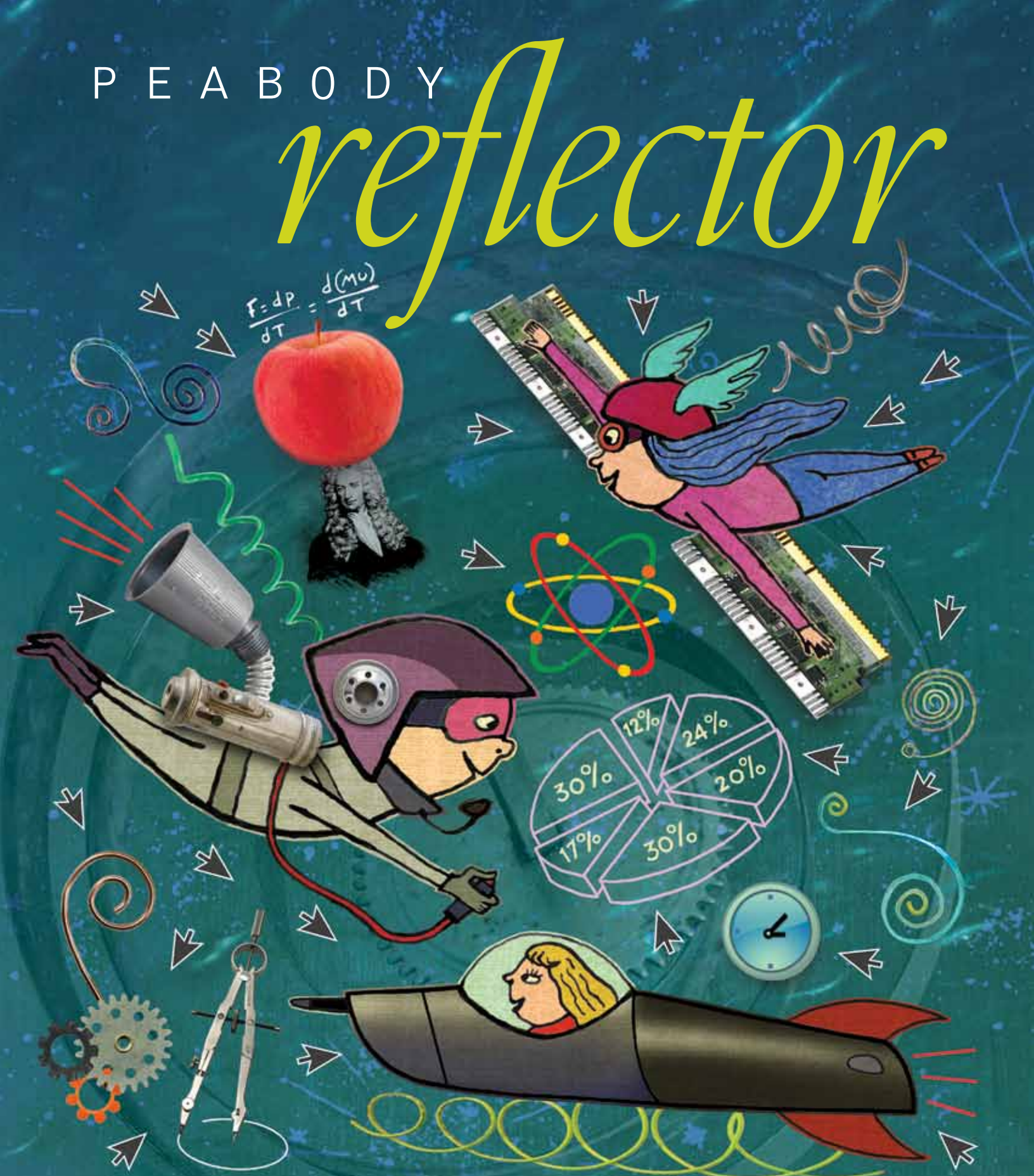
PEABODY

# reflector




## Technology at the Speed of Learning

SUMMER 2011 VANDERBILT UNIVERSITY

# The Peabody Journal of Education


MARY DONALDSON

*The Peabody Journal of Education (PJE),* America's second-longest running publication devoted exclusively to educational research, practice and policy, is committed to providing information and reasoned opinion that will enhance understanding and practice among institutions and individuals concerned with human learning and development.

*PJE* publishes issues on topics related to institutions catering to students in early childhood, preschool, primary, secondary, post-secondary and tertiary education. Interests include education matters of both domestic and international natures, including those that are linked to the social and organizational contexts in which formal and informal education takes place.

## Recent issue topics have included:

*Immigration and education*
*Small learning communities*
*The use of interim assessments*

## Print & Online Subscription Rates

Institutional print and online – $671
Institutional online one – $604
Personal print and online – $80

PJE is pleased to offer an additional issue each year beginning in 2011, an increase from four to five issues per volume. These changes are included in the 2011 pricing.

For more information and to subscribe, visit us online at *peabody.vanderbilt.edu/PJE.xml*

VANDERBILT UNIVERSITY Peabody College

*"For over 100 years, the* Peabody Journal of Education *has served the public by supplying cutting-edge research and policy analysis on all issues of education."*

James Guthrie

CONTENTS

Visit Peabody College's website at http://peabody.vanderbilt.edu/

Bonnie Arant Ertelt, Editor
Donna Pritchett, Art Director
Michael Smeltzer, Designer
Nelson Bryan, Class Notes Editor

Contributors: Joanne Lamphere Beckham, Kurt Brobeck, Katharyn Castro, Kara Furlong, Max Gertz, Jennifer Johnston, Melanie Moran, Jim Patterson, Lisa Robbins, Cindy Thomsen

Camilla Persson Benbow, Patricia and Rodes Hart Dean of Education and Human Development

Timothy Caboni, Associate Dean for External Relations and Professional Education

Jennifer Zehnder, Associate Dean for Development and Alumni Relations



Cover illustration by Roger Chouinard.

The Peabody Reflector is published biannually by Vanderbilt's Peabody College of education and human development in cooperation with the Vanderbilt Office of DAR Communications. The magazine is mailed free of charge to all Peabody alumni, parents of current Peabody students, and to friends of Peabody who make an annual gift of $25 or more to the College. Correspondence, including letters to the editor and class notes submissions, should be mailed to: Peabody Reflector, Office of DAR Communications, PMB 407703, 2301 Vanderbilt Place, Nashville, TN 37240-7703 or by email to reflector@vanderbilt.edu.

PEABODY reflector

## FEATURES





## DEPARTMENTS

WOLF HOFFMANN

Popular discussions about how technology is shaping our personal, social and professional lives tend not to reference education schools. Yet if you ask principals and superintendents what they look for in a prospective teacher, many will include facility with technology on their short list of desirable skills.

At a systems level, the growing incorporation of technology in education is one of the most powerful forces driving change in the field. More than ever, technology is being used for assessment, monitoring and decision making—as well as to promote learning.

Tennessee, for example, is among a cadre of states collecting and disseminating data to do such things as create early warning systems to identify students at risk of dropping out, evaluate teacher performance, predict student performance on high-stakes tests, and improve instruction. Of course, using data to inform decision making is nothing new for Peabody students both in education and non-education majors alike.

For its part, the Peabody faculty has used technology to develop such innovations as the Vanderbilt Assessment of Leadership in Education (VAL-ED) to measure principal effectiveness and the Peabody Treatment Progress Battery to give feedback to mental health professionals. As for classroom instruction, those familiar with the college's recent history may well recall that Peabody faculty members developed such learning technologies as Read 180 and *The Adventures of Jasper Woodbury*.

This issue of the *Reflector* explores efforts to understand, develop and apply educational technology by current and new members of the Peabody faculty, while looking at how our own IRIS Center uses technology successfully to disseminate materials on teaching students with special needs.

If all this talk about technology sounds a little off-putting, remember, we are still a college of education and human development—emphasis on the word human. With that in mind, we will introduce you to several HOD alumni giving back to their communities in very humane ways.

Camilla P. Benbow
*Patricia and Rodes Hart Dean of Education and Human Development*

## Reading into Reading First Data

In the Winter 2010 edition of the *Peabody Reflector*, there is an article with the heading "Early Reading First data shows impressive gains." This article, a summary of results of a preliminary study, describes research that appears to be seriously flawed.

Based on the summary presented, it appears that the project's research design has the following flaws:

1) There is no control group mentioned. How can any results be linked to an intervention if there is no control (comparison) group?

2) It appears that ELL children were administered a vocabulary test in English shortly after their arrival to their first formal school appearance. To report their mean score as 55 appears to be an egregious example of the misuse of a test, as it looks suspiciously like the "floor" or lowest score possible.

3) The African American children's scores increased from 88 to 94. This result is not impressive unless a control group would show virtually no improvement. Dr. Susan Gray, whose work preempts this study by about 50 years, demonstrated more impressive gains in a similar population in her Early Training Project conducted at Peabody in the 1960s! She had a control group!

And finally—the project director is quoted as saying "These final scores [a mean of 85.3 on a test whose average score per national norms is 100] are what I would expect to see as average scores in economically advantaged populations … ." On what basis would he expect economically advantaged populations to have a score significantly below the national norm?

I believe it would be helpful to have a follow-up article to apologize for these apparent flaws or present additional information to explain these apparent flaws.

Richard Brozovich, PhD'66
*Clarkston, Mich.*

*Editor's note: An article regarding the Reading First data reported on last issue is currently under review by* Reading Research Quarterly. *Until then, readers may want to see "Cross-site Effectiveness of* Opening the World of Learning *and Site-Specific Strategies for Supporting Implementation" in* Early Childhood Services*, 3(3), 179-191, by M. K. Ashe, S. Reed, David K. Dickinson, & S. J. Wilson published in 2009.*

## Charting a Path for Charter Schools

It is with great enjoyment that I see charter schools, performance incentives and individualized computerized learning programs in the most recent edition of your magazine. As a graduate of Peabody (MEd'03), founding teacher of KIPP Academy Nashville in 2005, and current principal of Rocketship Los Suenos Academy in San Jose, Calif., I couldn't be more excited that more people are gaining access to some true innovations in the movement towards closing the achievement gap.

The new movement of charter schools, known as Charter Schools 2.0, is interested in creating highly successful and replicable charter schools, not in opening a few schools and making an impact on a relatively small number of families. Opening hundreds of charter schools across the country in the next decade will make a huge impact in a country that currently has 5 million elementary school students enrolled in failing schools.

Thank you for your efforts in sharing developments with the greater Peabody community. A deeper understanding of low-income education in this country is necessary if we are to build an educational system that is truly equitable.

Adam Nadeau, MEd'03
*San Jose, Calif.*

## Cheers for Paul Dokecki

Of course! While studying Herodotus, Homer, etc., Paul sat in the center rear seat creating music for his drums. And we still stood around him after quizzes/exams to find out what the correct responses were. Our class kept tabs on Paul. Whenever something of importance was accomplished, we all shared the news, by telephone in the '60s and '70s, even the '80s.

Now it's email, Twitter, etc. We who graduated [from Manhattan College] with Paul in 1962 have continued our admiration.

Paul F. Trudeau, PhD, CGP
*Atlanta, Ga.*

I took Paul's Professional Ethics class as part of my master's degree program in the late '90s, and I enjoyed it immensely. It ranks high on my list of all-time favorite classes. Ever. Paul is a total treasure. Glad to see this piece about him.

Tamra Gentry, MEd'98
*Bartlett, Ill.*

Paul taught a graduate seminar in 1974 called Intervention. That class, with Dr. Dokecki's modeling and inspiration, launched

my career first as a clinician working with Indian tribes throughout the west, and now as a forensic psychologist working with intellectually disabled adolescents. Thanks, Paul.

