



# the challenge

*Magazine of The Center for Gifted Studies*

## THE KENTUCKY ACADEMY OF MATHEMATICS AND SCIENCE: *The Time is Now!*

Please contact your legislators to let them know how critical the Kentucky Academy of Mathematics and Science is to our Commonwealth! Young people throughout Kentucky deserve the opportunity to attend the Academy without cost prohibiting them. Thirteen other states realize the importance of this funding. An operating budget of \$3.8 million per year is needed to fill the Kentucky Academy with young people eager to pursue careers in science, technology, engineering, and mathematics.

Plans have been finalized, and the bids have gone out. A construction fence now surrounds Florence Schneider Hall as crews prepare the building for the actual renovation beginning in April. Then in August of 2007, 60 juniors and 60 seniors who have needs for more advanced science and math offerings will enter the Kentucky Academy of Mathematics and Science! These 120 young men and women will complete their high school requirements while earning 60 hours of college credit – if the legislators choose to make it happen.

The building will be ready; we just need the funds to fill it with students.



**Contact your legislators  
immediately in support of  
the Kentucky Academy of  
Mathematics and Science  
([www.wku.edu/academy](http://www.wku.edu/academy))  
and the White Paper  
([www.wku.edu/kage](http://www.wku.edu/kage)).**

### *Gifted White Paper Goes to Kentucky Legislators*

The superintendents of Kentucky's schools are posing a white paper to the legislators of the Commonwealth advocating an increased \$13.5 million (with \$6.4 million being new money) for the education of Kentucky's gifted and talented young people. Increased funding is crucial for 1. Ongoing professional development for teachers, 2. Comprehensive identification of gifted students, and 3. Appropriate services for gifted students. They have presented only two other white papers (one on assessment and one on early childhood education). The legislators recognized the value of the superintendents' positions,

and funding was secured for each issue. We hope for a similar outcome with Kentucky's Future: Mining Untapped Treasure – Children and Youth of the Commonwealth Who are Gifted and Talented.

The paper was developed by a task force representing multiple stakeholders: a superintendent (Dale Brown of Warren County), an instructional supervisor (Carl Stoltzfus of Hart County), a principal (Mary Evans of Warren County), a parent (Sharon Clouse of Glasgow), the executive director of KAGE (Lynette Baldwin of Paducah), and

*(continued on inside cover)*

# Letter from Julia

DEAR FRIENDS OF THE CENTER,

In my hotel room in Xian the title of a special international edition of *Newsweek* is "Knowledge Revolution: Why Victory Will Go to the Smartest Nations & Companies." High school students in schools we visited in Beijing study four years of biology and five years of chemistry and physics. The growth and change in China since I was here ten years ago are spectacular.

As I write this letter from China, I am more convinced than ever that the Kentucky Academy of Mathematics and Science will be the key to stimulating interest in high level science, technology, engineering, and mathematics (STEM) in the Commonwealth at the same time that it provides the needed challenge for juniors and seniors in high school who are both interested and talented in these fields of study. The economy of Kentucky will benefit from the establishment of the Kentucky Academy. Young people



who need opportunities for advanced study will benefit. The Kentucky General Assembly provided the funding and bonding capacity for the Kentucky Academy. Building will begin in April to have Florence Schneider Hall, the home of the Kentucky Academy students, retrofitted in time for the Kentucky Academy to begin with its first class in the fall of 2007.

The next step is to get the Kentucky General Assembly to provide funding for implementing the Kentucky Academy in their 2006-2008 budget. Your help is needed to speak to decision-makers about your support for the Kentucky Academy. Legislators respond to the people who vote for them, so please talk with the Senator and the Representative who represent you in Frankfort. Please let me know the response you get from your legislators. The website [www.wku.edu/academy](http://www.wku.edu/academy) provides information about the Kentucky Academy.

Kentucky needs to move away from the 47th position in the number of scientists and engineers. Stimulating interest in STEM careers and providing opportunities for research combined with study of science, mathematics, engineering, and technology, the Kentucky Academy will be a beacon of excellence in the Commonwealth. Now is the time to speak out about your support for the Kentucky Academy!

Sincerely,

A handwritten signature in black ink that reads "Julia Link Roberts".

JULIA LINK ROBERTS  
Mahurin Professor  
of Gifted Studies

## Gifted White Paper *(continued from cover)*

university personnel specializing in gifted education (Julia Roberts and Tracy Inman of Western Kentucky University). Input was given by the Kentucky Department of Education and Commissioner Gene Wilhoit.

The first public sharing of the document was at the National Association for Gifted Children's Annual Conference held in Louisville, November 9-13, during the Administrators Leadership Institute and the Superintendents' Forum, "The Role of the Superintendent in Gifted Education." Support and enthusiasm were tremendous. Currently, the paper is being shared with many business, civic, and education groups throughout the Commonwealth.

### The following organizations have fully endorsed the white paper:

- Kentucky Association of Elementary School Principals
- Kentucky Association of School Superintendents
- Kentucky Education Association
- Kentucky PTA
- Kentucky Association for Academic Competition
- Prichard Committee for Academic Excellence
- Billy Harper, Harper Industries
- Greater Louisville KAGE Chapter
- Kentucky Association for Gifted Education (KAGE)
- Kentucky Advisory Council for Gifted and Talented Education

## the challenge

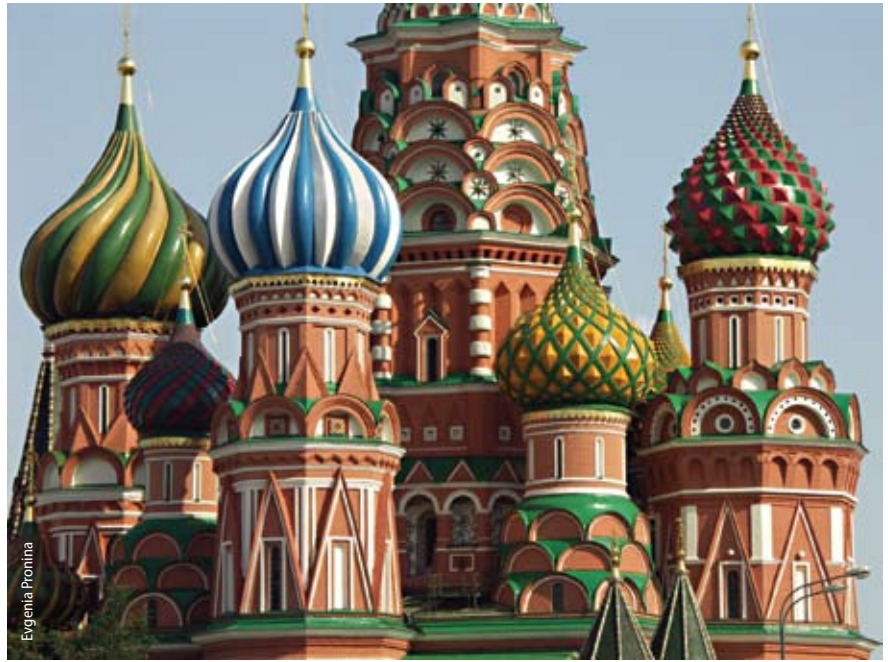
**Editor/Writer**  
**TRACY INMAN**  
**Designer**  
**MARCUS DUKES**

"Don't you and Carrie spend all your time together and snub the other people on your trip." I was getting ready to travel 6,000 miles away from home at the age of 15 to a formerly communist country, and my dad was worried about my being cliquy with my best friend! "Leigh, if you're not careful, you'll end up getting sick of each other." Carrie Dickerson and I waved as we boarded the 5:00 am flight from Louisville, KY, to New York City to start our Russian adventure.

