page that provides a resource for those seeking information, or wanting to connect to the Chinese culture. The page proved to be very popular,” he said. Yuan also became hooked on information technology. After graduating from Indiana University, Yuan began working at a Florida private school, but his interest in technology caused him to look for a networked campus.

In 1997 he interviewed for coordinator of the Educational Resource Center at Western. His presentation concerned children’s safety on the Internet.

Once Yuan was hired, library faculty members encouraged him to elaborate on the presentation and develop it into an article. He published the award-winning article “Librarian, Educator and Parent Partnership: Keeping Children Safe on the Internet” in Kentucky Libraries, the journal of the Kentucky Library Association, in 1999.

Yuan moved into his present position of Web Site and Virtual Library Coordinator about a year later. Yuan is now collaborating with a librarian in Tianjin, China’s third largest city, to have an article on the same topic published in China. Even though the government regulates much of the Internet in China, he said the Chinese are facing many of the same issues as the U.S.

“Hopefully, this collaborative research will be beneficial to both cultures,” he added.

Yuan said the constraints of academic research dictate that individual research projects be carefully selected.

“I took advantage of my bi-cultural background to devote my research to helping bridge different cultures,” he said. “My studies compare reading patterns of Chinese and American secondary school students and my attempted endeavor at a collection of Chinese legends and folktales all testify to this practice.”

For one of those research projects, “Books and reading: An initial investigation of China’s middle and high school teachers’ expectations of students’ book use,” Yuan is working with librarians on and off campus, in America and China. The challenge, he said, has been gathering information from halfway across the world. Not all of Professor Yuan’s research is international in scope. In 1999 he worked with Business Librarian, Dr. Gay Perkins, and together with the Library Survey Committee, they developed WKU Libraries’ first Web-based user satisfaction survey. They have also completed a second library satisfaction survey with identical content for patrons to complete on the Web compared to patrons who actually complete it in the library. These groups’ responses will be prepared for a co-presentation.

“Dr. Perkins’ training in social sciences research and my training in the Web technology complement each other perfectly in these projects and provide me with a great opportunity to learn from the strength of others to help myself grow in academic research,” Yuan said. “Collaboration among researchers of different disciplines and strengths will not only enrich the scientific inquiry but also the researchers themselves who learn from each other.”

Professor Yuan has also published “Using WebCT Software in Library Media Education” and “Web-Based Client Survey and Data Analysis: A Review of the Message Parse.” Yuan was the first to utilize these two computer programs in library settings on campus, WebCT to build interactive online courses and Message Parse to automate survey data collection and formatting for computerized analysis.

One of his latest projects has been the development of the Topper Information Portal, or TIP, which went online in May of 2000. “TIP is our effort to offer a service to help faculty, students and staff, and our community, to streamline their online searches,” Professor Yuan said. “TIP is a unique search tool on the WKU Libraries’ home page, which allows users to find the best university, regional and global Internet accessible resources. The fact that all library and other resources—funded and non-funded—are integrated into a one-stop shopping access point makes TIP the first development of its kind and a potential model for libraries to become the first place to come for useful information.”

With Libraries Dean Michael Binder, Yuan has finished an article on the development and management of TIP. The research has been submitted to the Kentucky Library Association, the Internet Librarian 2000 Conference, and the China Society of Library Science (CSLS). The latest development is that Professor Yuan and Dean Binder have received CSLS’ invitation to its Annual Conference at Hailar, China this summer—a new link between WKU and Chinese libraries.

Bob Skipper is Director of Media Relations in the WKU Division of Public Affairs.
Donna Gregory, who completed graduate studies at Western in 1999, has had an interest in children’s social interaction. She found the graduate program in applied experimental psychology to be a perfect fit with her interest in young children.

She was interested in working with children," she said. She also was interested in seeing how children’s peer relationships were being affected by the mixed-age primary classrooms that were part of the Kentucky Education Reform Act (KERA). "My mother is a retired teacher so I’d heard a lot about KERA," Gregory said.

Her search for a graduate program brought her to Western where she met Dr. Elizabeth Lemerise, associate professor of psychology and director of the Social Development Laboratory. Dr. Lemerise’s enthusiasm for children’s social interaction was contagious, Gregory said. "Working with her was the reason I chose Western" and the Applied Experimental Psychology Program.

Dr. Lemerise has been doing research, funded by internal and external grants, about peer acceptance and friendship in children and how younger and older children interact in KERA’s ungraded primary, which mixes children from different grades (e.g., first and second graders) in a classroom.

"One of the things she had found was that younger children in these classrooms were less well liked overall and had fewer friendships than did older children," Gregory said. Also, in a project with other master’s students, Dr. Lemerise found that how well children were liked by classmates and whether they had a friend in the classroom were both related to children’s school performance. Well-liked children and children with at least one friend had better achievement test scores.

Gregory’s two-year master’s research project with Dr. Lemerise took the idea a step further and looked at how having friends was related to children’s social and emotional development. The research showed that younger children in the individual classroom mixes benefited the most by having at least one friend as evidenced by teacher ratings of social competence and problem behaviors. "That’s significant because children’s friends have an impact on their school performance and their attitudes about school," she said.

