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# @SED

Boston University School of Education

SUMMER 2014

# IT TAKES TWO

SED's partnership with the  
**Trotter Innovation School**  
is helping both students and  
tutors step up their game

BOSTON  
UNIVERSITY



**Dear Alumni and Friends,**

At the School of Education, we are often asked what we are doing to improve the quality of education in our nation's classrooms. We know that the most important factor in creating a quality education for all is putting a highly effective teacher in every classroom, supported by an equally effective principal. So we believe we are doing our job. Each year, our School graduates more than 200 aspiring teachers, counselors, principals, and superintendents. We prepare students to have deep content and pedagogical knowledge, and the clinical acumen to use that knowledge in a variety of settings. Our dedication to preparing quality educators results in stronger schools and communities.

In addition, we are deeply engaged in using our scholarship to advance educational practice. For example, we are improving our understanding of girls' career aspirations to engage them in STEM studies, exploring how classroom discourse helps students learn math, and finding ways to improve ASL instruction for deaf children. To improve the quality of education, we must deepen our understanding of children's needs and how to best meet them, and then teach those techniques to educators.

It is our experience that a highly effective school of education is one that makes an ongoing impact on the quality of education through the students it prepares and the scholarship it produces. In this issue of @SED, you will learn more about the research our faculty are doing, the relationships we are building with local schools, how our graduates impact the world, and more. Please enjoy, and stay in touch.

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COVER PHOTOGRAPH: CYDNEY SCOTT



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# NEWS & NOTES



Working with BU tutors and faculty through Upward Bound, Massachusetts high school students learn skills ranging from programming robots to coping on a college campus.

## STILL BOUND FOR SUCCESS

In 2011, when 16-year-old Radie Qurashei immigrated with his family to Boston from Bangladesh, he spoke no English and wasn't optimistic about his academic prospects. His guidance counselor at English High School connected him with Boston University's Upward Bound (UB), a federally funded, national college prep program for low-income and potential first-generation college students. He spent two summers living at BU, where he took classes, worked with a tutor, and practiced English. This fall, the 19-year-old is entering Franklin & Marshall, a competitive private college in Pennsylvania, with scholarship assistance from the Philanthropic Initiative. He learned about both from UB. "Upward Bound inspired me to look for good colleges, and showed me that I could challenge myself," he says.

Qurashei is one of more than 1,000 students that UB and its sister program, Upward Bound Math Science, have helped in the 25 years since UB began at the University. **Ruth Shane ('73)**, former director of the Boston University/Boston Public Schools Collaborative, launched BU's chapter, through which more than 30 students from SED and other BU schools and colleges tutor each year.

The program has adapted to meet evolving needs, says UB Director **Mike Dennehy (CAS'92, SED'01)**, pointing to the 2007 addition of Upward Bound Math Science and an increased emphasis on Massachusetts Comprehensive Assessment System (MCAS) preparation. But its core goal remains the same: getting high school students "academically, socially, and emotionally prepared for college and all the changes that come with that transition."

A celebration will take place this fall for the 25th anniversary of UB at BU, which coincides with the 50th anniversary of the national program. Information will be posted at [www.bu.edu/ub](http://www.bu.edu/ub).—JULIE RATTEY

*SED faculty Thomas Cottle, Carol Jenkins, Eileen Sullivan, and **Kathleen Vaughan ('71, '83)** retired this year, along with **Ruth Shane ('73)**, director of the Boston University/Boston Public Schools Collaborative. Learn more at [www.bu.edu/sed/news-events](http://www.bu.edu/sed/news-events).*

## MAKING WAY FOR MANDARIN

At the Boston Renaissance Charter Public School, only 1.5 percent of students are Asian. But step into the classrooms and you'll find students speaking Mandarin Chinese, Skyping with pen pals in China, and celebrating Chinese holidays. These activities are the elementary school's response to President Barack Obama's 2009 100,000 Strong China initiative, which aims to increase the number and diversity of American students learning Chinese and studying in China. In 2009, Boston Renaissance and its superintendent, SED Clinical Assistant Professor **Roger F. Harris ('74)**, launched its Chinese Language and Culture Program, which has earned China's 2013 Confucius Classroom of the Year Award. Harris traveled to Beijing to receive the award, which the government gives annually to only 5 of the 600 schools in the Asia Society's worldwide Confucius Classrooms Network.