Let me back up. Why were two teenagers going to Russia in 1995 in the early days of the Chechen crisis anyway? And why on earth were our parents supporting the trip? To the latter, the answer is simple – they trusted Dr. Julia Roberts, Director of The Center of Gifted Studies, who always says to students about to embark on one of her camps or trips: "I want to return you to your folks in the same good shape they left you." She didn't always, but that was because the shape we came back in was more grown up, more self-assured, and more ready to face whatever the world could offer us.

As to why specifically Carrie and I were part of the trip, like Arielle, Tracey, Kristina, Norm, Daniel, Emily, Bobby, and Emma, we had been part of the Summer Program for Verbally and Mathematically Precocious Youth – VAMPY for short. The ten of us from Kentucky joined ten from Tennessee, ten from North Carolina, and ten from Denmark; now it's ten years later, and my hypothesis is that if I got in touch again with all the people from the trip, we would still remember, and we would attribute more to the experience than any of us would have thought possible.

"Good-bye, Leigh." Groggily I opened my eyes, still tired from the last dinner and dance of VAMPY. My Russian roommate, Anya, was leaving on the plane that would take her and the other ten Russian students who had attended VAMPY home to Rostov-on-Don. Actually, I was kind of relieved she was leaving. Very anxious about punctuality, I was a nervous wreck trying to adjust to Anya's conception of "one minute." Because she was my room-



Eugenia Pronina

**HALF A WORLD AND 10 YEARS AWAY:**

# THE CENTER'S RUSSIAN EXCHANGE

BY LEIGH JOHNSON

mate and lab partner, I constantly found myself late because "one minute" had magically morphed into ten or fifteen minutes. A teacher or counselor asking me politely to be on time next time made me want to cry, especially when I knew that wasn't going to happen. (However, Anya did come through when it counted: the time I burned myself on the Bunsen burner!)

I was anxious to find out if all Russians were late, late, late, or if simply the

neurotically punctual girl had roomed with the perpetually late girl as a form of cosmic retribution. Eliza Kendrick, who traveled to Russia with The Center the next summer, credits her interest in Russia to her Russian roommate as well.

Flying to St. Petersburg, we stopped in Helsinki. Probably there were more pictures taken of Helsinki from the plane at that moment than in the entire city. All outfitted with new cameras, we were determined to use them.



St. Petersburg, at 60 degrees north latitude, was still brilliantly lit at 11:00 pm when we arrived. Norman Teale remembers “looking out the hotel window at the sun and thinking what a strange place we were in that the sun almost never went down.” The triumphs of our short stay in St. Petersburg consisted of sounding out signs in the Cyrillic alphabet and locating Tchaikovsky’s tomb.

Our boat trip, up and down the Volga and Don rivers, ended in Rostov-on-Don. Because we were on the boat over the Fourth of July, our Russian friends threw us a party, complete with watermelon and patriotic songs. The river spanned climates from the well-sunlit, beautiful north to the more heavily populated, almost tropical heat of the south. On the boat the opportunities to stand at the deck watching the trees roll by, to talk with Russian friends in lounge chairs, and to get water from the boiled water room labeled “Kipitok” provided endless entertainment. About once a day we would stop, get off the boat, and explore a little river city. At one of the cities, on July 4th, I had written in my journal that I threw a coin in a fountain, which according to a Russian folk saying, means I’ll return to that town someday – I only wish I had thought to write down the name of the town!

Russia brought things closer to us than we would have ever been able to understand as mostly rural, American teenagers. We saw a war-destroyed building that hadn’t been restored so that it could be left as a memorial from World War II. We saw the remnants of communism in the Soviet-style architecture and the unassuming facades of the buildings, shrouding exquisite apartments with family heirlooms inside. I would see these things again later on my study abroad to Romania, an adventure I never would have undertaken if not for my trip to Russia. Moreover, I would have a context for understanding them. Why was there a rooster that greeted every dawn from across the street in an apartment building in downtown Bucharest? Ceaucescu, like Stalin, moved hundreds of thousands of peasants from the sur-

**DAVID BAUER** (VAMPY 1993-94; Russia, Europe, Italy, Great Britain) graduated from University of Michigan medical school and is doing his residency in neurosurgery at the University of Alabama, Birmingham. David really enjoyed Rostov-on-Don and remembers the “sausage and bread for breakfast, lunch, and dinner.”

**CARRIE DICKERSON** (VAMPY 1994; Russia) graduated from the University of Virginia after spending a semester in Russia. She has been working with environmental protection in Austin, TX.

**LEIF GLYNN** (VAMPY 1994-95; Russia) is an engineer and plans to spend part of this year surfing in South America. He recalls his host brother, Pasha, who was only 10 but “handled himself like an adult even when we were confronted by some local hoodlums.”

**BARRY GREENE** (VAMPY 1993-95; Russia) is a Japan Sales Assistant for Equity House. He credits his interest in international relations to the Russia trip: “The experience really showed me that there are different ways to live...and was the impetus behind my traveling and career in international finance.”

**CHARLES HAINE** (VAMPY 1992-95; Russia) recently graduated with an MFA from USC School of Cinema-Television and is a freelance gaffer/cinematographer. He notes that the trip prompted “an interest in Russian cinema and a career involving a lot of travel.” He hopes to soon be working on a documentary on the Russian symphony orchestra.

## Alumni Update

**ELIZA KENDRICK** (VAMPY 1993-95; Russia) graduated from Duke with a J.D. and an L.L.M. in international and comparative law in May 2004; she spent that summer in St. Petersburg on a Foreign Language and Area Studies scholarship: “I brushed up on my Russian, witnessed the White Nights, and generally enjoyed my last taste of freedom from the working world for a while.” In August 2004, she started a clerkship at the U.S. District Court for the Middle District of North Carolina.

**ARIELLE MOINESTER** (VAMPY 1993-94; Russia) has been working in anti-poverty federal policy in Washington, DC, and in Honduras. She is currently applying to graduate schools with a focus in international agricultural development and economics.

**EMMA MURLEY** (VAMPY 1994; Russia) lives in Toronto and recently traveled with a professional orchestra to Japan for three weeks. She plays the classical trumpet among other instruments.

**DANIEL NOBLES** (VAMPY 1993; Russia) is a NASA EVA engineer and credits his ease with international partners to his experience in Rostov-on-Don. He still remembers his Russian friends asking “Do you ride a horse to school?” as they started to learn about each other’s culture.

**TRACEY OWENSBY** (VAMPY 1993-94; Russia) is in medical school at the University of Virginia.

**KATERI ROESSLER** (VAMPY 1995-97; Russia) is currently a volunteer at a health clinic in Malawi, Africa. She plans to attend medical school upon her return to the US. The trip “fanned a flame to learn more, first-hand, about different cultures and peoples.”

**KRISTINA TALBERT-SLAGLE** (SCATS 1990; VAMPY 1991-94; Russia) is working on a PhD at Yale in Epidemiology of Microbial Disease and hopes to proceed to an internship using her language/science ability to “address global disparities in health.” She says the Russian experience “marked a deciding point in my life, even if I did not realize it at the time.”

**NORMAN TEALE** (VAMPY 1993; Russia; Counselor) is at Mills College in California working on an MFA in Electronic Music and Recording Media. He recently released his first CD on Ambience Magnetiques, [www.actuellecd.com/cat.e/am-135.html](http://www.actuellecd.com/cat.e/am-135.html). Last year he won first place in the Audio Engineering Society’s International Student Recording Competition in the Pop/Rock category.



Kristina Talbert with her  
host brother Antushka



Leigh Johnson and  
Carrie Dickerson at  
a park in Rostov



The  
"tremendous  
cannon"



Norm Teale, Bobby Tracy, and Leigh Johnson  
at the 4th of July Celebration

rounding countryside into the city as his plan for government control. They brought their livestock with them! Learning history from a book is very different from learning history while examining sites of significance to the day's lesson.