Steven Abernathy, MS'76
*Tallahassee, Fla.*

## Watermelon with Dr. Crabb

I GREATLY ENJOYED THE PICTURE on page 8 in the winter issue of the *Reflector* since it is my father, Dr. A. L. Crabb, in the hat. He delighted in such mild exaggerations as depicted here—one should never overdo it, of course. I will share that picture with his grandchildren and great-grandchildren. They already know of most of his other accomplishments, and this should not be omitted!

And if you know, I'd like to know the name of the other gentleman in the photo.

Alfred Leland Crabb Jr., BS'40, MA'41
*Lexington, Ky.*

VANDERBILT UNIVERSITY SPECIAL COLLECTIONS AND UNIVERSITY ARCHIVES

*Editor's note: We contacted the Special Collections staff at the Jean and Alexander Heard Library, which provided the photo. The other man in the photo is listed as Clifton L. Hall, and the photo is from July 4, 1951. It appears in the 1952* Pillar.

Letters are always welcome in response to contents of the magazine. We reserve the right to edit for length, style or clarity. Send signed letters to: Editor, *Peabody Reflector*, PMB 407703, 2301 Vanderbilt Place, Nashville, TN 37240-7703, or email reflector@vanderbilt.edu.

STEVE GREEN

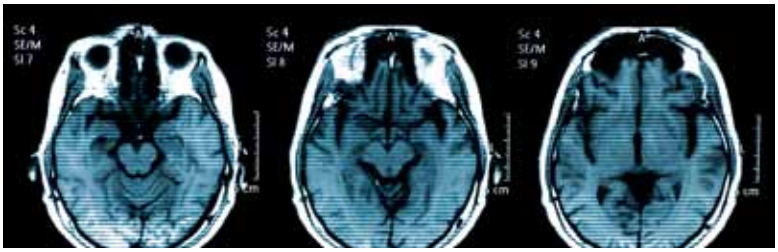
*Commencement took place on Friday, May 13, this year and was forced indoors because of rainy weather. Rebecca Barden of Nashville, shown above with Dean Camilla Benbow, left, and Chancellor Nicholas S. Zeppos, right, was the Founder's Medalist for Peabody, graduating with a bachelor of science in human and organizational development. Following graduation, Barden plans to pursue a career using her business development, public relations and special events skills.*

## Brain imaging predicts reading progress

Brain scans of adolescents with dyslexia can be used to predict the future improvement of their reading skills with an accuracy rate of up to 90 percent, new research indicates. Advanced analyses of the brain activity images are significantly more accurate in driving predictions than standardized reading tests or any other measures of children's behavior.

The finding raises the possibility that a test one day could be developed to predict which individuals with dyslexia would most likely benefit from specific treatments.

"This approach opens up a new vantage point on the question of how children with dyslexia differ from one another in ways that translate into meaningful differences two to three years down the line," said Bruce McCandliss, Patricia and Rodes Hart Chair of Psychology and Human Development at Peabody and a co-author of the report. "Such insights may be crucial for new educational research on how to best meet the individual needs of struggling readers."



ISTOCKPHOTO

The research was primarily conducted at Stanford University and led by Fumiko Hoeft, associate director of neuroimaging applications at the Stanford University School of Medicine. In addition to McCandliss, Hoeft's collaborators included researchers at MIT, the University of Jyväskylä in Finland and the University of York in the United Kingdom.

"This finding provides insight into how certain individuals with dyslexia may compensate for reading difficulties," said Alan E. Guttmacher, director of the National Institutes of Health's Eunice Kennedy Shriver National Institute of Child Health and Human Development, which provided funding for the study.

"Understanding the brain activity associated with compensation may lead to ways to help individuals with this capacity draw upon their strengths," Guttmacher

said. "Similarly, learning why other individuals have difficulty compensating may lead to new treatments to help them overcome reading disability."

The researchers used two types of brain imaging technology to conduct their study. The first, functional magnetic resonance imaging (fMRI), depicts oxygen use by brain areas involved in a particular task or activity. The second, diffusion tensor magnetic resonance imaging (DTI), maps white matter tracts that are the brain's wiring, revealing connections between brain areas.

The researchers adapted algorithms used in artificial intelligence research to refine the brain activity data to create models that would predict the children's later progress. Using this relatively new technique, the researchers could use the brain scanning data collected at the beginning of the study to predict with more than 90 percent accuracy which children would go on to improve their reading skills two and a half years later.

In contrast, the battery of standardized, paper-and-pencil tests typically used by reading specialists did not aid in predicting which of the children with dyslexia would go on to improve their reading ability years later.

The study is part of a rapidly developing field of research known as "educational neuroscience" that brings together neuroimaging studies with educational research to understand how individual learners differ in brain structure and activity and how learning can drive changes at the neural level.

"This latest study provides a simple answer to a very complex question—what can neuroscience contribute to complex issues in education?" McCandliss said. "Here we have a clear example of how new insights and discoveries are beginning to emerge by pairing rigorous education research with novel neuroimaging approaches."

The research was published in December in the *Proceedings of the National Academy of Science.* It was funded by the National Institute of Child Health and Human Development, the Stanford University Lucile Packard Children's Hospital Child Health Research Program, the William and Flora Hewlett Foundation and the Richard King Mellon Foundation.

## Peabody collaborates on new national center

Helping foster children's learning and readiness for school through the federal Head Start program is the goal of a new National Center on Quality Teaching and Learning, created this fall with a $40 million grant from the Office of Head Start. Peabody is one of seven institutions that will compose the center, which began work in January and will last for five years. Approximately $5 million of the grant will fund research at Peabody.

"For over 20 years, my colleagues and I have been doing research on effective instruction, and I am pleased that this center will provide the opportunity to use that knowledge to improve the quality of Head Start services all over the country," said Mary Louise Hemmeter, associate professor of special education and the lead Peabody researcher on the project. "With this center, the federal

*Continued on page 8*

JOHN RUSSELL

*Mary Louise Hemmeter, associate professor of education, is the lead Peabody researcher for the National Center on Quality Teaching and Learning. Peabody is one of seven institutions that will compose the center.*

## Faculty News

**Elisabeth Dykens**, professor of psychology and human development and director of the Vanderbilt Kennedy Center, was appointed to the board of directors of Special Olympics International.

**Donna Ford**, professor of special education, received the 2011 Vanderbilt Black Student Alliance Distinguished Faculty Award.

**Steve Graham**, Currey-Ingram Professor of Special Education, will serve on the advisory board for Research for the National Writing Project.

**Craig Anne Heflinger**, professor of human and organizational development and associate dean, received the Mentoring Award from Vanderbilt's Margaret Cuninggim Women's Center.

**Robert Jiménez**, professor of education, has been selected for a Fulbright Specialist Award. He will work with peers at the Autonomous University of Yucatan in Merida, Mexico, on the inclusion of community literacy practices in teacher education.

**Mark Lipsey**, research professor of human and organizational development, was appointed by the U.S. Department of Justice to a newly created Science Advisory Board.

**Bruce McCandliss**, Patricia and Rodes Hart Professor of Psychology and Human Development, received one of six exploratory grants for collaborative research projects from the Vanderbilt International Office. His project, "Cross Cultural Investigations of Functional Brain Development for Attention and Language Skills," is with Beijing Normal University (China) and Utrecht University (the Netherlands).


PHOTO COURTESY OF DEAN CAMILLA BENBOW

*Camilla Benbow, Patricia and Rodes Hart Dean of Education and Human Development, raised the Vanderbilt Peabody flag while visiting the South Pole on a National Science Board trip.*

**Rich Milner**, associate professor of education, won the 2010 Carl A. Grant Multicultural Research Award from the National Association for Multicultural Education.

**Torin Monahan,** associate professor of human and organizational development, won the inaugural Surveillance Studies Book Prize for his book, ***Surveillance in the Time of Insecurity*** (Rutgers University Press, 2010).

**Victoria Risko**, professor of education, emerita, was inducted into the Reading Hall of Fame in May at the national convention of the International Reading Association in Orlando, Fla. Earlier this year, she was the keynote speaker at the Pan African Literacy Conference in Botswana, at the New Zealand Reading Association meeting in Roturoa, New Zealand, and at the European Literacy Conference in Mons, Belgium.

**Sharon Shields**, professor of the practice of human and organizational development, was inducted as a fellow of the North American Society of Health, Physical Education, Recreation, Sport and Dance. She also received the Honor Award from the American Alliance of Health, Physical Education, Recreation, Sport and Dance for her scholarly contributions, her innovative service-learning initiatives that impact communities, and her tireless efforts in support of Title IX.

**Claire Smrekar**, associate professor of leadership, policy and organizations, received an invitation and funding from Fudan University (China), one of Vanderbilt's six international core partners, to conduct seminars on the social context for education and social organization of schools as a distinguished international lecturer.

**Tamra Stambaugh**, research assistant professor of special education, was selected to serve on the Praxis Gifted Education National Advisory Committee.

**The Educational Leadership Learning Exchange (ELLE)**, Peabody's partnership with Metropolitan Nashville Public Schools and South China Normal University, which is directed by **Tom Ward**, lecturer in education, was selected by the University Design Consortium for inclusion in the Innovation Clearinghouse of Good Practices.

**NATIONAL CENTER**
*Continued from page 6*

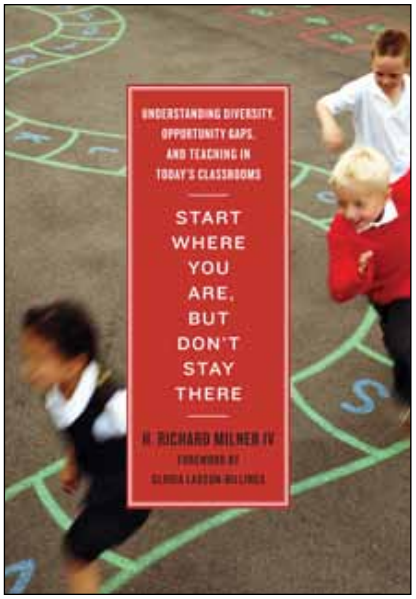
government has made a long-term commitment to improving the quality and maximizing the effects of Head Start, and I am excited to be a part of that."

The other participating institutions are the University of Washington College of Education Haring Center, which will lead the effort, University of Virginia, Iowa State University, University of Southern Florida, University of Wisconsin-Milwaukee and the University of Illinois at Urbana Champaign.

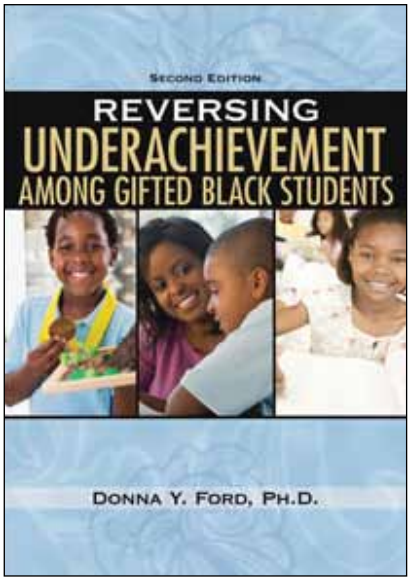
The goal of the new center is to provide leadership in the area of best practices in teaching and learning for Head Start training and technical-assistance providers, consultants and grantees. The center will be integral to ensuring that the federal investment in Head Start helps foster children's learning and readiness for school.