With approximately 950 students in grades K–6, most of whom are low income and black or Latino, Boston Renaissance is Boston's largest public elementary school. It began teaching Chinese to kindergarten students in 2009, adding a grade each year; the program will be schoolwide in fall 2015. Students receive Chinese instruction five times a week and participate in activities related to Chinese arts and culture. In 2011, student representatives traveled to Washington, D.C., by invitation of the White House for the visit of China's then-president, Hu Jintao.

"Exposing urban children to second languages and foreign cultures should be an imperative of the US education system," says Harris, a 2013 recipient of the President's Award from the National Association for the Advancement of Colored People. "These experiences open students' minds and broaden their perspectives. Learning Chinese language and culture, in particular, is going to help prepare these children for successful participation in the 21st-century global economy."—JULIE RATTEY



Alison Adler ('81)



Suzanne Chapin ('85, '87)

# MEET THE GAME CHANGERS

SED'S DISTINGUISHED ALUMNI AWARD WINNERS REVITALIZE CLASSROOMS NATIONWIDE

BY JULIE RATTEY

Each year, SED honors alums who demonstrate distinguished services to the School, the field of education, or the community. In October 2013, during Alumni Weekend, SED presented **Alison Adler ('81)** with the Ida M. Johnston Award, named for a former SED professor and alum ('42, '43). Adler is chair of SED's advisory board and the retired chief of safety and learning environment for the School District of Palm Beach County, Florida. **Suzanne Chapin ('85, '87)**, professor of mathematics education, received the Dean Arthur Herbert Wilde Society Award. The honor is named for the BU alum (1887, 1891) who became SED's first dean.

## IDA M. JOHNSTON AWARD

For more than 30 years, Alison Adler has been fighting a persistent attitude among some teachers: that some students simply are not capable of academic achievement. Throughout her career in Palm Beach County, Florida, the nation's 12th-largest school district, **Adler ('81)** proved that belief wrong.

She discovered her mission in the early '80s, when she was asked to coordinate a new drug prevention program in Palm Beach County. Adler was struck by how low the academic bar had been set for the struggling sixth grade participants. Building on the theory that intelligence is not fixed and that students will work hard when teachers believe in them, she and her team provided both academic and counseling support. "We really worked on their resiliency and on finding things that they were good at, letting them know that they were plenty capable," she says.

The program's success encouraged Adler to launch other initiatives to help academically struggling students, asking, "How do we need to change our strategies in order for students to be successful?" Discovering that inconsistent policies on everything from dress code to grading exasperated students and sparked time-

wasting disciplinary battles, Adler developed Single School Culture® (SSC), an approach to school organization and management. The key principles of SSC are that academics, behavior, and climate are connected, and that using data to track students' progress will guarantee their success. Adler considers the SSC her greatest career achievement.

Keith Oswald is a believer. When he became principal of the urban Boynton Beach High School in 2008, he says, it was plagued by gang violence and had a consistent D rating and inconsistent classroom policies. Its graduation rate was 61.1 percent. After Oswald implemented SSC, violence decreased, graduation rates rose, and the school earned a B rating by 2010. Crucial to that success, says Oswald, was the effort he and teachers made to build trust, showing students "that it wasn't us against them; that we're in this together."

Oswald, now assistant superintendent of teaching and learning, describes Adler's impact as revolutionary. He believes she's the reason Palm Beach County was Florida's only district to receive A ratings eight years in a row (2005–2012). Her SSC initiative also received commendations from the Bill & Melinda Gates Foundation and the Broad Foundation.