When we stopped in Rostov-on-Don, we met with our host families. They had time to take us places that were emotionally important to them, such as places of work or to relatives' houses. The markets stuck out to most of us, but only because we don't like to recognize our food as coming from an animal, and in Russia, the animal is right there hanging next to the food – very difficult to disassociate! Our lessons continued, and we were glad to settle into a place we could explore, and thereby get to know. After tearful goodbyes to host families, we were on the fast train to Moscow.

Moscow reinvigorated us. The 10 days in Rostov gave us time to think about home, and being with families put us in mind of what our own families

might be doing at the same time; a touch of homesickness developed. However, the thrill of the huge Russian capital changed everything! With all the current controversy surrounding what to do with Lenin's body, the powers that be might want to consider the words of a 15-year-old girl in her journal upon seeing his preserved body: "It was so creepy! He looked like he was just going to sit up at any minute. We had to be really quiet and couldn't take any pictures. It was so very cool!" While this may be the reaction they are trying to move away from, can you imagine a similar display of George Washington's body? Carrie was very excited about seeing the Bolshoi, the home of the Russian ballet company, and others enjoyed seeing Chekhov's tomb. The size of Red Square and a "huge bell and tremendous cannon" prompted me to observe that "Russians do things bigger than Texans." As the departure approached, we suspended disbelief that it was our last night.

For 3 years, The Center for Gifted Studies sent 10 students to Russia as part of the Citizen Exchange Council Summer Gifted and Talented Program funded by the United States Information Agency (USIA) grant. For 3 summers, 10 Russian students came to VAMPY to take classes for 3 weeks. Needless to say, they all spoke English better than any of us spoke Russian. However, the experience prompted many of us, including Carrie, Eliza, Kristina, Daniel, and me to study Russian language in college – the first place such programs existed. Carrie, Kristina, and Eliza even went back to Russia for semester-long programs. The impact Russia had on us is immense. Arielle pursues opportunities to work in international agricultural development; Norm includes Vladimir Ussachevsky, a Russian émigré to the US, in his electronic music studies; and Emma's musical performance world is international, including trips to Japan.

That trip half a world away still impacts us 10 years later.





# GOT SCIENCE?

## SUPER SATURDAYS MEETS NEEDS

BY LEIGH JOHNSON

In 1999, Dr. Julia Roberts reflected on the reasons The Center for Gifted Studies exists – “Everything we did was in response to a need.” Six years later, we’re still working to find ways of making our programs meet the needs of gifted students, their parents, and their teachers. In 2002, we added a fall session of our Super Saturdays; three years ago, we began a Super Saturdays program in Owensboro; last year, we expanded our offerings to 7th graders.

This year, a different need came to our attention. We’ve always offered an array of classes in math, science, art, social studies, language arts, foreign language, and technology. As the science classes began to fill within days of mailing the brochure, we realized that we would

have to turn kids away from science classes! Dana Hudson, a science teacher who has taught Super Saturdays before, quickly designed and agreed to teach an additional science class for 4th and 5th graders. Rico Tyler, also a past Super Saturdays teacher and the science methods teacher for secondary preservice teachers at Western, designed a science class for 2nd and 3rd graders. Since these classes didn’t make the brochure in time for printing, they were advertised by word of mouth. They ended up closing, too!

A recent report from the National Academies of Science and Engineering, the Institute of Medicine, and the National Research Council, *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future* (<http://www4.nationalacademies.org/news.nsf/ISBN/0309100399?OpenDocument>), warns that unless the best students have opportunities in science, the United States will face a critical shortage of intellectual capital and economic growth potential. We can’t let that happen!

Obviously, young people are interested in science and want the opportunity to learn more in a hands-on, minds-on approach to experimentation and exploration. Super Saturdays allows students to expand their interests and meet other young people interested in science. This year, over 550 students attended Fall Super Saturdays on campus. Of those, 250 took science classes. The need for extra opportunities in science is clearly present, and The Center works to make science exploration a reality for students.

When 13-year-old Fletcher Young of Bowling Green arrived at SCATS this summer, he hadn't ever kept a journal. A first-time camper with Probe Robotics, Rocketry, Clowning, and Acting on his course list, Fletcher soon discovered that at SCATS one day is NEVER the same as the next. To help him recount his experiences to his family, he decided to keep a record of each day's adventures. From the mind-boggling challenges of robotics to the wacky joys of clowning to the heart pounding excitement of Capture the Flag, here is a quick look at SCATS... one very cool day at a time.

### First Day of Classes

In Probe Robotics we made our first tankbot from fancy LEGO kits – very confusing. But in clowning we made a balloon dog – very simple. In Rocketry, we made rockets by filling film cases with water and pouring Alka-Seltzer in – some of the rockets blew up! In Acting we sat in a circle and got to know each other by asking certain questions depending on which color M&M we had. That evening we played Capture the Flag on the lawn with like 40 people – very fun!

### Day 3

In Probe Robotics we kept working on programming our LEGO robots to complete training tests – still confusing. Our Clowning instructor, Broadway the Clown, put a clown face on a kid in our class. Then we learned to make a balloon parrot and started learning to juggle. In Rocketry, we made Coke cans spin by poking holes in the can and pouring in water. Then we finished the Alka-Seltzer project and recorded the data. We picked two plays to perform in Acting. I was picked for "Slurping Beauty." We did short performances of each play. We played Frisbee this evening; I am very tired.

### Day 4

Everyone was confused in Robotics. But Broadway the Clown put a character clown face on another student, and we



practiced juggling. We learned more balloon animals, and we learned the levitation gag, the changing-color-cloth gag, the rope gag, and the cloth-in-thumb gag. In Rocketry we finished the Coke can project. We read about the history of rockets, and made a timeline about important events in the history of rocketry. We rehearsed the play in Acting and wrote lists of props and costumes and played "kitty wants a corner" – very fun. After class we went to 4th floor DUC for a party. We played pool, went bowling, played ping-pong, ate pizza, and just all hung out. It was a lot of fun. Everything was free, too.

### The Weekend

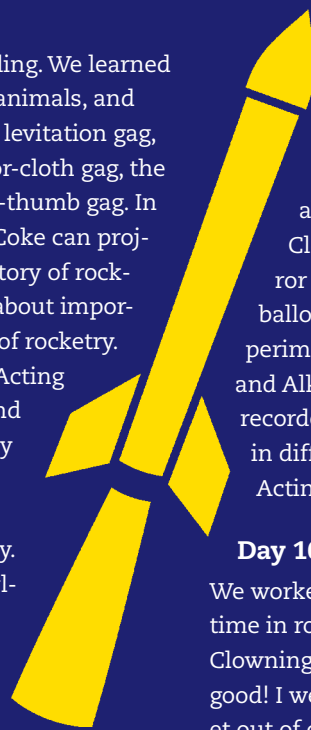
No classes! I did some laundry downstairs and hung out all day. In the evening we did paper theatre in the Tate Page Hall auditorium. We were divided into groups and given a fairytale to act out using a bunch of newspaper. My group did Rumpelstiltskin – except we had to perform the story backwards. It was very funny and very crazy! On Sunday we had a huge cookout on the lawn. We played Frisbee and tug-o-war and football.

# 'Today Was Cool'

## THE SCATS EXPERIENCE

**'It was not like anything I had ever done before.'**

— Fletcher Young, 2005



### Day 9

Today was cool! In Robotics, we went to the planetarium and talked about physics and about galaxies and space. In Clowning we learned the mirror gag – very fun, and I bought a balloon pump! In Rocketry we experimented with water temperature and Alka-Seltzer in our rockets and recorded data. We performed our plays in different accents and emotions in Acting.

### Day 10

We worked on "Darth Bob" the whole time in robotics. I put on a clown face in Clowning and juggled; I'm getting pretty good! I went to Rocketry and built a rocket out of construction paper. My group also tried to build a balloon rocket. We talked about character study in Acting. The talent show was tonight, and it was awesomely funny with lots of cool stuff. Then we all had parties on our floors at the dorms – very cool!