The project included 1,063 elementary students from five schools in Bowling Green and Warren County. The students were asked to list the three students in their classroom that they liked to play and work with best of all. Friendships among the children were determined by mutual nominations. Teachers were asked to rate each child’s social and emotional problems, areas of social competence, and learning problems in class. Gregory found that the younger children in the class were less likely to have a friend, but that having a friend in the classroom was helpful. Teachers rated children with friends as having fewer problems and being more competent than friendless children. Even children who were not well liked by the peer group as a whole showed a benefit of having at least one friend.

"People know the quality of research we’re doing at Western," Gregory said.

The research conducted at Western Kentucky University and other universities has shown that young children need friends and a social support network to help them adjust to school and develop a good attitude toward school. Some teachers often are leery of putting friends together in small group activities “but it’s important to have a friend there,” she said. "KERA is still relatively new. Educators need to think about peer groups of children when.arangeing classes, especially for younger ones.”

The next step is to have the research project published. Gregory already has presented her findings at an international meeting of the Society for Research in Child Development held in Albuquerque. "People know the research really well," she said.

The strengths of WKU’s Applied Experimental Psychology Program is found in the quality of the faculty, the involvement of students in research, the opportunity for national recognition and the potential to advance in the field, she said. "While you are a student in the program, you focus on a single research project, but the skills you learn can be applied to many areas," said Gregory, who is using her research, computer, and data analysis skills directing research for the Division of Student Affairs at Western’s Counseling and Testing Center. "That’s really one of the strengths of the program."
Frank Etscorn III (’71, ’73) made a discovery so great, People Magazine compared it to Isaac Newton and the apple falling from the tree. But, for Dr. Etscorn, the invention came from a simple laboratory blunder.

In 1979, Etscorn conceived the idea of the nicotine patch after tripping in his laboratory and spilling liquid nicotine on his arm. An interest in what triggers vomiting — a problem astronauts face in orbit — led to experiments with placing liquid nicotine on rats.

Although he was a non-smoker, he felt as if he had chain-smoked several cigarettes. He sweated and felt nauseated. This prompted the idea that putting nicotine on the skin could be an effective way to get the chemical into the bloodstream and suppress smoking.

His only experience with cigarettes was a few puffs behind the barn when he was a kid in Franklin, Ky. He had always been curious, however, about the addictive effects of smoking.

“I was always fascinated that my wife would stop her Jane Fonda workout tape to smoke a cigarette, then start it back up,” he said.

Dr. Etscorn’s discovery has helped millions kick the habit. Among the people who have used the patch to stop smoking are Etscorn’s wife, Sheri; his daughter, Keli; and his brother, John.

When the patch was perfected, Etscorn patented it, then sold it to Ciba-Geigy Pharmaceuticals of Switzerland. The patch is marketed under the names Habitrol and Equate.

In 1993, Etscorn was inducted into Western Kentucky University’s Hall of Distinguished Alumni. The irony is he almost wasn’t an alumnus. Etscorn finished last in his class at a Tennessee preparatory school and then flunked out of Western Kentucky University.

Interest in a psychology course sparked Etscorn’s curiosity and prompted him to return to Western for a bachelor’s degree in psychology and a master’s degree in experimental psychology. He then went on to George Peabody College in Nashville for a doctorate in experimental psychology.

After graduating from Peabody, Dr. Etscorn accepted a position at New Mexico Tech as an assistant professor of psychology, becoming a full professor and dean of students in 1985. He received the University’s Distinguished Teaching Award in 1980.

He still conducts experiments, and has patented a way to keep wildlife from harming crops by using capscin, the active ingredient in chili peppers.

Another experiment on which he is currently working is to determine whether exposing children to secondhand smoke makes them more tolerant of nicotine if they start smoking themselves.

Etscorn still fights the war against smoking by working to educate high schools.

About 50 times a year, he visits with students to talk about the adverse effects of smoking. It may not seem important, but Etscorn knows you save people one person at a time.

“I was always fascinated that my wife would stop her Jane Fonda workout tape to smoke a cigarette, then start it back up.”
“The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.”

Anatole France

At Western, scholarship is a teaching art. Whether by engaging undergraduates in ongoing research and creative activities, or in guiding students as they explore their own scholarly pursuits, Western faculty use the discovery process as a means of reinforcing concepts taught in the classroom.

“Becoming involved in research enhances students’ intellectual growth by providing them a taste of the research process, which cannot be learned in a classroom,” said Dr. Joe Bilotta of the Department of Psychology. 2000 graduate Jalynn Barnett agreed. “Participating in Dr. Bilotta’s Neuroscience Laboratory provided me the opportunity to incorporate a greater understanding of psychology and biology with the hands-on experience of becoming an active member of a research laboratory team.”