The center will ensure staff access to a professional development system that provides individualized support and development, including the establishment of a "Head Start University" concept that will engage nationally recognized leaders in the field to develop comprehensive, research-

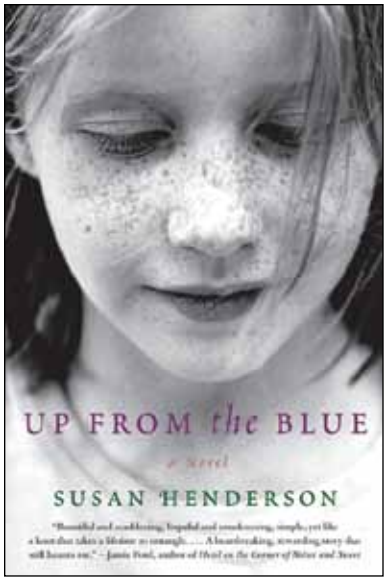
## Read About It




*Start Where You Are, But Don't Stay There: Understanding Diversity, Opportunity Gaps, and Teaching in Today's Classrooms* (Harvard Education Press, 2010) by **H. Richard Milner,** associate professor of education. The book details strategies for closing the achievement gap by refocusing attention on opportunity gaps to successfully teach students in diverse, urban schools. It provides a counter to pervasive notions that teachers and students in highly diverse and urban schools cannot succeed, demonstrating how teachers and students work through and transcend academic, social, individual and systemic challenges to thrive.




*Reversing Underachievement Among Gifted Black Students, 2nd Ed.,* (Prufrock Press, Inc, 2010) by **Donna Y. Ford,** professor of special education. Two thorny issues continue to exist in education since the book was first published in 1996: the underrepresentation of black students in advanced placement classes and the persistent underachievement of black students even when identified as gifted. In this edition, these two issues are addressed, with updated information on key social, familial, educational and psychological factors that contribute to underachievement and underrepresentation.




*Up from the Blue* (2010, HarperCollins) by **Susan Henderson,** MEd'92. The debut novel from Pushcart Prize-nominee Henderson, *Up from the Blue* unfolds against the backdrop of 1970s America—a tumultuous era of desegregation, school busing and the early rise of modern-day feminism. The story of an imaginative young girl struggling to make sense of her mother's mysterious disappearance, the book delves into the complexity of family relationships.

based college courses that can be offered for credit online or in person.

"One of the goals of the center will be to develop and implement a coaching and mentoring system to help Head Start teachers implement evidence-based practices related to teaching and learning," Hemmeter said. "My colleagues and I have developed and evaluated a coaching approach. We are excited to be able to scale up that approach with teachers all over the country."

The Head Start program was inspired by the work of Susan Gray in the 1960s at Peabody. Gray's landmark Early Training Project was one of the first experimental studies to implement a preschool curriculum and family-based intervention for low-income children. That project, in collaboration with fellow researchers Carl Haywood and Nicholas Hobbs, and with the support of Eunice Kennedy Shriver and Robert Sargent Shriver Jr., laid the foundation for Head Start.

## Grant to fund mental health service study

Improving mental health services is the aim of a $3.8 million grant from the National Institute of Mental Health to Peabody's Center for Evaluation and Program Improvement and the Indiana University Center for Adolescent and Family Studies (CAFS).

The five-year project will examine how to improve mental health services for youth and families in community mental health settings. The study will integrate a computer-based method of measurement and feedback about treatment developed by Leonard Bickman, CEPI director, Betts Chair and professor of psychology, psychiatry and public policy at Peabody, with an evidence-based treatment developed with Tom Sexton, director of CAFS and professor of counseling and psychology in the IU School of Education.

The project will apply functional family therapy, a type of clinical treatment for youth with violent, criminal, behavioral, school and conduct problems and their families, with Bickman's "Contextualized Feedback System" or CFS. CFS is an automated, self-scoring and clinically oriented feedback system that includes measurement of treatment progress, detailed feedback, onsite training and Web-based clinical training modules. The Vanderbilt and Indiana researchers began to work together more than three years ago to apply functional family therapy to the computerized feedback system.

*Bickman*

PHOTO COURTESY OF SAMARA ORKIN

*Vanderbilt junior Amanda Polcari tutors Ravia Burton as part of The After School Program, known as TAP, coordinated by Peabody seniors Samantha Pomplon, Megan Goetsch and Samara Orkin. Vanderbilt provides student tutors for the program, which was originally conceived by the Rev. Frank Gordon and his wife, Tam Gordon, of the Fourteenth Avenue Baptist Church. Pomplon, Goetsch and Orkin are students of Donna Ford, professor of special education.*

## Students mentor at-risk youth

Helping at-risk youth improve their reading skills is the aim of three Vanderbilt students who have helped mobilize a rotating group of 60 fellow student volunteers to meet with North Nashville youth every Tuesday and Thursday evening.

Samantha Pomplon, Megan Goetsch and Samara Orkin, all seniors at Peabody, are co-coordinators of The After School Program, known as TAP. The Rev. Frank Gordon and his wife, Tam Gordon, of the Fourteenth Avenue Baptist Church originally conceived of the program to help the community's young children. Mrs. Gordon partnered with Donna Ford, professor of special educa-

tion, to make their dream a reality. Pomplon, Goetsch and Orkin are three of Ford's students.

The mentors encourage the children to push themselves further than they think they can go. For the older students, the goal is often to work towards chapter books and provoke higher-level thinking.

Pomplon, Goetsch and Orkin manage the program, spending the bulk of their time recruiting and training Vanderbilt volunteers and tutoring and mentoring the TAP participants. Their goal is to have enough volunteers so that each child is paired with a single mentor to better form close relationships and establish constancy. Children in the program know who their tutors are and when they come—much like a Big Brother/Big Sister relationship.

"The original goal of the program was to focus mainly on the students' reading ability, however, the mentoring experience has become just as important," Orkin explained. "Even the youngest students know which day a certain mentor comes and will look forward to that day all week."

The program works for tutors and students alike. Experiencing a day as a tutor is a rewarding experience, and all of the tutors are happy to stay and spend time with their younger friends when reading time is over.

"It's impossible for them not to gain from this wonderful experience," Ford said. "I am incredibly proud of Samara, Megan and Samantha. These students are representing Vanderbilt so well. They are taking what they have learned in classes and making a difference. What more can we ask of our students?"

*A current Vanderbilt student leads prospective students and their families on a tour of the Peabody campus in April. The Vanderbilt Admissions Office offers student-led tours most days. To find out more, visit* peabody.vanderbilt.edu *and click "Admissions and Programs," or go to* www.vanderbilt.edu *and click the PreVU box at the lower right hand corner.*

MARY DONALDSON

## Peabody ranked No. 1 for third year

Peabody College was named the No. 1 graduate education school in the United States for the third consecutive year by *U.S. News & World Report* in the rankings released March 15.

The *U.S. News & World Report* rankings are based on statistical analysis of programs, student and faculty surveys along with expert opinions. The data is provided through surveys of administrators at more than 1,200 programs and about 13,000 academics and professionals.

"Peabody College is currently celebrating its 225th anniversary, so being ranked No. 1 for a third time feels very gratifying. We've come a long way from a small frontier academy to become one of the nation's leading graduate schools of education," said Dean Benbow. "In the end, the work done by our faculty and by our graduates in their professions is the most important thing. It is rewarding to see their efforts repeatedly recognized."

In a poll of education school deans, Peabody also had the top special education and administrative/supervision programs in the country. Programs in curriculum/instruction, educational psychology, education policy, elementary education and higher education administration all ranked in the Top 10.

"The consistent receipt of the top ranking for the Department of Special Education is a reflection of an incredibly bright and productive faculty, outstanding students and our emphasis on practice-oriented research informed by the realities of schools," said Mark Wolery, professor of special education and chair of the department.

## Incentive pay program shows improved student achievement

Student achievement improved and teacher turnover declined in schools participating in the Texas state-funded District Awards for Teacher Excellence (D.A.T.E.) program, the National Center on

Performance Incentives (NCPI) at Peabody has found.

"Our findings suggest that, more often than not, participants in the D.A.T.E. program had a positive experience and that student achievement gains and teacher turnover moved in a generally desirable direction," said Matthew Springer, director of NCPI and lead author of the report.

D.A.T.E. is a state-funded program that provides grants to school districts in Texas to implement locally designed incentive pay plans. About half of the teachers at eligible campuses received a D.A.T.E. incentive award of at least $1,000.

The findings come at a relevant time for Texas and for national teacher pay policy. The Texas state legislature will soon convene to consider the future direction of D.A.T.E., while at the same time Texas and various districts within the state have recently received federal Teacher Incentive Fund grants.

Overall, D.A.T.E.-participating districts saw bigger declines in teacher turnover than other Texas districts during the program's first year. Additionally, the probability of turnover surged among teachers who did not receive a D.A.T.E. award, while it fell sharply among teachers who did receive one.

"Teachers who received a D.A.T.E. award were much less likely to turn over than those who did not, and the size of the award received by a teacher was less important than the fact that the teacher received any award at all," said Lori Taylor, associate professor at Texas A&M University and co-author of the report.

There are important limitations to consider about the evaluation's findings. "Since districts and schools select themselves into the D.A.T.E. program," Springer said, "we can never fully rule out the possibility that differences in the characteristics of participants and nonparticipants may have affected outcomes for students and teachers independent from participation in D.A.T.E."

Texas' D.A.T.E. program and NCPI's evaluation of the program were implemented in a notably different manner than the Nashville incentive pay program experiment conducted by NCPI, the results of which were released in September. Those results found that rewarding teachers with bonus pay, in the absence of any other support programs, did not raise student test scores.

STEVE GREEN

*This view from the second floor balcony overlooking the vaulted lobby of Jesup Hall was featured in the 365@VU project, which features a new photo by Vanderbilt's Photography Services team every day during 2011. To see more, visit* www.vanderbilt.edu/365.

## Tennessee pre-K students see gain in early literacy

Children who attended state-funded prekindergarten classes gained an average of 82 percent more on early literacy and math skills than comparable children who did not attend, researchers from the Peabody Research Institute have found.

The initial results are from the first rigorous longitudinal study that has been conducted on the effects of public prekindergarten attendance on a statewide scale.

"This research is difficult to do but critically important to evaluating the effects of Tennessee's investment in pre-K," study leaders Mark Lipsey and Dale Farran said. "Such evidence is especially important in the context of the current budgetary constraints in Tennessee and other states that have made commitments to pre-K education."

For the study, 23 schools in 14 Tennessee school districts randomly admitted children to their pre-K program. All of the schools received applications from more students than they could accommodate. The children admitted to pre-K were then compared to the children whose families applied but were not admitted. A total of 303 children were involved in this phase of the study.

*Farran*

Assessments at the beginning and end of the prekindergarten year found that the pre-K children had a 98 percent greater gain in literacy skills than children who did not attend a state pre-K program, a 145 percent greater gain in vocabulary and a 109 percent greater gain in comprehension. They also made strong, but more moderate, gains in early math skills (33 percent to 63 percent greater gains). Overall, the average gain across the board was 82 percent more than for the children who did not attend state pre-K.

Results from a second parallel study corroborated these findings. That study compared 682 children who attended 36 pre-K classes in rural and urban middle Tennessee schools to 676 children who had to enter a year later because of the birth date cutoff for pre-K eligibility.

The second study also found that children enrolled in state-funded pre-K classes scored significantly higher on emergent literacy and math assessments than the children who had not yet attended pre-K once the age difference was accounted for.

The strongest differences were again in the areas of literacy and language skills, with more modest gains in math skills.

Both studies will continue collecting data for the next four years. The second study will continue collecting data in waves across the state until every region is represented.

## Joe B. Wyatt Distinguished Professor Award

Bruce Compas, holder of the Patricia and Rodes Hart Chair of Psychology and Human Development and professor of psychology, won the Joe B. Wyatt Distinguished Professor Award this spring.

STEVE GREEN

The award, created to honor Chancellor Joe B. Wyatt upon his retirement in 2000, is given to a full-time faculty member for the development of significant new knowledge from research or exemplary innovations in teaching.