*Now back in middle school studying, playing tennis, and practicing with the academic team, Fletcher has plenty more busy days ahead of him. But he says camp was a new and different experience for him, and he looks forward to another exciting summer.*



# CENTER HOSTS RECEPTION AT NAGC

When the National Association for Gifted Children held their annual conference in Louisville this past November, The Center saw a wonderful opportunity to host a reception for our friends. And thanks to our friends, the evening was lovely! Thanks to the efforts of Advisory Board member David Laird, the reception was held on the top floor of the Humana Building with a fabulous terrace view of downtown Louisville. Because of Board member Kate Hinkle's orchestration, Vincenzo's provided delicious morsels while red rose petals and lovely yellow and red roses adorned the tables. Thanks to Board member Will Johnson, everyone invited was able to enter through security downstairs. And because Center alums Maggie and Meredith Clouse's generosity and talent, the guests were serenaded with magical harp melodies. Even the pictures you see are because of Connie St. Clair's photography prowess!

Over three hundred people attended the event. The mix included NAGC friends, program participants and families from Louisville, a former TA who practices law in Louisville (Anne Guillory), two of the Eisenstein clan (Jeffrey who is in school in Louisville and Marcia who attended NAGC through Duke where she is doing a senior thesis on gifted children and No Child Left Behind), advisory board members, former participants who now reside in Louisville, plus teachers of the gifted and myriad other friends.

*Thanks to all who helped make the event so special!*

## Mark Your

Circle July 1, 2006, in Western Kentucky red; then start making travel plans to Bowling Green. You won't want to miss the first meeting of The Center for Gifted Studies Alumni Association! Whether you're a Super Saturdays, SCATS, VAMPY, or travel alum, we want you to join us as we kick-off our 25th year. It will be a year of celebration, and the party starts that weekend. More details will follow, so be sure that we have your current address (and the current information for your friends you made at Western). See you in July!

## Calendars!





# Nancy Rice: Former VAMPY Student Teaches VAMPY Class

BY HARPER LEE

For Dr. Nancy Ayers Rice, assistant professor of biology at Western Kentucky University, life is complicated – to say the least. At once infinitesimally small and overwhelmingly large, life, in all its mystery, is Nancy's business.

A Bowling Green native, Nancy has been both student and teacher for The Center. Beginning as a SCATS camper in 1987, she went on to be a participant in VAMPY in 1989, traveled with The Center to Scotland and England, and then returned once again in 2005 to teach a VAMPY course in molecular cell biology.

"My initial introduction to biology and genetics was in SCATS," she said. "I took Gene Preston's genetics class, and I wanted to cure cancer. I thought it was the coolest thing. I had never been exposed to genetics before SCATS. I loved DNA and what we could do with it, the doors that we could open."

This summer, Nancy offered her own VAMPY students the chance to not only discover but also to enrich their own burgeoning interests in the field of biology by exposing them to research and graduate level labs. In just three weeks time, her students did mammalian cell tissue cultures, isolated and sequenced DNA, discussed at length the ethical and societal implications of



**'You know, that's really what drives it all, wanting to know why things are the way they are.'**

— Dr. Nancy Rice, *Western Kentucky University professor of biology, VAMPY camper (1989) and VAMPY instructor (2005)*

stem cell research, and canoed down the Green River, one of the most organismically diverse waterways in the northern hemisphere.

"It was 80% hands-on and 20% lecture," she said. "I wanted them to glimpse the complexity of life and how amazingly beautiful it is. It's just a phenomenal thing."

While cell biology is her first love, Nancy also has a passion for writing and literature that took root during her summer at VAMPY and continued to grow throughout her time as an undergraduate at Western.

"Writing in VAMPY gave me a love of English," she said. "I minored in English literature along with my sciences in college. Language and writing are very important. You can't be successful without knowing how to write well."

After completing a degree in biology at Western, she went to the University of Tennessee and then on to the University of Colorado at Boulder for her doctoral and postdoctoral work. She then returned to Western as a full-time faculty member to both teach and do research which consumes most of her time. But when she is not in her lab wrestling with what she terms the "Dr. Jekyll/Mr. Hyde" cell, the culprit of pulmonary fibrosis, she is likely to be spending time

with her 16-month-old daughter, Abbey, or restoring her old home with her husband, John.

"VAMPY is a program of value," she said. "It is the camaraderie of peers of like mind and like interest; you can be with those people in a secure environment. The exploration of self – it's almost cathartic."

# 'From a Cell to an Ecosystem': VAMPY Students Explore Field Biology

*Lesley Mann, a student in Dr. Rice's Molecular Cell Biology from Calhoun, KY, reflects on the adventure that Dr. Rice orchestrated for them. Despite her devotion to molecular cell biology, Dr. Rice wanted her class to be aware of the endless branches of biology, so she organized a canoe trip down the Green River, giving them a chance to explore these other areas of biology. Here are excerpts from Lesley's writing:*

A long drive through wooded areas eerily resembling horror movies and a short walk from the grasses of the Upper Part Green River Biological Preserve landed us at the river. We loaded our gear and lunches in the canoes, which had been packaged in flotation devices (Ziplocs), and then we cautiously joined our cargo in the teetering canoes. Most of the canoes, including mine, made several

circles before mastering the technique of rowing as a team. Almost immediately a snake was spotted slithering across the river. To our great surprise, Dr. Albert Meier, a field biologist and our guide, began churning the water with his experienced oar and snatched the snake just before it reached the safety of the bushes lining the bank.

Dr. Meier led the way downstream, and we followed, as best as amateurs could. The river flowed peacefully. We steered our canoes like the water bugs walking on the surface of the water, cautiously and strategically.

During our lunch break we had our first lesson taught in a river. Instead of chalk, Dr. Meier was armed with a net. He caught various bugs and small fish and showed us the shells left by dead freshwater clams. The Green River is actually

home to 70 species of clam and 109 species of fish. Exercising the trial and error approach, we discovered that you are not supposed to pick up or handle the living clams. The Green River runs through my town, but before our disguised lecture, I never considered it to be anything but dull.

Following Dr. Meier's talk, we paddled further downstream where Dr. Rice was waiting with the van and trailer. Packed in like a can of sardines, the mud hardened on our skin as we drove back to campus on that July afternoon. Besides mud and physical tiredness, we came away with a glimpse of field biology. Dr. Rice had given us a multifaceted opportunity, one that served as recreation and a chance to see the emergent properties of life rising from a cell to an ecosystem.

## JULIAN STANLEY: A FRIEND OF GIFTED CHILDREN

BY JULIA ROBERTS

JULIAN STANLEY (1918-2005) WAS A TRUE GENTLEMAN AND SCHOLAR. DR. STANLEY RECOGNIZED THAT A YOUNG PERSON WITH A VERY HIGH SCORE ON THE SAT NEEDED INSTRUCTION MATCHED TO WHAT HE OR SHE KNEW. HE UNDERSTOOD THAT ABOVE-LEVEL TESTING PROVIDED VERY IMPORTANT INFORMATION TO GUIDE EDUCATIONAL PLANNING. DR. STANLEY WAS THE "FATHER" OF THE TALENT SEARCHES, AND HE WAS THE FOUNDING DIRECTOR OF THE CENTER FOR TALENTED YOUTH AT JOHNS HOPKINS UNIVERSITY.

DR. STANLEY WAS A FRIEND OF THE CENTER FOR GIFTED STUDIES AT WESTERN KENTUCKY UNIVERSITY. WHEN HE HEARD

ABOUT OUR WORK TO ESTABLISH THE KENTUCKY ACADEMY OF MATHEMATICS AND SCIENCE, HE SENT A GIFT OF \$1,000 TO SUPPORT THE PROPOSED SCHOOL. HE UNDERSTOOD

THAT THE KENTUCKY ACADEMY WOULD PROVIDE AN APPROPRIATE LEARNING OPPORTUNITY FOR YOUNG PEOPLE WHO ARE ADVANCED IN MATHEMATICS AND SCIENCE.