"I believe that we have many more problems in society when our population isn't educated and doesn't see a way out and doesn't see something for themselves," Adler says. "So when you meet students early on who feel defeated, and you know that you have the ability to change it, and you find like-minded people, then it's a calling."

Adler, who chairs SED's advisory board, retired as the district's chief of safety and learning environment in 2011, but she continues to promote SSC by consulting for districts nationwide. She's also launching a staff development application that will show practitioners modeling SSC in classrooms. As SSC expands, so may teachers' beliefs in students' capacity to achieve.

#### DEAN ARTHUR HERBERT WILDE SOCIETY AWARD

Suzanne Chapin likes starting a good argument about math. "If you don't have kids talking in class, you only know when they're confused by how they do on a quiz or a test or some assessment," she says. "You think they're all with you, but they may not be." Showing current and aspiring teachers how to help students understand math through discourse and debate has been a cornerstone of the math education professor's nearly 30 years at SED.

The National Council of Teachers of Mathematics has encouraged class discussion for two decades. It's a practice that supports memory, language development, and reasoning, and can empower both teachers and students. **Chapin ('85, '87)** says SED undergraduates tell her, "I used to hate mathematics. I love it now, because I am powerful in terms of being able to make sense of these ideas." But few US math teachers use discussion, Chapin and her coauthors note in the teacher's guide *Classroom Discussions in Math*. Some are concerned about time management; others say, "What is there to talk about in math?"

Chapin teaches how to successfully use math discourse in SED classes and as principal investigator for the math-related Robert Noyce Scholars Programs, national training initiatives for preservice and in-service teachers working in high-need schools.

Chapin brought the programs to the University with grant funding from the Noyce Foundation. As a consultant and curriculum coauthor, she also helps schools worldwide implement math reform. *Classroom Discussions in Math* provides supplementary video clips of elementary teachers modeling math discourse. Chapin is working with SED faculty to develop a similar resource for secondary education.

To teach and discuss math in depth, teachers need to explain both the *how* of the subject and the *why*. Learning theory indicates that students are more likely to retain information when they're taught to understand it, not just memorize it, Chapin says. But many math teachers "have a great deal of difficulty explaining why certain things work." To bridge that gap, Chapin and SED colleagues **Ziv Feldman ('07, '12)** and Alejandra Salinas obtained two grants from the National Science Foundation totaling \$700,000 to create and test a discourse-oriented curriculum for

pre-service elementary educators. In Phase I of this Elementary Pre-Service Mathematics Project, the curriculum was tested at BU and nearby institutions. "The materials were very effective in improving future teachers' knowledge," says Chapin. Phase II, a broader test of the curriculum, concludes in 2015.

Chapin hopes discourse will have an impact on students beyond the classroom. Whereas a negative or uninspiring experience in math class might steer them away from related careers, a positive experience might spark their interest. ■

**"IF YOU DON'T HAVE KIDS TALKING IN CLASS, YOU ONLY KNOW WHEN THEY'RE CONFUSED BY HOW THEY DO ON A QUIZ OR A TEST OR SOME ASSESSMENT. YOU THINK THEY'RE ALL WITH YOU, BUT THEY MAY NOT BE."**

—SUZANNE CHAPIN

To nominate someone for an SED alumni award, visit [www.bu.edu/sed/alumni/awards/nominations](http://www.bu.edu/sed/alumni/awards/nominations).

SHARLENE CHANG ('15) works with fourth grader Lanaya Feagin-Payne during a writing tutoring session at the Trotter Innovation School. SED and Trotter, which is in the Boston neighborhood of Dorchester, have been partners since 2006.



IT TAKES TWO:

# TROTTER & SED

## SED'S PARTNERSHIP WITH THE TROTTER INNOVATION SCHOOL IS HELPING BOTH STUDENTS AND TUTORS STEP UP THEIR GAME

BY LESLIE FRIDAY

Veteran science teacher Brenda Richardson has 30 minutes to deliver her lesson to a classroom full of kinetic fourth graders, two still in cooldown mode after a brief scuffle.