"Bruce is widely recognized for his research in depression in adolescents, psychological adjustment of children with cancer, and the neurocognitive deficits of children with cancer or sickle cell disease," Chancellor Nicholas S. Zeppos said. "In each of these areas of expertise, he is like a brilliant maestro broadly engaging the academic community at Vanderbilt in interdisciplinary collaboration. Through his pioneering work, he has influenced the practice of both psychology and medicine."

Zeppos presented Compas and four other faculty members with awards when Vanderbilt's Spring Faculty Assembly convened April 7.

"These studies were possible only because of a strong partnership with the Division of School Readiness and Early Learning in the Tennessee Department of Education and the commitment of school districts across the state to learning about the effects of pre-K," Lipsey said.

The studies are led by Lipsey, research professor of human and organizational development and Peabody Research Institute director, and Dale Farran, professor of education and psychology. Carol Bilbrey, research associate at the Peabody Research Institute, directed data collection.

The research is funded by the U.S. Department of Education's Institute of Education Sciences.

DANIEL DUBOIS

*Mark Lipsey (above), research professor of human and organizational development and director of the Peabody Research Institute, and Dale Farran (top left), professor of education and psychology, are leading research on evaluating the effects of Tennessee's investment in pre-K education.*

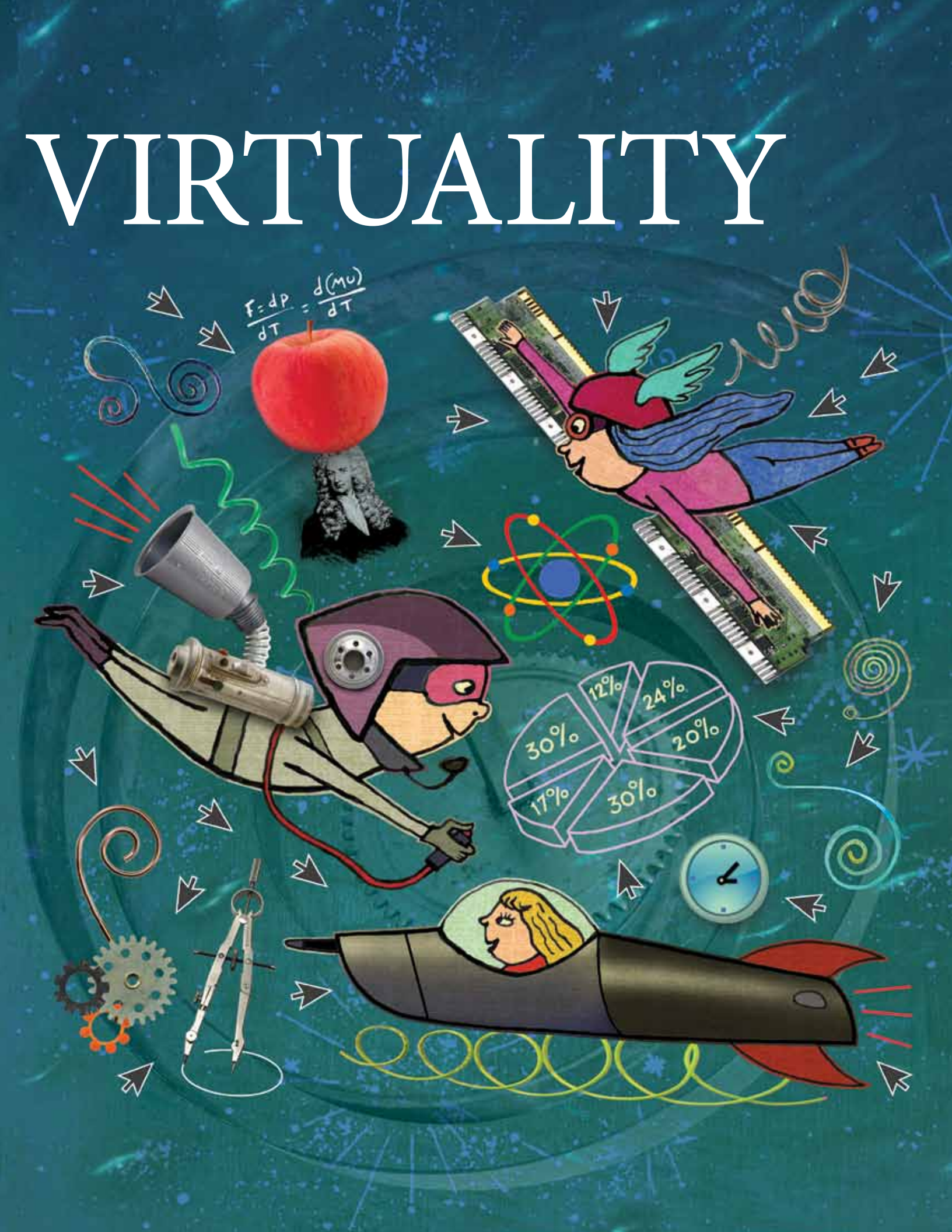
# THE VIRTUE IN

## At Peabody, researchers enhance learning through instructional technologies

BY Jennifer Johnston
ILLUSTRATION BY Roger Chouinard

What if a fifth grader could learn college-level physics concepts? What if the platform used to teach those concepts could be accessed very simply online through a Web browser? What if that new methodology allowed students to write computer programs, progress at their own pace and provide the teacher immediate feedback on individual progress?

# VIRTUALITY



As it turns out, these questions are not just "what ifs" thanks to several groundbreaking education technology platforms under development in labs across the Peabody campus. These innovations allow cutting-edge researchers to harness what Pratim Sengupta, innovator of the technology described, calls "the virtue in virtuality."

Common among these developing platforms is their commitment to accessibility, focus on efficiency and effectiveness, and an emphasis on STEM (science, technology, engineering and math) topics. A driving theme is a desire to free teachers up for more instructional time and, ultimately, improve learning outcomes.

Technological innovations always begin with a passion to tackle intransigent problems. Once a problem in need of a solution is identified, "then we ask, 'To what extent could the use of technology make this more accessible to learners?' The technology comes in on the back end," says Andy Van Schaack, assistant professor of the practice of human and organizational development.

Many steps follow prior to implementation—from designing technology to data generation to extensive testing. The ultimate question is always how well the technology works.

TING-LI WANG

*Pratim Sengupta, assistant professor of teaching and learning, and Doug Clark, associate professor of science education, work on computer applications that allow students to use their intuitive knowledge rather than memorization to learn complex scientific concepts.*

"There are a lot of teaching technologies that are worse than nothing," Van Schaack says. Of utmost import is which strategies provide an edge in the classroom. "I believe that the most effective instructional technologies are the ones that require the fewest changes in behavior on the part of the teachers and the learners," he says.

## A focus on science and math

In the design and testing stage is Sengupta's Virtual Multi-Agent-based Programming (ViMAP) platform. The idea behind ViMAP is to encourage students to use their intuitive knowledge rather than memorization to grasp complex science concepts through building computer programs that can model real-world phenomena.

If scientists and mathematicians want to inspire a new generation of students to push the limits of human understanding, then that thrust has to begin in elementary school, according to Sengupta, assistant professor of teaching and learning. His driving passion is his belief that young children can learn difficult concepts.

"Here's an interesting evolutionary question," Sengupta says, "What if my fifth graders can learn stuff they are supposed to learn in college? What will the learning progression look like when these students move to advanced grades? These are the questions I want to answer, and I think that's going to be my life's work."

A basic tenet for Sengupta, who also collaborates with Gautam Biswas, professor of computer science and computer engineering, is to begin with simple concepts such as movement and speed before progressing into the more difficult ones rather than teaching formulas right off the bat. "Why are we teaching them formulas when they should be building models, just like real scientists?" Sengupta asks.

Learning with ViMAP takes place on the screen without the need for expensive lab equipment or space. Through using ViMAP, students can also develop computational thinking, a hallmark of modern scientific expertise in almost any domain of science.

ViMAP consists of several modules currently under development in different disciplines, including physics (with a focus on mechanics and electricity), ecology and mathematics. With ViMAP-Mechanics,

for example, students begin by exploring the concept of speed.

"We have created a programming toolkit that will allow them to move from a qualitative understanding to a more formal understanding of the equation of motion," he says. "We are not discarding but leveraging their intuition."

These new tools allow students to immediately practice the concepts they are learning in the classroom.

One way to increase practice time is to make it a game. Consider that the online computer game "World of Warcraft" attracts 12 million gamers, while only a tiny portion of that number enter STEM disciplines each year, says Doug Clark, associate professor of science education, who works with Sengupta on several grant projects.

Creating a mechanism to channel the teen-age obsession with gaming into an avenue for teaching scientific concepts is behind his work. Results from a fun but educational game he's developed to teach core physics concepts are extremely encouraging. The game, "Surge," is funded through a $450,000 National Science Foundation grant.

JOE HOWELL

*Ted Hasselbring, research professor of special education, and Maria Mendiburo, research associate in electrical engineering and computer science, are developing a math education computer application to teach fractions using virtual manipulatives.*

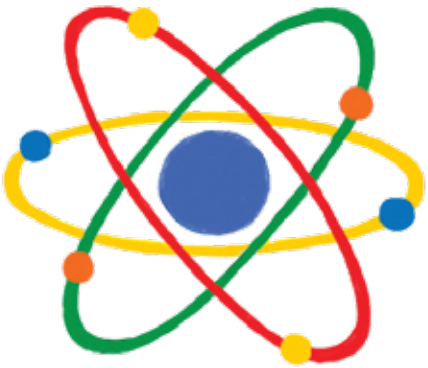
"What we're trying to do is connect intuitive ideas to formal ideas so that they can actually learn something," he says.

The ultimate goal is to help develop a core of students excited about STEM disciplines. "Every kid in the United States needs to learn about force and motion and Newton's laws. But the way it's done traditionally, kids just don't get it," Clark says. "Schools and traditional teaching tend to focus on abstract but very powerful ideas that are disconnected from students' experiences."

*I believe that the most effective instructional technologies are the ones that require the fewest changes in behavior on the part of the teachers and the learners.* —Andy Van Shaack

"Games are becoming a real possible avenue for learning, either in school or out of school," Clark says. "Kids spend as much time out of school playing games and watching TV as they spend in school. If you can get anything out of those hours, it's a huge windfall. We've helped kids make more progress on some measures in one-and-a-half hours than in a whole semester of college," he says.

According to Clark, games are ripe for guiding students toward an intuitive understanding of basic physics concepts since many of them are about maneuvering through space, but games rarely allow for learning opportunities.



Certainly, games are not going to replace teachers, but Clark believes games can augment and reinforce what is happening in the classroom.

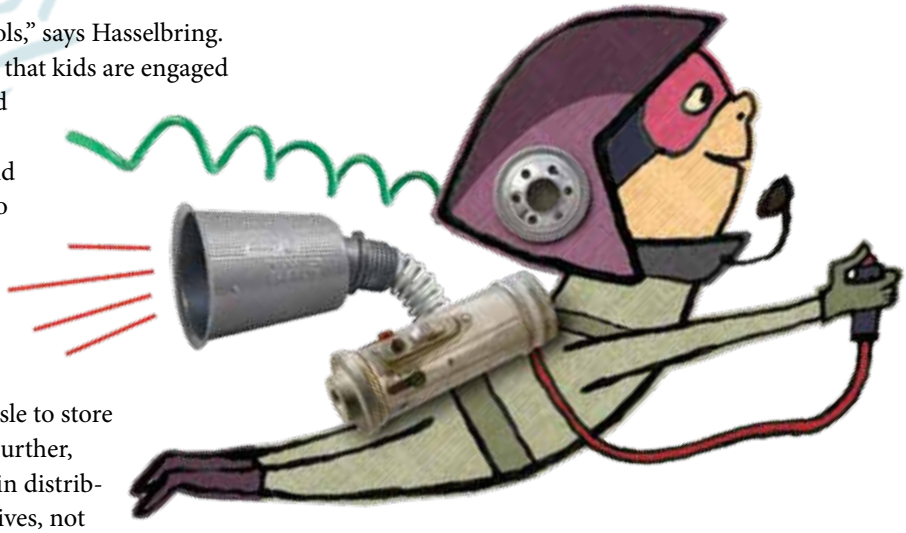
## The efficiency experts

Saving time in the classroom so that teachers can focus more on instruction is one of the fundamental concepts of a math instruction program under development by Maria Mendiburo, research associate in electrical engineering and computer science, and Ted Hasselbring, research professor of special education. They have found a way to help teachers build deeper understanding in their students with a program using virtual manipulatives to learn fractions.