DR. STANLEY WAS TRULY A FRIEND TO YOUNG PEOPLE WHO ARE GIFTED AND TALENTED. HIS CONTRIBUTIONS TO GIFTED EDUCATION WERE NUMEROUS. HE WILL BE

REMEMBERED FOR ALL HE DID ON BEHALF OF GIFTED CHILDREN. HE WILL BE MISSED!



## LEARNING TO LIVE IN A FLAT WORLD:

### THE CENTER TRAVELS TO

# CHINA

**“Yes, economic competition in the flat world will be more equal and more intense. We Americans will have to work harder, run faster, and become smarter to make sure we get our share. Let us not underestimate our strengths or the innovation that could explode from the flat world when we really do connect all the knowledge centers together.”** — Thomas Friedman, *The World is Flat*



As the world flattens, China mirrors the United States more and more – economically, educationally, and even culturally. In spite of capitalism and modernization in both countries, fundamental differences remain: democracy versus communism and education for all versus education for some. One unfortunate (albeit strong) parallel, though, is the mutual lack of understanding of and appreciation for the other country.

President Dwight D. Eisenhower “believed that ordinary citizens of different nations, if able to communicate directly, would solve their differences and find a way to live in peace. He believed that if people could visit each others’ homes, attend their schools, and see their places of worship, then the misunderstandings, misperceptions, and resulting suspicions – which were making war a viable option – would disappear. This simple thought – that people can make the difference where government cannot – is People to People’s foundation” ([www.ambassadorprograms.com](http://www.ambassadorprograms.com)).

For fifty years Americans have traveled, as People to People delegates, to other countries sharing, learning, and building relationships: “People to People Ambassador Programs provides foreign educational travel experiences for professionals. The programs join common interests in





uncommon places through journeys that enrich the world, one person at a time.” This past December, three from The Center for Gifted Studies enjoyed this once-in-a-lifetime chance to travel to China for an incredible learning experience.

As part of People to People, Julia Roberts led a delegation of gifted education professionals to Beijing, China, to participate in the 2005 U.S. – China Joint Education Conference. Dick Roberts and Tracy Inman, serving as delegates, joined over 200 Americans and 200 Chinese from a dozen disciplines in an exploration of content, practice, and pedagogy at Beijing Normal University.

Julia opened the gifted delegation meeting with a discussion of the social-emotional needs of gifted children. Liu Fenghua, Vice Researcher of Hebei Education Research Institute, gave an overview of gifted education in China. Tracy later presented “Acceleration? Research Says Yes!” Transla-

tions proved interesting in spite of an excellent interpreter. The Chinese delegates excitedly received copies of *Methods and Materials for Teaching the Gifted* (in which Julia and Dick contributed a chapter) and *A Nation Deceived* as gifts from their new American friends.

Both the Beijing Number One Middle School Affiliate of Beijing Normal University and the Number Eight Middle School warmly welcomed delegates on the day devoted to school visits, the highlight of the conference. Each class visit started with enthusiastic applause and smiling faces. Since students begin learning English in grade 3, communicating with children was no problem! Often, they translated for their teachers. The students eagerly answered questions showing great respect for us, their teachers, and the learning process.

Great disparity, however, exists in the Chinese educational system. The gifted delegation toured benchmark schools in Beijing where students graduate with 4-5 years



of Biology, Chemistry, and Physics! Their schools are equipped with state-of-the-art technology and are equally rich in the sciences and humanities. No wonder they graduate 6 times as many engineering majors as America does (Margaret Spellings, U.S. Secretary of Education, 2005). In fact “in China, 39% of all students are studying engineering, compared to just 5% in the United States” (The TechNet Innovative Initiative, 2005). The world is indeed flattening – and we need to make sure that America doesn’t get steamrolled in the process! (Kentucky is on the right track with the Academy and the White Paper; see cover.)

Schools in the rural areas, however, pale in comparison. Julia and Dick visited a small school in Xian a few miles from the wondrous Terra Cotta Soldiers. The unheated sparse rooms held children sharing books with little to no supplies, much less any technology. Some had jars of hot water on the scarred tables, presumably to warm their hands. But that same enthusiasm for learning, that

same great respect for teachers, greeted the delegates. Not all children living in rural areas are as even fortunate as these children. The People to People tour guide explained that a considerable number of rural communities only have schools if a business establishes one there. The contrast is startling!

The Chinese students and their teachers, regardless of their school situations, were eager (and “honored”) to have us visit. That respect permeated our entire trip. From climbing the Great Wall outside of Beijing to attending a banquet at the Great Hall of the People on Tiananmen Square to floating down the Li River in Guilin, we were treated as honored and welcomed guests.

The world is indeed flat when people share passions about children learning. The gifted delegation plans on meeting again this summer at Western during either SCATS or VAMPY to share the impact this People to People opportunity made on them.





# Differentiation Tips for Teachers: Practical Strategies for the Classroom, Part 2: Content, Process, Product

BY TRACY INMAN & JULIA ROBERTS

The first part of the series (*Challenge*, Winter 2005) explored the first two essential questions that lead to a differentiated learning experience. The key question with planning is “What do I want students to know, understand, and be able to do?” The second key question is the preassessment one: “Who already knows, understands, and/or can use the content or demonstrate the skill?” This installment explores the last essential question.

## **DIFFERENTIATION: What can I do for him, her, or them so they can make continuous progress and extend their learning?**

Before you can explore differentiating the lesson or unit itself, it’s critical to realize that learning experiences combine content, process, and product.

The matching of any one of those components to a student’s needs, interests, or abilities creates a differentiated learning experience. In order to do that though, you must understand those components fully.

## **CONTENT: What do you want the students to learn?**

National and state standards should drive the content in your classroom. National standards have been adopted in all major content areas (see box on page 14), plus most states have dovetailed on those for their particular students. In Kentucky, for example, the Program of Studies and Core Content Standards prescribe content for all grade levels and all subjects.

Differentiation comes into play with children who have already mastered the content. A pretest for each unit determines mastery. Students should receive credit for that mastery, then be able to explore the content vertically. As educators, you know that any content in your curriculum could be taught on the graduate level. In-depth exploration of content challenges the learner in your classroom who has already mastered the material in your lesson.

## **PROCESS: What do you want the students to do cognitively?**

Another component to differentiation is the process, the kind of thinking that occurs. As you educators are acutely aware, Bloom along with others (1956) created a taxonomy of cognitive thinking skills. The revision of that taxonomy, (Anderson & Krathwohl, 2001) focuses on the action of thinking. In terms of differentiation, Bloom’s approach matches naturally.

Some children may be ready to consider the solar system, for example, on the lowest levels: remember and understand. They may be challenged to remember the names and order of the planets. Other children, though, may be ready to think about the planets on higher levels. Perhaps they can apply the criteria of what makes a planet a planet to another celestial body in order to determine the difference between the two. Maybe they’re challenged by analyzing the atmosphere of the planet in terms of supporting life. But for them to only think about the planets’ order doesn’t even require them to think. For some children, analyzing and applying won’t challenge them. They need to evaluate and predict in order to learn more about the solar system. So while their classmates may be exploring atmospheres, they may be considering what would happen to the solar system if an asteroid hit the earth. Or perhaps they’re evaluating whether that “tenth planet” is really a planet and why.