It's enough to bring sweat to the palms of the dozen SED students observing Richardson's every move from the back of the room at Boston's William Monroe Trotter Innovation School in Dorchester, Massachusetts.

Over the light chatter and low din of chairs scraping the tile floor, Richardson reads from a poster titled Motion and Design: "When a vehicle is at rest..." Here she pauses and asks, "What do I mean by 'vehicle'?"

A small hand rises and an eager boy answers: "Vehicle means your car."

"Yes," nods Richardson. "It's just another word for your car." She reads the rest of the poster, then tells the students to divide into groups and start assembling cars with the

string, paper clips, and washers ready for them to use for their experiments.

At Richardson's instruction, the SED students disperse among the groups. One by one, they squat to guide the young scientists through the exercise, and cars soon scoot, or creep, across the tables pulled by the weight of attached washers. While Richardson weaves from one group to the next to dish out encouragement, students pull her aside to show off their good work.

"You have done an awesome, awesome job," Richardson says as she wraps up the class, spotting Principal Mairead Nolan and Assistant Principal Romaine Mills-Teque at the door. The administrators usher the children away for a quick conversation about the earlier scuffle, leaving the SED students alone with their Trotter mentor.

"That's exactly what I want you to do every time you come," Richardson says. "All of you weren't afraid to just jump right in."

Richardson is accustomed to BU students in her classroom. In 2006, **Thomas M. Menino (Hon.'01)**, former longtime Boston mayor and now codirector of BU's Initiative on Cities, created a program called Step UP, which charged 5 local universities with assisting 10 public schools struggling to meet the goals of the federal No Child Left Behind Act. **Charles Glenn (GRS'87)**, then SED dean ad interim, chose the Trotter and the English High School of Boston—the two lowest performers at the time.

Working closely with Trotter staff, SED developed courses that place elementary education undergraduates in the public

school's reading, writing, and science classes at several grade levels. Teachers and professors swap methods and co-teach, while SED students observe and tutor children. A BU-initiated program, Dads Read, encourages fathers to pick up a book with their children after school. (Learn more about Dads Read on page 13.) And the Boston University Initiative for Literacy Development gives work-study students the opportunity to provide additional afternoon tutoring.

### PARTNERS IN REINVENTION

The partnership between SED and the Dorchester elementary school deepened when Trotter was designated by the Massachusetts Department of Elementary and Secondary Education (DESE) as Level 4 in 2010 and put under the state's watchful eye. The Level 4 designation means it was among the state's most struggling schools based on Massachusetts Comprehensive Assessment System (MCAS) trends over four years. The designation was a blow, but it gave Nolan permission to rebuild her staff and invest in professional development. She also informed SED that improving children's literacy was the area where her school could use the most help.

Nolan's all-out push made a difference. Trotter students' consistent gains on the MCAS lifted the school last year to Level 1 status, meaning all students met the state's gap-narrowing goals—rarified air occupied by schools in affluent suburbs like Wellesley and Newton. The difference, however, is that Trotter has farther to climb to the top of the



MCAS performance ladder. The school still ranks among the state's lowest performers (in the 21st percentile). At the same time, it has become a beacon among high-poverty peers. Nearly 84 percent of Trotter's 400 children come from low-income families, compared to a statewide average of 38 percent, according to the DESE.

BU officials do not take credit for Trotter's success. SED Dean Hardin Coleman goes so far as to say that the University has helped facilitate the school's progress, similar to Gatorade-toting sidekicks to Nolan's forward-charging football team. "We're not being falsely modest by saying she was the leader" in creating a coherent culture and curriculum, he says. "We provided useful and timely help to those efforts."

As far as the SED dean is concerned, that's all for the good. "It's essentially vital that universities share their cultural capital with the community," says Coleman, who was appointed by Menino last summer to the Boston School Committee. "These are the kids that we want to recruit to come to us one day."