As a Peabody graduate student, Mendiburo watched a presentation about Hasselbring's groundbreaking Read 180 program and was inspired to apply the idea to math education and, more specifically, to learning fractions.

"Time's a huge issue in schools," says Hasselbring. "We need to maximize the time that kids are engaged in academic pursuits. We found that this methodology actually increased instructional time and the amount of time kids have to respond to the instruction."

When teaching fractions by using physical manipulatives, there is a significant cost to purchasing the materials for multiple students, and it's a hassle to store the material between lessons. Further, instructional time is often lost in distributing and collecting manipulatives, not to mention the problems that arise when pieces are lost or misplaced.



The first step, which was part of Mendiburo's dissertation for her Ph.D. in leadership and policy studies at Peabody, was to find out whether virtual manipulatives actually work. She found a slight edge in the learning process using the virtuals over paper and, more important, greater efficiency.

Through a three-year, $1.5 million development and innovation grant from the Department of Education's Institute of Education Sciences, Mendiburo and Hasselbring are working with Biswas and others to develop a program that is compatible with computers as well as the new iPad. The advantage of iPads is that children can approach them intuitively, using touch rather than clicking and dragging using a mouse, Hasselbring says. It allows virtual manipulatives to emulate physical manipulatives much more closely.

*When grading papers, I find that many students make the same mistakes. I can speed up grading considerably by copying and pasting 30-second spoken tutorials from a master list into their papers.* —Andy Van Schaack

While many computer tutorials are individualized, this one is designed for whole class instruction, although it does allow students to progress at their own pace. It has added value for children who are struggling with learning, a career-long focus for Hasselbring.

The students are monitored and rewarded while immediate feedback on progress is provided to the teacher, allowing the teacher to spend less time on grading and more time on instructing students in areas of difficulty for them.

Learning fractions and many other concepts requires practice. A basic problem to be solved in a classroom is how to provide more practice time for students with feedback from the teacher—since practice is still one of the best ways to learn—without exponentially increasing the workload for the teacher or the cost to the school, Van Schaack says.

He is taking the challenge of finding ways to help teachers provide more and better feedback to their students in multiple subject areas by grading papers faster and more effectively through the use of smart pen technology.

Van Schaack is one of the inventors of a smart pen produced by Livescribe. The pen, called "Echo," is a computer with built-in microphone, speaker and display. The pen captures everything a user hears or says and synchronizes it with what they write. A student just taps on a word or drawing in a notebook to play back the audio recorded at that moment.

Grading papers is always a huge time management issue for teachers. The smart pen technology could help teachers to provide spoken feedback in tandem with written feedback. This technology has potential applications for grading everything from calculus homework to essays to sheets of music. "When grading papers, I find that many students make the same mistakes. I can speed up grading considerably by copying and pasting 30-second spoken tutorials from a master list into their papers," Van Schaack says.

Studies conducted by other researchers have found that teachers were able to provide two-and-a-half times more feedback in spoken form than in writing— in one quarter of the time. Students also felt more connected to their teachers.

Van Schaack fervently advocates mining existing research rather than reinventing the wheel at every

step. "I'm a pragmatist," Van Schaack says. "I want to have impact now."

He tackles problems not just from the education angle but from a scientific and business side as well. He spent time working with Apple in higher education sales and found he couldn't convincingly sell a product until he was certain that he understood its benefits. That led to an interest in research about technology and in developing new technologies that work to provide real solutions.

The smart pen technology also has the potential to help students who are blind study math and science—subjects that make significant use of equations, diagrams and other visual representations. The pen would be used to create raised line drawings annotated with audio recordings, called "audio-tactile graphics," that could be accessed by tapping on them. That work is progressing through a $300,000 grant from the National Science Foundation.

## From the lab to the classroom

There are multiple ways to bring education technology with an edge to the marketplace, and each of the researchers emphasize that no single way is necessarily the best.

Van Schaack was involved in forming a company, Livescribe, to sell and market the smart pen. He is senior science advisor, and Livescribe has a CEO and a team of business experts to manage the business side.

In the case of Sengupta and Clark, their plan is to make the technology available for free through a browser.

Hasselbring and Mendiburo hope to attract a publisher once their project is complete. A publisher has the business-side expertise to manage issues such as marketing and distribution, Hasselbring says.

Another avenue is seeking out investors. Frank Bonsal, MEd'93, MBA'04, is a venture capitalist who searches out promising, emerging technologies for investment, reviewing "dozens and dozens" of opportunities annually. He sees a potential trend in bringing technologies to market that will provide instructional innovation for STEM disciplines, especially when combining one or more of those topics.

"It's a newer trend and there aren't that many people involved in it yet," he says. No Child Left Behind, he predicts, also will continue to drive solutions.

Bonsal spent nearly 15 years teaching and coaching in middle school and high school before joining Bonsal Capital, the venture capital firm founded by his father, Frank Bonsal Jr.

He eventually left the family firm to become a partner in New Market Venture Partners, specializing in information technology, education and healthcare. He also serves on the board of Questar Assessment Inc., which focuses on large-scale K-12 assessment, both from business services and online perspectives and is board observer at Moodlerooms, Inc and Starfish Retention Solutions Inc.

Education technology is still an emerging platform for most investors. Postsecondary platforms currently are the bigger success stories, but Bonsal predicts a brighter future for K-12 technologies in the next decade.

The most successful technologies are the ones that help teachers individualize learning, he says. "I taught in Charlottesville [Va.]. I had kids from a wide spectrum of ability, and I was supposed to teach all of those ranges. It's pretty hard. You can really add value if you can create a Web medium and allow the user to personalize and individualize the speed with which students learn."

JOHN RUSSELL

*Andy Van Schaack, assistant professor of the practice of human and organizational development, with the Livescribe smart pen that he helped to invent. The pen is a computer with built-in microphone, speaker and display so that a user can capture what is heard and synchronize it with what is written.*

Hasselbring, who has spent much of his career in education technology innovation, agrees that new instructional technologies must be effective at promoting advances in both teaching and learning.

"My biggest criticism is that a lot of developers of education technology have not paid attention to what we know about human learning," he says. "What's different about what we're doing now is that we focus first on how humans learn. We know technologies can be helpful, but teachers don't always use them. We're trying to leverage our understandings and make [technologies] better and more efficient. If we do that, we're going to have a much better outcome."

# An IRIS for the Teacher

*Naomi Tyler, associate professor of the practice of special education, directs Peabody's IRIS Center, which provides free, Web-based, instructional resources for educators and parents of special needs students.*

*Peabody's IRIS Center uses advances in technology to educate teachers and parents of students with special needs*

BY Joanne Lamphere Beckham
PHOTO BY Joe Howell

Among the 23 lively students in Miss Smith's third-grade class (all names have been changed) are several children with disabilities: Katie, who has dyslexia; Billy, who experiences occasional seizures; John, who has attention deficit hyperactivity disorder, and several students with behavioral problems. Meeting the needs of all her students is no small task. Yet at no time during Miss Smith's college education did she learn about teaching children with disabilities. She is not alone.

In 2008 more than 5.6 million students with disabilities spent a large part of each school day in the nation's general public school classrooms. But while inclusive classes have improved the education of those students, they also present major challenges for classroom teachers, many of whom receive little or no training in special education during their college careers.

Now a center named for the iris, for many years a symbol of Peabody College, has received national recognition for educating classroom teachers about struggling learners and students with disabilities.

The IRIS Center (an acronym for IDEA'04 and Research for Inclusive Settings) provides free, Web-based, interactive instructional resources for college faculty and other professionals preparing the next generation of educators, says co-director Naomi C. Tyler, associate professor of the practice of special education. IRIS is also used by professional development providers who work with teachers and principals in school settings.

Parents also use the site, which had more than one million visitors worldwide last year.

Mary Little, associate professor and coordinator of graduate programs on exceptional students at the University of Central Florida, calls IRIS "a fabulous resource."

"We use the modules to build collaboration between special education and content faculty across our college of education," she says.

Last November IRIS was singled out as an exemplary center at the 35th anniversary celebration of the Individuals with Disabilities Education Act (IDEA) in Washington, D.C. Over the past 10 years, IRIS has been awarded two multiyear grants totaling $11.1 million from the U.S. Department of Education. The center has also received nearly $1.1 million in contracts from several states to develop specific learning materials.

Founded at Peabody in 2001, IRIS has two additional sites: IRIS-West at Claremont Graduate University in California and IRIS-East in Washington, D.C. The Claremont site, directed by Deborah D. Smith, handles dissemination and training components, while Judy Smith Davis at IRIS-East provides liaison with professional groups.

At Peabody's IRIS-Central, two faculty members, six full-time and two part-time staff members manage the website and develop all instructional materials. The website, which includes interactive modules, case studies, information briefs, activities, podcasts, instructors' tips and other resources, can be accessed without a login or password. The site contains features such as closed-captioning, transcripts and audio descriptions to make it accessible to individuals with disabilities.

IRIS modules feature the Star Legacy cycle, an instructional tool based on the "How People Learn" framework developed by former Peabody professor John Bransford, who currently holds the Shauna C. Larson Chair of Learning Sciences at the University of Washington in Seattle, Daniel Schwartz, now at Stanford, and others.

The case-based modules provide information on instructional and behavioral interventions and contain videos, interactive activities, interviews with experts, demonstrations of interventions and suggested resources for further study. Sample topics include behavior and classroom management, school improvement, and reading, literacy and language arts.

*We are bridging the gap between research and practice by translating the latest research into practical applications that make sense to classroom teachers.* —Naomi Tyler

"The complexity of the modules has improved over time," Tyler says. "The level of interactive sophistication has definitely increased since the earlier modules. They contain more video, interactive activities and opportunities for feedback. The technology enables college students and professionals to learn through a variety of formats."

For example, students can read about how to implement a particular instructional or behavioral strategy, listen to an interview with the researchers who validated that practice, watch a video of a teacher demonstrating the practice in a classroom setting, and then engage in an interactive activity to assess their knowledge about the practice.

Kimberly Paulsen, associate professor of the practice of special education at Peabody, uses IRIS in her undergraduate classes and with mentors who supervise Nashville-area student teachers.

"I present two or three modules to the class," Paulsen explains. "Then I assign a review, have them answer the questions, and write a report on what they learned and how they would use that knowledge in the classroom."

Kristen Wong, a paraprofessional at a suburban Atlanta elementary school, was introduced to IRIS while an undergraduate at Georgia State University. "I found the modules very helpful," she says. "I have been able to apply the [module] on the acting-out cycle almost daily in the classroom."

In addition to training future and current teachers, IRIS also highlights the work of Peabody researchers, who help the staff develop, review and field test the instructional materials.


*The Star Legacy Module is an instructional tool that provides the structure for IRIS training topics.*

"IRIS is situated in an ideal location to develop training materials on best practices because we get to collaborate with Peabody's stellar faculty," Tyler says. "We are bridging the gap between research and practice by translating the latest research into practical applications that make sense to classroom teachers."