So the content is essentially the same: the solar system. But their think

(continued on page 14)



Amber Norris (SCATS 1995 and 1996; VAMPY 1996, 1997, and 1998; Counselor) loved VAMPY. She adored her friends and hungered for the rigorous and exhilarating learning environment camp provided. But after her first summer, it didn't look like Amber would be able to return to camp – the money just wasn't there. When miraculously the money materialized, Amber thankfully spent two more summers challenging her mind and meeting life-long friends. It wasn't until college that Amber's mysterious benefactor came forward – her brother. Wake Norris (VAMPY 1989, 1990, 1991, and 1992; Counselor) had worked as a camp counselor for two summers donating his pay so his sister could participate in VAMPY. Amber is now a graduate of Emory University; she is in her second year of Teach for America.

As The Center for Gifted Studies grows and expands, we encounter challenges. We are constantly meeting gifted children who simply do not have the financial resources to participate in the programming they need. But we believe that money should never bar the door; the educational and social-emotional needs of gifted children absolutely must be met. That's why we rely on the generosity of our friends. But The Center need not be the only source of financial assistance. Take a quick look around your community; we're sure you'll find others who are not just willing, but eager, to invest in the education of a gifted child.

### Options and Opportunities

- Civic organizations such as Optimists, Kiwanis, Rotary, and Business and Professional Women all have excellent reputations for giving.
 

*A young man recently attended VAMPY on a scholarship from his local Optimists Club. Upon his return, he made a presentation to them focusing on what he learned and how that would impact his community.*
- Your local KAGE organization is eager to provide financial support to gifted children with financial needs in your area.
 

*The Daviess County local chapter of KAGE donated \$700 to send young people to Owensboro Super Saturdays.*
- School districts, schools, banks, friends, family, teachers: all are potential sources of financial aid.
 

*The Metcalfe County Board of Education financed summer campers through their gifted funds.*

*One grandfather not only paid for his three grandchildren to attend Super Saturdays, but he also provided transportation.*

*A teacher from eastern Kentucky anonymously supplied spending money for a VAMPY camper from her school.*

These are all resources, a means of getting what you need or what someone you know needs. Never let money stand in the way; it is possible; there is a way.

# MAKING ENDS MEET

BY HARPER LEE

**'I felt like I wasn't there  
for the present. I was there  
for the future.'**

— Amber Norris

### Giving to The Center: A Promising Investment

There is no limit to what you can do for The Center as support can take multiple forms. Financial support can take the shape of an endowed gift, where the gift perpetuates itself, or a one-time personal donation. Those funds go directly to meeting the needs of gifted children. In the past, we have had other individuals (like Wake) working for The Center who donate their pay to allow deserving young people the opportunity to participate in summer programming or Super Saturdays.

However, our office is in need of volunteers to help with mailings, make phone calls, and maintain our database – among many other tasks! We are also always on the lookout for possible teachers and teaching assistants for our summer programs as well as Super Saturdays.

The list is endless....

The Center is constantly changing. We push ourselves to grow and expand. Such development requires a variety of steady supports. We are always in need of extra hands, extra hearts, and extra minds to help us in our mission to support children who are gifted and talented. Whether it is sealing envelopes, writing a check, responding to legislative action, teaching or mentoring a child – no contribution is too small; no gift inconsequential. YOU are essential to improving and enhancing the educational and emotional lives of gifted children.

## YOU CAN LOCATE THE NATIONAL CURRICULUM STANDARDS AT THE FOLLOWING WEBSITES:

### American Association for the Advancement of Science: Benchmarks for Science Literacy

<http://www.project2061.org/publications/bsl/online/bolintro.htm>

### American Council on the Teaching of Foreign Languages: Standards for Foreign Language Learning

<http://www.actfl.org/i4a/pages/index.cfm?pageid+3392>

### Center for Civic Education: National Standards for Civics and Government

<http://www.civiced.org/stds.html>

### National Center for History in the Schools: National Standards for History for Grades K-12 and National Standards for World History Grades 5-12

<http://nchs.ucla.edu/standards>

### National Council for the Social Studies: Curriculum Standards for Social Studies

<http://www.socialstudies.org/standards>



### National Council of Teachers of English: Standards for the English Language Arts

<http://www.readwritethink.org/standards/index.html>

### National Council of Teachers of Mathematics: Principles and Standards for School Mathematics

<http://standards.nctm.org>

### National Geographic Society: Geography Standards 1994

<http://www.nationalgeographic.com/xpeditions>

### National Research Council: National Science Education Standards

<http://www.nap.edu/html/nses>

### National Standards for Arts Education

<http://artsedge.kennedy-center.org/teach/standards.cfm>

ing, how they process this concept, differs greatly. And it must be so in order for them to have continuous progress.

Teachers can also differentiate creative thinking skills, for example, by using Torrance's (1963) flexibility, elaboration, fluency, and originality. The process of learning a concept must be challenging to the individual learner.

### PRODUCT: How do you want the students to show or demonstrate what they have learned?

In addition to content and process, product is another component in the learning process that can be differentiated to meet the needs of learners. In fact, you can approach differentiation of product in a couple of ways.

When the product is an integral part of the learning (e.g., students are learning PowerPoint or the art of writing essays), you can differentiate through your levels of expectation. A child gifted in language arts should be held to higher standards than a child below grade level if the product is a written one. Everyone is still expected to write, but the assessment for the gifted child or child of high ability needs to be more sophisticated and stringent. For example, one rubric could assess complex syntax while another looks for complete sentences. Each would prove challenging for the writer – as long as appropriate preassessment occurs.

Please note: no where does the assessment call for more (more pages, more paragraphs, etc.) for the gifted child. It calls for different!

Another approach to differentiating the product is appropriate when the content is more important than the product. If your goal is for students to explore the Bill of Rights, whether they demonstrate their understanding by a speech, pamphlet, or model, is of little consequence to you. Your goal is content. Differentiating occurs when you encourage your students to demonstrate their learning in products that match them: their learning style, their interests, their multiple intelligence. And the assessment of those products holds all children to high standards.

Product. Process. Content. Any one of these learning components can be differentiated so that a match is made between learning and learner.

Anderson, L., Krathwohl, D., Airasian, P., Cruikshank, K., Mayer, R., Pintrich, P., et al. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives* (Abridged ed.). New York: Longman.

Bloom, B. (Ed.). (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain*. New York: Longman.

Torrance, E. P. (1963). *Education and the creative potential*. Minneapolis, MN: University of Minnesota Press.

# AP Teachers—Embracing More Than the 3 Rs

BY LEIGH JOHNSON

This summer over 360 teachers participated in the College Board endorsed Advanced Placement Summer Institute at Western Kentucky University. Other than a committed group of teachers exploring how to improve their approach to challenging college-level classes, what else did the participants learn?

## RIGOR

AP classes need to be rigorous in order for students to be challenged by new material and to fulfill the expectation that the class will correspond to college level material. The Summer Institute can help teachers create strategies to make their classes more challenging for students; one teacher found that the “English Language Institute has inspired me to become a teacher with higher expectations.” To ensure the rigor of courses designated as AP, the College Board will institute an AP Course Audit beginning the 2007-08 school year. The Course Audit will allow colleges and universities to evaluate a student’s transcript knowing that courses designated as AP are rigorous, challenging courses. For more information about the AP Course Audit, see <http://apcentral.collegeboard.com>.

## RELATIONSHIPS

At the AP Summer Institute at Western Kentucky University, teachers were able to establish relationships with others teaching in their subject areas. One teacher remarked, “I learned a tremendous amount, and I will use it in my classes. I have a new ‘best’ friend



Sheryl Hagan-Booth

as a source of info – actually several new friends to network!” As teachers have the opportunity to engage in professional development, they take their passion and commitment to learning to their students. The 2005 AP Teacher Standards states: “Regular use of AP resources, such as AP Central, electronic discussion groups, Released Exams, Teacher’s Guides, current disciplinary literature and other supplemental materials allow the individual AP teacher to benefit from the experiences of the wider AP teaching community.” Additionally, opportunities like the Summer Institute do make a dif-

ference for teachers, with research by the College Board showing that “86 percent indicate changing their instruction based on what they learned, and a quarter indicated that they followed up with a colleague they met there.”