#### TURNING AROUND TROTTER

Named after civil rights activist William Monroe Trotter, who was raised in Hyde Park, the school opened its doors in 1969 as Boston's first magnet school. It was founded on the mission of racial integration—well before the city's tumultuous implementation of court-mandated school desegregation and forced busing in 1974. At the time, it boasted a 60 to 40 percent split between black and white students and was a first pick for many families, whose "kids came from all over the state," says Alma Wright, a computer specialist who helped open the Trotter.

Top: SED instructor Jennifer Bryson ('98, '05) checks in with her students and their pupils during a Trotter tutoring session. Bottom: Emily Chessher ('15) works with fourth grader Laniah Butler. BU-Trotter partnership liaison Julia Badiali calls the collaboration priceless for SED students, who have many opportunities to teach before they graduate.

The school and the neighborhood around it fell into sharp decline in the late 1980s. Wright says its quality of instruction dropped as many African American teachers were moved to other districts to meet desegregation goals. Drugs and gang violence transformed the neighborhood surrounding Humboldt Avenue, the school's base, into a danger zone that many families—mostly white—fled for calmer suburbs. The school is now 60 percent African American, 30 percent Hispanic, and 6 percent white.

By the end of 2009, MCAS scores had plummeted. Only 13 percent of Trotter's third, fourth, and fifth graders scored proficient or higher in English and 12 percent in math.

Around that time, Carol Jenkins, an SED associate professor in the Elementary Education program and a Metcalf Award winner last year, was growing frustrated with the University's teacher preparation methods, which had students listening to lectures and role-playing classroom situations on the Charles River Campus. *They need to be in classrooms with real teachers*, she remembers thinking. *They need to observe me teaching, too.*

Recent SED graduates had the same opinion. One alumna placed in a New York City school told Jenkins that she felt unprepared, despite being one of the highest performers in her class.

Coleman understands the problem. Most SED students, he says, come from suburban, middle-class families with "good cultural capital," yet their first job might be in an urban school where mentors and resources are scarce, families face unemployment and poor health care, and children come to school hungry and tired—situations most SED students were unlikely to encounter while practice-teaching.

Jenkins thought SED needed to place greater emphasis on "situated learning" in urban schools, and the Trotter partnership was an obvious solution. She moved from occasionally co-teaching fourth grade writing classes while her students observed to developing a semester-long methods course where her aspiring teachers coached children through the writing process.

**Don DeRosa (SED'91, '01)**, an SED clinical associate professor of science educa-

tion, joined Jenkins, pairing with Trotter's Richardson so that his students could observe, coach, and occasionally lead science classes. Jenkins recruited a sociology professor to teach a two-credit course for the SED students at Trotter that tackles topics like racial, cultural, gender, and social identities and how they relate to the achievement gap. A half-hour block is wrapped into each Monday and Wednesday class this year so that students can tutor second graders in poetry and hone the children's literacy skills.

**"IT'S ESSENTIALLY VITAL THAT UNIVERSITIES SHARE THEIR CULTURAL CAPITAL WITH THE COMMUNITY. THESE ARE THE KIDS THAT WE WANT TO RECRUIT TO COME TO US ONE DAY."**

—DEAN HARDIN COLEMAN

#### **GIVING TOOLS TO CHANGE THE WORLD**

Tutoring children "definitely confirms that I want to be a teacher," says **Marina Alberti ('16)**. "They really count on you to be there each week." SED students say their children bring them hand-drawn pictures, give them hugs—**Gwen Jahnke ('16)** fielded a tight squeeze from one of her students during a recent visit—and share stories about life at home. "Sometimes you have to tell them: 'TMI,'" **Megan Baker ('16)** says with a laugh.

**Donald Gillis (GRS'78, '15)**, a College of Arts & Sciences lecturer in sociology, and **Chris Martell ('11)**, an SED clinical assistant professor of social studies in the Elementary Education program, co-teach the sociology class, which Gillis calls a cultural awakening for many teachers-in-training. "We want them to change the world, but we need to give them the tools to do

it," says Martell, who thinks this class is a step in that direction.