For more information about IRIS, please go to *http://iris.peabody.vanderbilt.edu*

# Not Just for Profit

## HOD alumni put their initiative and skills to work for their communities

BY Lisa Robbins

Former linebacker Shelton Quarles coordinates pro scouting for the Tampa Bay Buccaneers. Shaiza Rizavi is a New York portfolio manager who previously worked in international aid and development. Entrepreneur Jeremy Werthan runs a granite company in his native Nashville. Ryan Pickens teaches business at a small liberal arts college in North Carolina.

At first glance, these alumni do not seem to share much beyond their undergraduate major, human and organizational development. They came to Vanderbilt from diverse backgrounds and went on to pursue widely divergent careers. The causes that move them vary, but together they show that there are many different ways to serve community.

### Shelton Quarles, BS '94

As a top college athlete headed toward a pro football career, Shelton Quarles learned how to get things done.

"The demands of being a student and being in a sport—they taught me time management, to be efficient," Quarles says.

Quarles' pace did not slow during his 10 years as a linebacker for the Buccaneers, which included multiple playoff seasons and a Super Bowl championship in January 2003. Off the field, he found himself increasingly interested in community service.

"Coach [Tony] Dungy encouraged us to get out in the community, because they support us in such a major way," Quarles says. "I started out doing a lot of different things—Easter egg hunts, events for the American Heart Association, various community-minded activities."

In 2004, after several years in Tampa Bay, Quarles and his wife, Damaris, decided to focus their volunteer efforts. They established the IMPACT Foundation, which helps at-risk, single-parent families in the Tampa Bay area.

"My foundation is my passion. It's near and dear to my heart," says Quarles, who was born at Vanderbilt

*Shelton Quarles, BS'94, helps cut the ribbon on the renovation of Allie and Dawn Lopez's home. Quarles' IMPACT Foundation renovates the homes of at-risk, single-parent families in the Tampa area through their Home Blitz program.*

MONICA GINN/IMPACT FOUNDATION

University Medical Center and grew up in Nashville. He knows first hand the difficulties single-parent families can face. "I was raised by a single parent," Quarles says. "[My mom] was 15 when I was born. She's always been supportive, and we have a great relationship."

Florida Gov. Charlie Crist then tapped Quarles to chair the new Tampa Bay Area Regional Transportation Authority (TBARTA), established in 2007 to develop and implement a master plan to modernize the region's transit system. Quarles had just stopped playing football; he was in his first year as a pro scout for the Buccaneers. Some questioned whether a former football player had the right skills to lead critical transportation policy, but Quarles won over the skeptics. By the end of his two-year tenure, the board had created a master plan and presented it in dozens of public forums. Successfully working across a seven-county region to develop potentially controversial, not to mention costly, transportation policy was no small feat.

"At the time it was the most powerful board formed by the legislature," Quarles says. "I had four mayors, seven county commissioners and three other gubernatorial appointees under my leadership. It was pretty fun. It was a little bit different, though. It was politics."

Quarles did not seek re-appointment to TBARTA after his first term. He is now the Buccaneers' coordinator of pro scouting and concentrates his volunteer energy on his labor of love, the IMPACT Foundation. The organization has raised almost $700,000 for its work.

"One of our big programs is called Home Blitz," Quarles says. "We find a single mother whose home is in disrepair and take the family out of the home for about a month. We add new floors, walls, roofs, landscaping, kitchens, baths—it's basically a new house without taking the house down. The week of the reveal, we take them to Disney or Universal Studios, and then we bring them home."

Quarles has a simple message to students wondering what they can do to get involved in their communities: "Just try it. You can always move on to the next thing if you don't like it. You have to find your niche. But if you say you don't know what you want to do, you'll never do anything."

*So much of life is about risk. It may not be the safest approach, but sometimes you have to explore to get where you're going.*— Shaiza Rizavi

## Shaiza Rizavi, BS '91

Shaiza Rizavi was only 7 years old when she left Pakistan with her family, but her early memories of Karachi had lasting impact.

"Even in high school, I did a lot of community service, and I think part of the reason is that I came from Karachi," Rizavi says. "You grow up there, you go into the city and see the poverty, and then you go home and sleep in a nice bed. It's like the saying goes, 'from those to whom much is given, much is expected.'"

As a student at Vanderbilt, Rizavi demonstrated her commitment to helping those in need. She worked at public defender's offices in Nashville and Washington, D.C., with the homeless duringAlternative Spring Break, and with a program to improve services for people with family members in prison. After graduation, thinking she might want to become a public defender, she took a job at a New York law firm. It did not suit.

"The work that I'd come from was problem solving: Were people's needs getting addressed?" Rizavi says. "This job was a lot of paperwork. It wasn't all that stimulating."

So Rizavi took a leap. She bought a ticket to Thailand with the intention of finding a job in development once she got there. Soon she was evaluating programs designed to address child labor and prostitution in Thailand, Vietnam and throughout the region.

ALICIA HANSEN

*Shaiza Rizavi, BS'91, a portfolio manager with the New York firm of Gilder Gagnon Howe & Co., was first inspired to community service in her native city of Karachi, Pakistan.*

"So much of life is about risk," Rizavi says. "It may not be the safest approach, but sometimes you have to explore to get where you're going. It doesn't really matter if you get it right or wrong—you can correct things as you go along."

The work was rewarding, but emotionally difficult. After two years, Rizavi needed a break.

"I was a bit beaten down coming back from Thailand. Seeing life not work out for a lot of those children is hard," Rizavi says. She returned to New York and entered Columbia Business School.

Today, Rizavi brings her passion for international development to her career as a portfolio manager at Gilder Gagnon Howe & Co., specializing in global securities. The busy mother of four also still finds time for community work. She serves on the advisory board of The Social Enterprise Program at Columbia Business School and volunteers with several local nonprofits.

Pakistan, the country that first inspired her, still holds a place in Rizavi's heart. She plans to travel there soon and hopes to visit projects supported by the Acumen Fund, a nonprofit organization that uses investment as an international development tool.


MIKE THORNHILL/MARS HILL COLLEGE

*Ryan Pickens, BS'94, has been working on ways to revitalize the small Appalachian town of Mars Hill, N.C., utilizing aspects of social entrepreneurism.*

## Ryan Pickens, BS '94

Barely three years after coming to teach business in Mars Hill, N.C.—really a blink of the eye in Appalachian time—Ryan Pickens was coming up with ideas to help revitalize the economically struggling small town.

He bought the empty Mars Hill Theatre on Main Street in 2004. The following year, he purchased the boarding house next door. By 2009, he was running for mayor. He lost the race, 325 votes to 113, but it was a respectable showing considering he does not live in the town full time; he regularly commutes from Asheville.

Pickens, who teaches at Mars Hill College, now is focused on getting financial backing for his theater redevelopment project, which includes plans for restaurant and entertainment space. He hopes to contribute to the downtown's revival and create new resources for the college and its students. He describes the project in terms of social entrepreneurism, envisioning a business that creates a modest profit, benefits the community and positively impacts the environment.

Pickens also refers to this in terms of a "triple bottom line": profit, planet and people.

"It ties into the idea of buying local," Pickens says, citing a study by the state's commerce department that showed the area around Mars Hill losing tens of millions of retail dollars each year.

"People are driving to spend money. If you look at that from a social aspect, the community is not getting its needs met inside the

community," Pickens says. "If you look at it from an environmental aspect, people are polluting every time they fire up their cars."

Pickens credits his parents with inspiring his civic involvement.

"I learned a lot about community service with my parents growing up. We were very involved with a shelter in Atlanta, helping people that were homeless. At one point we opened our own house up and had people living with us," Pickens says. His father, John Pickens, JD'71, founded the Georgia Justice Project, which provides criminal defense to the indigent, and now heads up the social justice organization Alabama Appleseed.

He also credits his education.

"My education at Vanderbilt and in human and organizational development helped me understand that organization is about helping people and taking care of people," Pickens says. "My focus in life and business is about creating community."

## Jeremy Werthan, BS '94

For Jeremy Werthan, philanthropy and service are, quite simply, facts of life. There may be times when you can do more, and times when you can do less, but you always do something.

Werthan learned this from his family, starting as a child.

"You have to get people into this giving philosophy early," Werthan says. "That's what happened to me. I learned that it's just what you do."

Because he understands the importance of this teaching, Werthan has advocated that Vanderbilt University adopt a service requirement.

"We tried to launch a program, at Peabody especially, that would require community service work," Werthan says, referring to efforts he made in the late 1990s. "A lot of these people stay here in Nashville. Let's get them involved. If they don't get involved now, they won't. And they have the time now."

Werthan describes himself as blunt and says nonprofits benefit when people speak up. He points to an experience with the United Way of Metropolitan Nashville as an example.

"I had been giving money to the United Way while I was in college," Werthan says. "I gave them $500, which was a lot of money to me at the time, and I never heard from them again."

Werthan thought this was strange. He could not understand why the organization did not take the opportunity to court young donors, as a way of cultivating the next generation of givers. So he called and asked.

In response, the United Way asked if he would help spearhead the creation of what in 1997 became the Sennet Society, which promotes service and giving among young adults interested in community leadership.

"I think it has raised about $5 million," Werthan says.

Werthan, who has five children and runs his own company, Werthan Granite, has been active in numerous charities over the years. Today he financially supports a range of nonprofits, and sits on the Middle Tennessee Leadership Council for Youth Villages, which provides services for emotionally troubled children and their families. His advice to young people who want to give back to their communities is simple.

"Find what fits for you, what has meaning for you," Werthan says. "And, unless it will hurt somebody, never hold your tongue."

JOHN RUSSELL

*Jeremy Werthan, BS'94, co-founder of Werthan Granite, has taken an active role in community service in Nashville through the United Way and the Middle Tennessee Leadership Council for Youth Villages.*

## HOD Course Finds A Solution to Urban "Food Deserts"

In Peabody College's HOD 2510, a course known as Health Service Delivery to Diverse Populations, human and organizational development professors Sharon Shields and Leigh Gilchrist, in conjunction with Liz Aleman, MEd'08, manager of the Healthy Children outreach program at Monroe Carell Jr. Children's Hospital at Vanderbilt, give students foundational information about health-care policy and health service agencies and delivery systems. One of the things the students learn about is "food deserts," a distinctly urban health concern linked to a host of preventable diseases. Food deserts are city neighborhoods without full-fledged grocery stores, limiting residents' access to fresh, healthy foods.

During a community tour to familiarize students with social and economic disparities of Nashville's neighborhoods, Ravi Patel, who at the time was an undergraduate, said the tour "opened my eyes to the fact that being able to get food conveniently or even in a reasonable manner is a factor in people not having access to healthy foods." As an assignment for the class, Patel wrote a memorandum describing a plan to combat food deserts in Nashville. Writing the memorandum was a valuable exercise—though completely theoretical, until Patel later began volunteering at Shade Tree Clinic in East Nashville as a medical student. There he routinely sees patients facing chronic diseases due to poor diets who say that healthy food is out of their reach.

"It really hit home that I can do all the education in the world and try to get these people the medications they need, but if they don't eat what they're supposed to, at the end of the day medicine can't help them.

"I went to Community Food Advocates, a group I was introduced to through HOD 2510, and they connected me with Organized Neighbors of Edgehill, who shared their idea: a mobile grocery store," Patel says. He sought help from fellow student leaders, including seniors Alex Arnold, Emily Zern, Nicole Gunasekera and Alex Ernst, and formed a student executive board that could search for funding, create an operations base, and start educational community outreach efforts. Funded by a $65,000 grant from the Frist Foundation, the mobile market is a 28-foot trailer that transports fresh produce, dairy and other refrigerated items to five stops in the Edgehill neighborhood each Friday, Saturday and Sunday. Customers walk through the trailer as they would a grocery store aisle. Food is priced competitively, and the mobile market accepts Electronic Benefit Transfer cards (Food Stamp assistance) along with other forms of payment. The market is run by Vanderbilt volunteers as well as two full-time employees.