## RELEVANCE

Not only do teachers of AP classes enjoy challenging their students, but they also relish pushing themselves to new levels. One participant tells how relevant the Summer Institute was for a life-long learner in that “I learned so much on Day 1 that I could have ‘survived’ just from that.” AP teachers work to ensure that they are experts in their fields, just as college professors are considered experts in their fields. For high school AP teachers, the standards are high. Teachers have expert knowledge in content, pedagogy and student learning, and analysis and reflection. According to the College Board, “69.7 percent of AP teachers hold a master’s degree...only 38 percent of teachers at large hold this degree.” By making the content relevant for students – preparing them for college coursework and analytical thinking – AP teachers “make challenging content available to all students.”

## BEYOND

A rigorous, relevant, relational experience benefits teachers and students as they take the next steps in education. Maintaining high standards in the classroom ensures the integrity of the AP designation as well as allows students to push the limits of their abilities in working hard.

**AP and great teaching make the world a smaller (and larger) place. For Shannon Murphy (AP Institute World History 2005), a DuPont Manual High School teacher, keeping students engaged and innovative teaching mean she will take her skills to Turkmenistan. According to the *Courier-Journal* (October 5, 2005), Murphy has won one of 15 U.S. Teacher Excellence Awards from the American Councils for International Education and the US Department of Education. CONGRATULATIONS, SHANNON!**



Dr. Sylvia Rimm's two presentations as part of the Berta Fund for Excellence – Education Series drew sizable crowds. As she spoke about underachievement in gifted children on the night of September 15, Rimm noted, "Underachievement is epidemic and enters every classroom and many homes." She left us with some pointers. Read on to discover how to identify and combat underachievement.

# THE EPIDEMIC OF UNDERACHIEVEMENT

## Quiz: Is your child an underachiever?

1. Does your child forget to do homework assignments?
2. Does your child give up easily?
3. Does your child avoid competitive activity unless he/she is almost sure to win?
4. Does your child start working on homework late each night?
5. Does your child watch two or more hours of TV (or play two or more hours of video games) on school nights?

Score 1 point for each yes response and total the points.

### Total Points:

- 4-5 Your child has characteristics that indicate a very serious underachievement problem.
- 2-3 Your child has characteristics that indicate a fairly serious underachievement problem.
- 1 Your child has characteristics that indicate only minor underachievement problems.
- 0 Your child has no underachievement characteristics.

## Ways Parents Can Help:

### Parenting by Positive Expectations

- Model hard work and satisfaction of accomplishments.  
*Hard work is not enough. Hardworking parents who constantly complain about their jobs are not good role models. Children should hear their parents speak in a more balanced way about the satisfactions of achievement.*
- Voice your sincere respect for educational institutions and teachers.  
*Children avoid work and learning if teachers are not respected by their parents. Set up regular communication with the child's teacher.*

- Involve your children in study routines.

*Don't sit with your children when they study, but be interested and review work. Reasonable structure and organization are necessary for accomplishment and dealing with responsibilities.*



- Be consistent with your children's other parent(s) in setting goals for children.

*If one parent sets higher goals than the other parent, children are likely to choose the easy way out. Don't ally with your children against the other parent, no matter how subtly.*

- Help your children cope with competition.

*Explain that being the best is not as important as doing their best, and that winning and losing are temporary.*

- Encourage independence in your children without giving them more power than they can handle.

*Parents should be clearly in charge, although children should be able to make choices and voice opinions within limits.*

- Praise children realistically with words that set goals they'll be able to achieve.

*"Bright," "good thinker," "kind" and "persevering" are more fair than "brilliant," "genius," "smartest" or "perfect."*

- Don't give up on your children.

*Your children need your support and a clear priority expectation of achievement. Even if it doesn't seem to have immediate results, your children do hear you eventually.*

For more information on underachievement see Sylvia's book *Why Bright Kids Get Poor Grades and What You Can Do About It* (1995) from Three Rivers Press in New York.

Reprinted with permission from Rimm, S. (2001). *Is your child an underachiever?* and *Preventing underachievement. On Raising Kids*, 15, 4-6.

BERTA EDUCATION SERIES SPONSORED BY THE BERTA FUND FOR EXCELLENCE

Day 2 of the Berta Series, a day-long workshop designed for educators, counselors, and parents, focused on her latest book. Sylvia Rimm's *Growing Up Too Fast: The Rimm Report on the Secret World of America's Middle Schoolers* (2005) documents changes and challenges middle schoolers face daily. Read on for some surprises and advice from Dr. Rimm.

You already know that kids are growing up too fast, but my new book actually documents kids' words and experiences. Yes, you will be astounded because they're growing up even faster than you supposed. By third grade, about 15% of children are already feeling pressure about being popular with the opposite sex, and the same percentage were worried that their parents didn't understand them. Kids in middle school today are typically exposed to the high-risk behaviors that their parents remember from high school and college.

### What's Wrong With Fast?

Adolescent-like behavior that begins early leads to more opposition both at home and in the classroom. It steals middle childhood, the time when children have typically been absorbed in learning basic academic and social skills. Early sexual absorption by children is a powerful distracter.

Furthermore, there is no research that suggests any positive outcome stemming from earlier sexual involvement, so you should be very concerned about the pace of sexual behavior in your children.

### The Pressure To Be Popular

Popularity has always been an issue in middle school, but kids today are absolutely certain the problem is more intense for their generation than it was for their parents'. Kids told me that the right clothes and labels, makeup, piercings, and appearances are the most critical ingredients for achieving popularity.

Students in my focus group said that popular kids shunned less popular kids. They believed that popular kids even had control over some teachers and that



# Dr. Sylvia Rimm's Latest Research on Middle Schoolers

teachers believed what popular kids said about other students. The students in my survey ranked popularity as their top concern—tied only with fears of a terrorist attack on our country.

Physical attributes are often determining factors for status, so it was no surprise that 22% of students also worried about being too fat, and 17% worried that they weren't pretty enough.

### Good Family Relationships

In all areas of my survey results, it was apparent that good family relationships have the power to combat adolescent fears and worries. Kids with very good family relationships worried less about all appearance and popularity issues, including being pretty enough,

pressure to have nice clothes, popularity with girls, being too fat, or not tall enough. It's gratifying to realize how influential parents can be in relieving some of the angst in middle school youngsters.

Although kids vocalized complaints about parental control, they assumed that their minor battles with their parents were normal and didn't interfere with their happy family relationships. This should reassure parents that middle schoolers expect and accept guidance from adults. Clearly, this means that when your kids roll their eyes at you in apparent protest, they hear your message anyway – so don't back off too much. They need you to guide them.

Reprinted with permission from Rimm, S. (2005). *Growing up too fast. On Raising Kids*, 16, 1-5.

# Prepare Your Students for Success Through Vertical Teaming: Science, Social Studies, & World Languages Join Mathematics and English in 2006

In order to have your students ready for the rigor and challenge of College Board Advanced Placement classes, they must experience rigor and challenge in the classes leading up to AP. If your school is concerned that too few people take AP (and how can they justify offering a class for only six students?), then realize that the College Board argues that AP is not just for gifted kids, but rather for all college bound students. Also realize that students who do not feel prepared for AP will be hesitant to take the classes. They must be prepared for the level of challenge in those classes. They must have worked with concepts at high levels. They must have developed study skills and a strong work ethic. These won't happen in a curriculum that lacks rigor and cohesion.