For many students, their introduction to the creative process comes through involvement with the University Honors Program. Students in the honors program are required to complete an undergraduate honors thesis on a topic of their choosing. “The thesis is a chance for students to put a personal stamp on their professional training,” said Dr. Doug McElroy, Honors Director. “It also demonstrates they can combine creativity, insight, and intellectual curiosity with the self-motivation and perseverance necessary to produce a tangible intellectual product.”

The majority of students who complete the honors program curriculum go on to graduate or professional school, and the experience they gain through their honors thesis work often provides them a leg up on success. “Western’s honors program gave me the opportunity to write and defend a thesis on my chemistry research that resulted in two publications,” said 1997 graduate Jonathan Whetstone. “I could not have asked for better training in preparation for my graduate career.”

1999 graduate Chris Wedding is another who made the most of his opportunity to participate in research as an undergraduate. After completing his honors thesis project as a sophomore, Chris applied for and was awarded a prestigious Barry M. Goldwater Scholarship. “This in turn facilitated two of my study abroad programs: teaching environmental science in a rural school on an island near Panama, and studying language and sustainable agriculture in Spain,” said Chris.

Recent biology graduate Natalie Bryant won the award for best undergraduate poster at the 1999 Meeting of the Kentucky Academy of Sciences. The results of her thesis, entitled Uptake of Lead by Sesbania drummondii, were also presented and published in the proceedings of the 5th International Conference on the Biogeochemistry of Trace Metals.

Gail Guiling’s thesis, Black Enfranchisement in Kentucky: The Impact of the Voting Rights Act of 1965, directed by Dr. Patricia Minter, to provide a historical perspective on racial conflict and political representation in Louisville. As a result of her efforts, she was the only undergraduate selected to present a paper at the 2000 Ohio Valley History Conference, and won the award for best undergraduate paper presented at the 2000 meeting of the Kentucky Political Science Association. She was awarded a national Phi Kappa Phi Graduate Scholarship and received offers of admission to law schools at both Vanderbilt and Harvard Universities.

Jalynn Barnett did research with the Neuroscience Laboratory of Western Kentucky University, which is investigating the effects of environmental stressors on the zebrafish.

Research as a teaching tool

By Doug McElroy

Chris Wedding taught environmental science in Central America as part of his honors thesis.

Student-Centered Scholarship

Student Discovery

PHOTO BY JOE BILOTTA

The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards.
Some of the best thesis research is interdisciplinary. Recent graduate Michael Blair was able to combine aspects of his two majors, physics and archaeology, in his thesis, *Archeoastronomy at the Shiloh Mound Group*, directed by Drs. Roger Scott and Darlene Applegate. By comparing the alignment of mounds with predicted solar, lunar and stellar positions during 1000 A.D., Michael was able to make very suggestive arguments for the significance of the Tennessee site as a celestial timekeeping device. His work was selected as the best contribution from Western at the 1999 Kentucky Honors Roundtable.

In the liner notes to his symphony *Voices from the Margin*, 1999 honors graduate William Compton explains his attempt to convey “the experience of domestic violence, from a victim’s perspective.” The resulting four movement composition, produced under the direction of Dr. Michael Kallstrom, is a powerful integration of social commitment and well-learned craft.

Kristi Runyon used her perspective as an African-American broadcast journalist as a starting point for her analysis of the current state of minorities in the media. Combining analysis of statistical trends with personal accounts derived from conversations with six minority media professionals, Kristi’s honors thesis, directed by Dr. Terry Likes, explored the history, current status and potential of minorities in the media.

Michael Croley drew on his experience growing up in Appalachia as an inspiration for his collection of short stories, entitled *A Place to Cross and Other Stories*. His thesis, directed by Mary Ellen Miller, presents stories and characters “trying to find a place to cross.” According to Michael, “People live lives of unfulfilled promise and honest mistakes that hold them back.” As an indication of his promise as a writer, Michael was selected to participate in the 2000 Advanced Fiction Workshop conducted by Tom Jenks and Carol Edgarian.

**A Natural Complement**

Working side-by-side with students provides the opportunity for faculty to get to know students better and on a more informal basis. “This enables the professor to help the student prepare for the future, whether it be attending professional school or trying to find a job,” said Dr. Bilotta. At the same time, faculty get the chance to witness firsthand the “awakening” of a young mind upon which France placed so much emphasis.

The chance to spark a lifelong intellectual interest in a student is the most satisfying aspect of mentoring students. Dr. Elizabeth Lemerise from the Department of Psychology is one of many faculty to have experienced this gratification firsthand. “Recently I received a letter from a former undergraduate who is currently a Ph.D. candidate at the University of Maryland. In it, she said that her research experience was instrumental in developing her interests in developmental science and in forming her aspirations for graduate study. I think this student is a good example of how undergraduate research experience can open doors to both opportunities and to a passion for the pursuit of knowledge.”

Western faculty believe strongly that meaningful and significant academic achievements can be generated as an integral part of, not in spite of, a commitment to provide the best possible educational experience for undergraduates. The demonstrable success of the students who have come before helps ensure that Western will continue to attract outstanding students in the future, and that the strong tradition of student-centered scholarship will continue.

Dr. Doug McElroy is director of the University Honors Program and an assistant professor of biology.