ANNE RAYNER

*During a Nashville Mobile Market stop at Vine Hill Towers, shoppers can buy fresh fruits and vegetables unavailable at convenience stores in the neighborhood.*

While the Nashville Mobile Market is the product of several years' gestation, each session of HOD 2510 has only 16 weeks to complete a smaller-scale service learning project that meets a community need and enhances the academic understanding of its students. "We talk about a lot of different issues in the class, and one of the frustrations that students express is, 'Now that we've talked about these problems, what are we going to do about them?'" Aleman says.

"Our hope," Shields says, "is that those skills will be transferred when they're in a public health setting or health agency or working with patients in their careers."

For more information about the Nashville Mobile Market, visit *www.nashvillemobilemarket.org*.

*—Kara Furlong*

## Helping the younger generation grow

When Roberta and Don Miller were pursuing their doctorates at Peabody in the early 1990s, they undertook a special project that examined funding in higher education. That's when they made a $1 million dollar commitment to the school.

"When you become older you change your focus from buying things to helping people," Don (MEd'89, EdD'92) says. "We decided it was time for us to start giving back, and we just liked the idea of helping Peabody because it was so important to us."

The Millers believe that business, education and entrepreneurship are intertwined.

"From a business perspective, we believe that you use your education to multiply your worth which gives you the capacity to reinvest in educational institutions so that others can be educated," Roberta (MALS'64, EdD'92) says. "That's cross-generational dynamics—when the older generation helps the younger one grow through education."

The Millers have established six charitable gift annuities that will benefit Peabody in the future. In the meantime, the annuities provide the couple with income that's guaranteed for life.

"We really want to encourage others to consider this as a creative form of giving," Roberta says. "In this economy it's a good way to stabilize your income, and it certainly gives you some tax advantages. But the main thing is that it leaves our wealth exactly where we want it to be left."

COURTESY OF ROBERTA AND DON MILLER

*Roberta and Don Miller*

As hard workers and lifelong learners, the Millers say that the word "retire" isn't in their vocabulary. A recent gerontology course taught them that there is new evidence supporting the theory that generous people live longer, further supporting their philanthropic nature.

"Once you release your money, you don't worry about it anymore," says Don. "It's a good feeling to know that you're able to give back to an entity that was so good to you."

*—Cindy Thomsen*

### Join us for the 2011 Roundtable dinner

***Come celebrate with Peabody College*** *and make plans to spend the weekend with Vanderbilt this fall. The annual Peabody Roundtable dinner is set for* ***Thursday, September 15,*** *in the Wyatt Center Rotunda. The Roundtable recognizes the generous support of those who provide annual gifts of $1,000 or more to Peabody. Vanderbilt's Family Weekend follows, with activities from Friday, September 16, through Sunday, September 18* (www.vanderbilt.edu/familyweekend).

## Sisters' Legacy Lives On

The abbreviated lives of Emily, BS'03, MEd'05, and Lauren Failla, BS'07, bear witness on an all-too-personal basis that out of tragedy comes triumph. The sisters, alumnae of Peabody's human and organizational development program, died in tragic accidents, four years and half a world apart from each other. Their lives are now honored in perpetuity with the establishment of the Emily and Lauren Failla Memorial Scholarship at Peabody College.

Emily moved to the Seattle area after earning a master's degree in elementary education and taught fourth grade in Everett, Wash. She

died in a July 2006 rock climbing accident. "Emily loved her time at Peabody-Vanderbilt," says her mother, Kay. "In addition to making great friends, she had exceptional mentors, especially in graduate school. She was nurtured and encouraged throughout her program in elementary education and graduated feeling confident about her abilities in the classroom." Kay notes that Emily was especially grateful for that graduate school experience following her first round of parent-teacher conferences. "I recall her saying that some of the interpersonal techniques she learned, 'actually worked!'

"Lauren struggled with the loss of her sister and the uncertainty of choosing a career path," Kay says. "Her instructors were patient, compassionate and supportive throughout her time at Peabody-Vanderbilt. Her professors in the art program, in particular, were a huge help to her, both emotionally and academically."

Lauren attended graduate school in London and earned a master of arts degree at Sotheby's Institute of Art (Manchester University). "She found the organization of assigned group projects a simple thing to do and gave credit to her background in HOD at Peabody," Kay says of Lauren's graduate experience. She also worked with youth at St. Peter's Church and had decided to work with children in art therapy. Lauren died in a snorkeling accident in India's Andaman Islands in April 2010.

PHOTOS COURTESY OF KAY AND FRANK FAILLA

*Frank, Emily, Lauren and Kay Failla with pet dog Lucie, Christmas 2005.*

But sometimes good things happen to good people, and a movement was underway to fully endow a scholarship in the girls' honor. Frank Failla, their father, works with WebMD as vice president of tax and finance. He learned that his colleagues had contacted Vanderbilt about creating a scholarship. "Returning to work at WebMD after Lauren's death, Marty Wygod, chairman of the board, and his wife, Pam, had the vision to establish the scholarship at Peabody-Vanderbilt in memory of Emily and Lauren," he says. "They recruited colleagues of mine at WebMD who also thought it was a wonderful way to honor our daughters. We were thrilled to learn that the scholarship was in the works and overwhelmed with gratitude to these generous individuals."

Vanderbilt and WebMD moved quickly and were able to offer scholarships to two students this academic year. "We received gracious notes from each of the students, expressing their gratitude for the scholarship and explaining their career paths," the Faillas report. "One is a senior who will be graduating soon, and the other is a current freshman who is still considering her options. We could relate to that!"

The vibrant lives of Emily and Lauren now have lasting influence on the lives of others. "There are incredible educational and community resources available through Peabody-Vanderbilt," the Faillas say. "We hope that these recipients will use such opportunities to develop their talents to contribute and live their lives with gusto!"

*—Nelson Bryan*

*Lauren and Emily Failla*

## Deborah Barnhart, EdD'94

*Aerospace Educator*

PHOTO COURTESY OF THE U.S. SPACE AND ROCKET CENTER

*If we're not getting the hook set [for math and science] when they're in grade school, sometimes we miss them.*

—Deborah Barnhart

A couple of hours south of Nashville lies a place inhabited by manned rockets and moon rocks that gives witness to America's stellar past and beckons young and old to come and contribute to its future. It is the U.S. Space and Rocket Center in Huntsville, Alabama's No.1 tourist attraction, and Deborah Barnhart is leading it to new frontiers.

The center named Barnhart director in January. Having grown up in Huntsville (her father worked at the then-fledgling Marshall Space Flight Center), Barnhart graduated from the University of Alabama-Huntsville before expanding her horizons with the U.S. Navy. She was one of the first 10 women qualified to fight on and drive Navy vessels. She rose to the rank of captain and was assigned for a time to the U.S. Naval Academy. She directed Space Camp at the center for four years and worked in the aerospace and defense sectors after that.

With two children under the age of 6, she decided to pursue a doctorate and looked at area schools. "Then I talked to Dr. William Lucas (MS'50, PhD'52), who was head of the Marshall Space Flight Center. He said, 'Deborah, if you're going to get your doctorate, go get it from some place you'll respect for the rest of your life. Why don't you go to Vanderbilt?'"

At Peabody she found the educational experience to be different from those she received in public institutions. "I already had a master's from the University of Maryland. I was kind of an oddball. I would come in with projects that were interesting to me in my area at the Space and Rocket Center and in aerospace and defense, and they totally supported my interests. [They] encouraged me and showed me how to use the tools to do the work that I wanted to accomplish in my professional career."

She now has a vision to take the Space and Rocket Center from its robust, historical artifact base and add a hands-on science component. "I want to start offering something for the 2- to 10-year-old child in a hands-on, three-dimensional way," Barnhart says. "That's where the interest in math and science starts. If we're not getting the hook set when they're in grade school, sometimes we miss them. We're going to elevate this place to a regional science center and shift the focus from strictly space and rocket more to science engineering and STEM education.

"We are NASA's public information extension to educators," she says. "We have a separate building here on campus totally dedicated to supporting teachers in space science education. All my pals and alumni and friends from Peabody are welcome to come use us as a resource through the NASA educator research facility."

*—Nelson Bryan*

**Alfred A. Baumeister,** professor of psychology, emeritus, and a former director of the Vanderbilt Kennedy Center, died on March 14 in Tuscaloosa, Ala. He was 76.

A native of Fairbanks, Alaska, Baumeister earned his B.A. in psychology from the University of Alaska in 1957, and his M.A. and Ph.D. in psychology from Peabody College in 1959 and 1961, respectively. He was an assistant professor of psychology at Peabody College from 1961 to 1962 and at Central Michigan University from 1962 to 1965. In 1967, he became an associate professor of psychology at the University of Alabama and was promoted to professor in 1969. In 1973, he accepted an appointment as a professor of psychology at Peabody College, where he also served as director of the Institute on Mental Retardation and Intellectual Development.


*Alfred A. Baumeister*

In 1983, he became director of the John F. Kennedy Center for Research on Education and Human Development, serving in that capacity until 1990. As director, he recognized that the center's funding would increasingly depend on research in neuroscience, and he expanded center programs to include more investigators from Vanderbilt's School of Medicine and the College of Arts and Science. He retired in December 2000.

Baumeister was a distinguished consultant to a variety of organizations such as the White House Policy Committee (1986) and the President's Committee on Mental Retardation (1984 to 1996). He received the Research Career Award from the American Academy of Mental Retardation (1986), the Distinguished Research Award from the Association for Retarded Citizens of the United States (1988), and the Edgar A. Doll Award for Research in Mental Retardation from the American Psychological Association's Division on Mental Retardation (1991).

Within Vanderbilt, his notable contributions were recognized by the Alexander Heard Distinguished Service Award (1986), the Harvie Branscomb Distinguished Professor Award (1987), and the Peabody College Distinguished Alumnus Award (1991). The Tennessee Department of Mental Health and Mental Retardation awarded him its Outstanding Professional Service Award in 1986 and a Distinguished Service Award in 1988.

The family requests that memorial donations be made to the RISE School, c/o The University of Alabama, P. O. Box 870305, Tuscaloosa, AL 35487 or the charity of one's choice.

**Elizabeth Goldman,** former associate provost for academic affairs and a Peabody faculty member who developed and evaluated new ways to use media in mathematics education, died Dec. 18 in Franklin, Tenn. She was 67.

A Louisiana native, Goldman earned her undergraduate degree in 1964 from Sophie Newcomb Memorial College, which was the coordinate women's college of Tulane University, and her master's and doctorate degrees from Vanderbilt University in 1965 and 1970. She joined the faculty of George Peabody College for Teachers in 1968 as associate professor of mathematics education.

Ahead of her time, Goldman recognized the power of video and multimedia for teaching and collaborated with Arts and Science faculty to develop a program that used video to enable future teachers to watch and respond to actual math and science classroom activity. In recognition and support of this work, Goldman won multiple federal and foundation grants and the 1983 Ellen Gregg Ingalls Award for excellence in classroom teaching.

Goldman served as associate dean for student affairs at Peabody from 1981 to 1988. She also served as chair of the Peabody Faculty Council and chair of the university Faculty Senate.

When she received the 1988 Thomas Jefferson award for "distinguished service to Vanderbilt," she was lauded as "the ultimate citizen, who is more concerned about others and about the university than with guarding her own time."


*Elizabeth Goldman*

Named associate provost in 1995, Goldman oversaw undergraduate admissions, student financial aid, the office of the University Registrar, ROTC, the Career Center, special projects, the University Press and various academic policies and procedures. Retiring after five years, she became professor of mathematics, emerita, and was succeeded in her post as associate provost by now-Chancellor Nicholas Zeppos.