Educators must learn how to vertically align the curriculum so that these high level concepts are built upon throughout the students' learning. Concepts and skills introduced in the latter



elementary years must be developed throughout middle and high school classes so that students are ready for the collegiate-level challenge of AP. Vertical Teaming is an excellent vehicle to make this a reality. Vertical Teaming trains teachers to prepare students for challenging work. Research shows that stu-

dents who do not take an AP class enter college with a 33% chance of earning a Bachelor's degree. Students who take at least one AP course have a 59% chance of earning a Bachelor's, while those who take two or more AP have a 76% chance! (Answers in the Tool Box: Academic Intensity, Attendance Patterns, and Bachelor's Degree Attainment at [<http://www.ed.gov/pubs/Toolbox/toolbox.html>].) In short, Vertical Teaming is a win for everyone – but it's especially critical for your students.

Last summer, four states took advantage of this training offered by The Center. Illinois, Kentucky, Ohio, and Tennessee all sent teams to be trained in English and/or Mathematics. One Ohio participant, Cathy McCoy, describes the experience: "I am a guidance counselor at a school that sent seven English teachers to the Vertical Team Institute. The principal and I were required to attend because we received a grant from the College Board. We were so impressed with the progress our English Team made, we applied for another grant to take our Math and Science teams next summer. Thanks for having a great institute."

We are very excited about the addition of three areas next summer, one which Cathy referred to in her response. The Center will offer Social Studies, Science, and World Languages alongside Mathematics and English. So mark your calendars now for July 10-13, 2006. Be sure that your school and district are represented as a team. Ensure that your students will be able to handle the rigor and challenge of AP.

***The vertical teaming information has been of valuable use in schoolwide curriculum meetings, particularly within our department. Student response to planned, stated course requirements for each grade level is enthusiastic. They enjoy the sensation of being prepared for "what comes next" and not taken by surprise. Some are vocal in their assessment of our performance. With structured vertical procedures in place, teachers and students feel more secure.***

**BILLY ALLISON  
JACKSON, TN**





## A YEAR OF MILESTONES!

The year 2006 is a very special one for Hilltoppers everywhere. One hundred years ago, the Commonwealth of Kentucky established Western Kentucky State Normal School, and Henry Hardin Cherry became the first president of the new school. The Center is proud to join Western Kentucky University in celebrating its centennial. And we are excited that we have been providing services to gifted children, their parents, and their educators for a full quarter of that century. Happy 100th Western – and Happy 25th to The Center!

## BEN CUNDIFF RECEIVES SUMMIT AWARD

The Summit Awards at Western honor the volunteers who have committed themselves to the excellence of the University. This past October, The Center for Gifted Studies' Advisory Board Member Ben Cundiff received this award.

The Cundiff family has a long history with The Center. Ben and his wife, Janine, have two children, John and Jenny, who have participated in our summer opportunities at Western. John attended the Summer Program for Verbally and Mathematically Precocious Youth (VAMPY) for three years. Jenny went to both the Summer Camp for Academically Talented Middle School Students (SCATS) and VAMPY. They both later returned to work as counselors. John recently received his law degree at Vanderbilt University. After going to Choate Rosemary Hall, a coeducational prep-school in Wallingford, CT, Jenny now studies at Vanderbilt.



Currently, Ben and Janine run a 12,000-acre farm located in Trigg and Caldwell counties. They raise cattle and grow corn, wheat, soybeans, sorghum, oats, and tobacco. Ben is also very active in his community. He has served as the chairman of the Trigg County Industrial Authority and as the industry vice president with the 2000 Cadiz-Trigg County Chamber of Commerce. He previously held the majority interest and was Chairman of the Board for Trigg Bancorp, Inc.

(Trigg County Farmers Bank) in Cadiz, Kentucky. He also served on the Integra Bank Corporation Board. It is important to him that people in his area understand what The Center for Gifted Studies offers; therefore, he has brought The Center to several Rotary meetings to discuss gifted children, The Center, and the Kentucky Academy of Mathematics and Science.

Ben believes strongly and fully in The Center for Gifted Studies' vision at Western. His support is emphasized by the multi-year attendance of his children; he gives credit for much of his children's success to these programs. Because of this belief and support, the Cundiff Fund for Excellence has been established in The Center for Gifted Studies.

Ben thoroughly enjoys spending time with his family, especially his granddaughter. He also enjoys traveling and golfing. And The Center certainly enjoys his insight and generosity!

# friends

Our deepest appreciation goes to the following people who, through their generosity, have allowed us to do what we do best: provide opportunities and services to young people who are gifted and talented, their educators, and their parents. Thanks for making it possible.

Kathy & John Abbott .....Louisville, KY  
 Kathy Adams .....Shelbyville, KY  
 Donna Baxter .....Fort Thomas, KY  
 Marilee Benson .....Bardstown, KY  
 Kathleen & Vince Berta .....Bowling Green, KY  
 Prana & Omkar Bhatt .....Bowling Green, KY  
 Kathryn & Mark Bigler .....Bowling Green, KY  
 Carrie & Robert Blackham .....Whitesville, KY  
 Michelle & James Blandford .....Louisville, KY  
 Martha & Douglas Brown .....Winchester, KY  
 Jackie & Bill Capp .....Boston, MA  
 Nancy & Keith Carwell .....Bowling Green, KY  
 Melinda & Gerald Cecil .....Louisville, KY  
 Jennie & Ravi Chandra .....Berkeley, CA  
 Beth & Richard Chapman .....Nashville, TN  
 Ann Coffey & Steve Dahmer .....Fisherville, KY  
 Ann & Raymond Cravens .....Bowling Green, KY  
 Anne & Darrell Crawford .....Auburn, KY  
 Janet Turner Cruse .....Magnolia, KY  
 Kelly & Todd Davis .....Bowling Green, KY  
 Sheila & Bob Depp .....Owensboro, KY  
 Jean & Wayne Dudgeon .....Elizabethtown, KY  
 Darlene & Warren Eisenstein .....Glasgow, KY  
 Mark Evans .....Louisville, KY  
 — Matching Gift AEGON/Transamerica  
 Mary & Sam Evans .....Bowling Green, KY  
 Marjorie Farris .....Richmond, KY  
 Mary & James Flueck .....Lexington, KY  
 Michael Flueck .....Fishers, IN  
 Doris & Jim Ford .....Bowling Green, KY  
 Julie & George Gilliam .....Owensboro, KY  
 Cindy & Brad Gilson .....Evansville, IN  
 Ruthene Glass .....Bowling Green, KY  
 Nancy & William Gravely .....Glasgow, KY  
 — Gravely Travel Service  
 Aline & Donald Greer .....Fairfield, KY  
 Anne Guillory .....Louisville, KY

Carolyn & Lowell Guthrie .....Bowling Green, KY  
 — Trace Die Cast, Inc.  
 Carolyn & John Hagaman .....Bowling Green, KY  
 Connie & Chuck Haine .....Memphis, TN  
 Sue & Bill Hamilton .....Pflugerville, TX  
 Dana Hammer .....Tompkinsville, KY  
 Pam & Scott Hammond .....Glasgow, KY  
 Jane & Randy Hansbrough .....Bowling Green, KY  
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 — Matching Gift Shelter Insurance  
 Michelle & Charles Haynes .....Gallatin, TN  
 Susan & Nelson Helm .....Louisville, KY  
 Amanda Hines .....Bowling Green, KY  
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March 31 – April 9, 2006  
**Spring Break in London**

June 11 – 23, 2006  
**The Summer Camp for Academically  
Talented Middle School Students (SCATS)**

June 19 – 20, 2006  
**Leading a School that Meets  
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June 25 – 30, 2006  
**Advanced Placement Summer Institute (AP)**

June 25 – July 15, 2006  
**The Summer Program for Verbally and  
Mathematically Precocious Youth (VAMPY)**

July 1, 2006  
**First Meeting of The Center for  
Gifted Studies Alumni Association**

July 10 – 13, 2006  
**The Vertical Team Institute**

To Be Announced  
**Fall Super Saturdays and  
Owensboro Super Saturdays**