Across the hall from the sociology class, **Elyssa Garcia ('15)** sits beside a fourth grader, coaching him through a writing assignment about the "best time you ever had." There's a long pause before the reticent boy in a buttoned-down shirt and sneakers jots down his list: my birthday, vacation in Miami, basketball with my brother, seeing my father. He eventually chooses his 10th birthday, but gets stuck when Garcia asks him to divide up the day's events.

"It's kind of hard to think," he says, barely above a whisper.

Garcia pries more information from her student. Soon, he's filling a timeline describing a birthday whose main event was a new phone from his mom.

"Wow!" Garcia says. "You're really writing a lot. This is going to be a good story. When we started, you said, 'Oh, I don't really have any best days.'"

Julia Badiali, the BU-Trotter partnership liaison, overhears their conversation as she circulates the room with **Jennifer Bryson ('98, '05)**, an SED clinical instructor and director of the Elementary Education program. Badiali gently ribs the boy for his hesitation, then provides this advice: "Think about what you guys did today. That's what you've got to do for yourself on your own." She's talking about the MCAS testing, which looms large in the months ahead.

A former Trotter fourth grade teacher, Badiali says new teachers often graduate unprepared, and acknowledges learning through trial-and-error her first year. That's why she calls the BU-Trotter partnership priceless for SED students, who have many opportunities to teach before graduation.

Badiali is quick to point out how Trotter benefits too: "You can't put a price on a child's one-on-one instruction."

And what do the kids think? One girl in Richardson's fourth grade science class seems to think the partnership is a good deal. She confided to **AnneMarie Schiller ('15)** during their motion experiment: "I've never had a BU tutor. I've always wanted one." ■

*This article originally appeared in BU Today.*



# BREAKTHROUGHS IN THE MAKING

SED RESEARCH HERALDS BIG  
CHANGES FOR THE CLASSROOM

BY JULIE RATTEY



**Thanks to research in progress at SED, schools may soon have better deaf education, more girls and diverse youth preparing for math and science careers, and less anxious, better-performing students.**

### LEADING REFORM IN DEAF EDUCATION

Want to know how well a hearing child understands written English? There are standardized tests for that. But educators have virtually no tools to evaluate deaf children's knowledge of American Sign Language (ASL), says Robert Hoffmeister. The American Sign Language Assessment Instrument (ASLAI) will change that.

This computer-based tool, which the associate professor of deaf studies is developing, covers topics like vocabulary and verb agreement, just like in English language tests. But ASLAI users answer by signing on camera or selecting a video clip in which the correct answer



This ASLAI vocabulary question asks deaf children to match the image of the wolf with the video clip in which the word "wolf" is signed.

is signed. Hoffmeister hopes the ASLAI will reveal how language impacts thinking and learning in deaf children, and prove that they're more intellectually capable than some have given them credit for.

Hoffmeister, who directs BU's Center for the Study of Communication & the Deaf, has been working on the ASLAI since 1989. A four-year, \$1,566,200 grant from the US Department of Education in 2010 provided a boost. Hoffmeister and a team of deaf and hearing graduate students are developing the tool and testing it with deaf students ages 4 to 18 in several states. Once completed in 2015, the ASLAI will help "identify developmental changes in ASL abilities as well as distinct profiles of learners who may be at risk for learning problems," Hoffmeister says. He hopes this will inform and improve ASL instruction.

"A lot of research states that deaf children don't 'get' language," sparking interventions like cochlear implants and speech therapy, signs project member **Jon Henner ('15)**. But their team has found that students' skill levels in ASL and English literacy correspond. "The field tends to have a low expectation of what deaf children in schools can do," says Hoffmeister, "and that's really what we want to change."