**Jules Seeman,** professor of psychology, emeritus, died Dec. 11, 2010. He was 95.

"Jules Seeman was one of the most significant people in the history of Peabody College, especially as a precursor of the Department of Human and Organizational Development," said Paul Dockeki, professor of psychology. "He was the best teacher I ever had."

Born in Baltimore, Md., Seeman spent 10 years as an elementary school teacher before receiving his Ph.D. in psychology from the University of Minnesota. He spent six years on the faculty of the University of Chicago, where he worked with prominent psychotherapist Carl Rogers. He was the Rogers group's research coordinator and spearheaded some of the earliest research on psychotherapy process and outcome.


*Jules Seeman*

In 1953, Seeman joined the faculty of Peabody College, where he worked for the next 37 years serving as director of clinical training. He led an extensive research program in personality integration, which is the study of optimal personality functioning. He was the recipient of numerous honors, including the American Psychological Association's Carl Rogers Award for his lifelong contribution to humanistic psychology.

After becoming an emeritus faculty member in 1985, Seeman continued to work part time at Vanderbilt; maintained a therapy and consulting practice; and initiated new lines of theory, including a precursor to the now-popular positive psychology field. He developed and published his Human System Model of human functioning and psychotherapy in 2008.

He was a founding member of Nashville Psychotherapy Institute, which has dedicated an annual symposium in his honor. Shortly before his death, he wondered aloud if a person was ever too old to generate new ideas—then began work on a model that integrated humanistic psychotherapy with psychodynamic interpretation. Throughout his life, he emphasized the fundamental importance of communication and connection.

**Sargent Shriver,** longtime friend and former board member of the Vanderbilt Kennedy Center, died Jan. 18 at a Washington-area hospital. He was 95.


*Sargent Shriver*

Along with the Peace Corps, which he created under the auspices of his brother-in-law President John F. Kennedy, Shriver played a pivotal role in the creation of social programs such as Neighborhood Health Services, Foster Grandparents, Job Corps and Head Start.

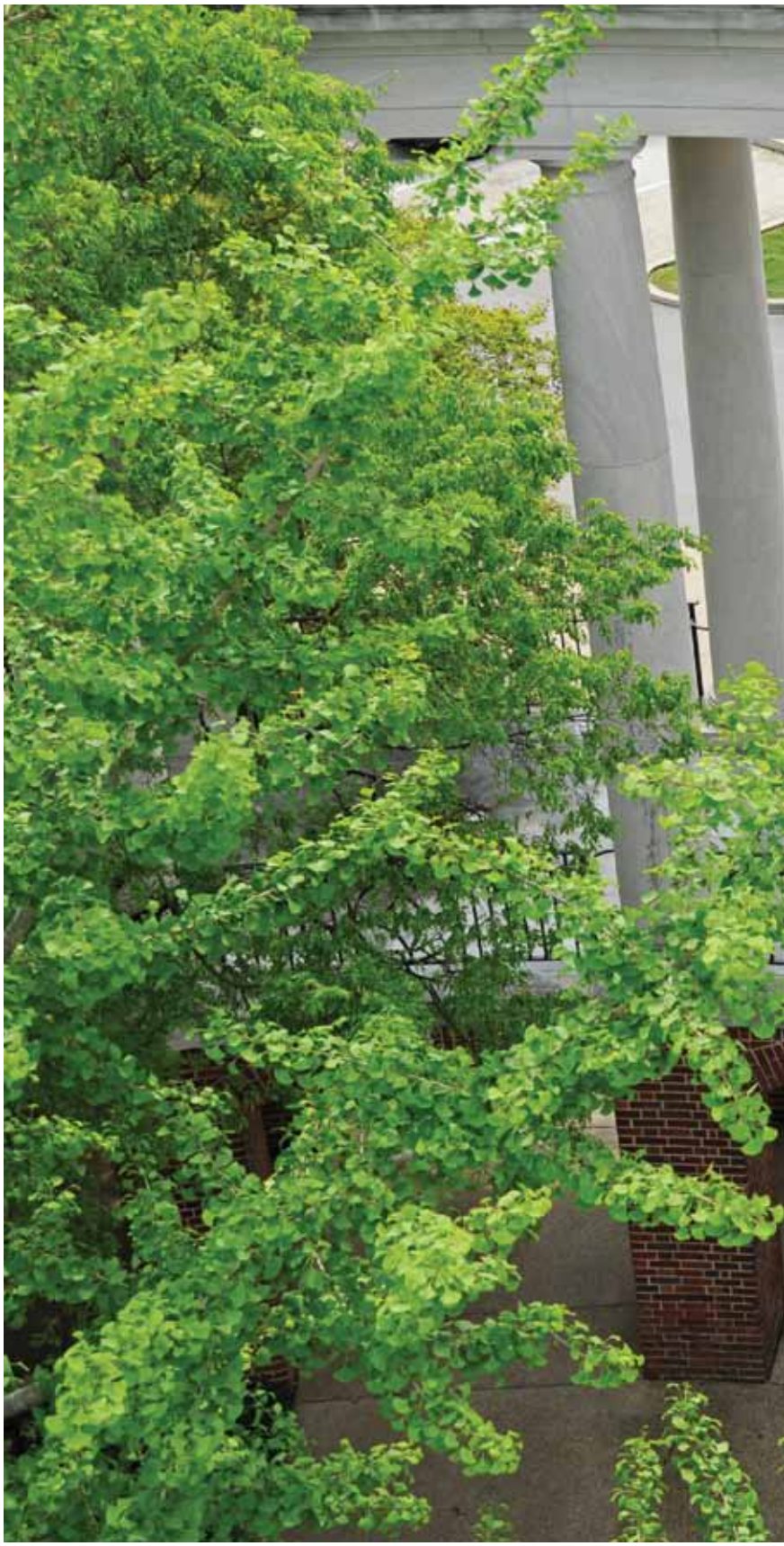
"Over the course of his long and distinguished career, Sarge came to embody the idea of public service," President Obama said.

Shriver was a member of the Board of Trust of the George Peabody College for Teachers in 1979 during the critical period when it was merging with Vanderbilt. He also recruited Peabody's Nicholas Hobbs as the first director of selection for the Peace Corps.

Shriver credited the work of Susan Gray, co-founder of the Vanderbilt Kennedy Center, as the inspiration for Head Start, a national program that provides educational, health, nutritional, social and other services to preschool children.

Shriver, along with wife Eunice Kennedy Shriver and mother-in-law Rose Kennedy, attended the convocation marking the founding of the Vanderbilt Kennedy Center on May 29, 1965. The Shrivers returned in 1996 to celebrate the center's 30th anniversary.

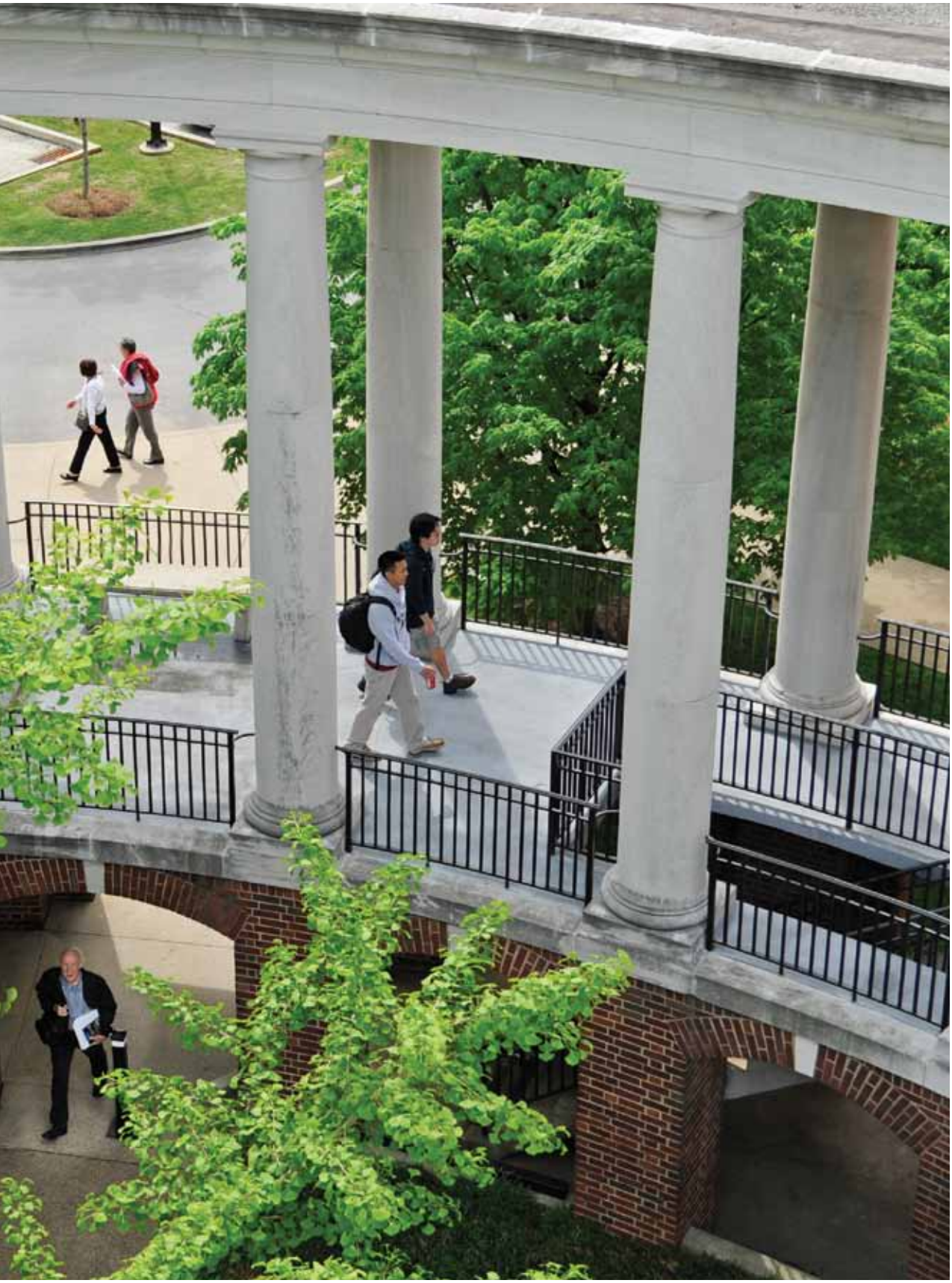
*Photos from Vanderbilt University Special Collections and University Archives*



## Bird's Eye View

PHOTO BY John Russell

The rhythm of columns, archways and architectural curves is apparent from above, as seen in the colonnade between the Wyatt Center (Social Religious Building) and East Hall. The photographer did not climb a gingko tree to get the shot; he made use of a construction lift before it was moved.



Vanderbilt University
Peabody College
PMB 407703
2301 Vanderbilt Place
Nashville, TN 37240-7703

Nonprofit Org.
U.S. Postage
**PAID**
Nashville, TN
Permit No. 1460

*A publication of* VANDERBILT PEABODY COLLEGE

# Third time is the charm

## *Support Vanderbilt with a tax-free gift from your IRA*

Looking for the most tax-effective way to make a gift to Vanderbilt? Congress recently extended a law for the third time that allows people 70½ or older to make tax-free charitable gifts up to $100,000 directly from their IRAs through the end of 2011.

Learn more by contacting Linda Ray Miller in Vanderbilt's Office of Planned Giving at (615) 343-3113, (888) 758-1999 or plannedgiving@vanderbilt.edu.

***www.vanderbilt.edu/alumni/plannedgiving***