### EXPLORING ANXIETY'S IMPACT ON CHILDREN'S READING

Sweaty palms, a pounding heart, visions of failure. Studies have shown that anxiety, while a motivating factor if moderate, can hamper children's problem-solving and decrease their performance on classroom tests. But what about children who aren't just anxious

at test time? Can their anxiety interfere with classroom activities like reading? And, in turn, can struggling to read cause anxiety? Amie Grills believes the answer to both questions is yes.

Grills, a licensed clinical psychologist and an assistant professor of counseling psychology & human development, is studying the little-explored relationship between anxiety and reading in children. With the help of a five-year grant for more than \$600,000 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development, Grills and colleagues at the University of Houston ran a study in Texas from 2008 to 2013 of more than 400 students in grades one through three. Having published results showing that anxiety can predict reading difficulties and vice versa, she's now exploring how that connection works over time. For example, she says, "How likely is it that a kid who was struggling to read in kindergarten develops an anxiety disorder by third grade?"

She's also asking this critical question: how do we fix the problem? Grills designed an anxiety-reducing intervention for struggling readers that she's testing in a pilot study whose results will be available this summer. "My hope is that by reducing the stress and anxiety children feel about reading, we can improve reading outcomes as well as children's overall learning experiences," she says.

### SPARKING INTEREST IN STEM

Kimberly Howard has given middle-schoolers some complex assignments, from repairing a model bridge to building a solar cooker for a fictional African village. Her goal: to increase their interest in science, technology, engineering, and mathematics (STEM) careers.

Howard, associate professor of counseling psychology & human development, says studies show that children as young as four assess their career options based on ideas about gender and socioeconomic status. And although girls and diverse youth often identify socially oriented, altruistic career goals, they don't tend to associate those goals with STEM careers, like engineering, in which they're underrepresented. What would happen, Howard wondered, if she introduced a curriculum that exposed students to engineering careers and showed how they give back to society? Could this increase interest in STEM activities among underrepresented groups?

Howard launched a study with engineering colleagues at the University of Wisconsin and a \$1,025,015 National Science Foundation grant. Howard's co-investigators and their fellow engineers created Society's Grand Challenges for Engineering, a story-based, hands-on curriculum that ties math and science knowledge to societal change (as in the solar cooker activity). From 2011 to 2013, middle-school math and science teachers in Wisconsin public schools used the curriculum for several weeks each year.

Howard, who will complete data analysis this year, says preliminary results show that at the end of the study, girls, African Americans, and low-income youth who used the curriculum showed more interest in STEM careers than their comparison group counterparts. The program also sparked a sense of play. "Kids would spontaneously come up to their teachers and say, 'You know what? I love our math class because it doesn't feel like we're learning math; it feels like we're having fun.'" ■



# ADVENTURES IN NICARAGUA

FROM TEACHING WITHOUT BOOKS TO MANAGING  
MACHETE-TOTING STUDENTS, I LEARNED TO  
EMBRACE NEW CHALLENGES IN THE CLASSROOM

BY ISABEL BAUERLEIN ('09) WITH LARA EHRLICH

**A SLOTH CAMPED OUT IN CLASS.** The ceiling tiles fell down. A mariachi band practiced just outside the window. These are just a few of the unexpected challenges Isabel Bauerlein ('09) has encountered since beginning her two-year term as a TEFL (Teaching English as a Foreign Language) teacher with the Peace Corps in Nueva Guinea, Nicaragua, in 2012. Here, she shares some highlights from her lively blog. —LARA EHRlich

### ARRIVING IN NUEVA GUINEA

My site is about halfway between Lake Nicaragua and the Caribbean Sea. There are about 95,000 people in the city. I will be working at both the high school level and the university level to co-plan and co-teach English classes. Nueva Guinea has a lot of cows, and I am told they have excellent cheese.

### MEETING MY HOST FAMILY

My family welcomed me with hugs. There are a mom and dad and four grown children. I felt like I'd stepped into the song "Old MacDonald Had a Farm," because in the backyard, they have 19 chickens, 1 rooster, 6 turkeys, 2 rabbits, 1 pig, 2 dogs, 2 puppies, and 1 cat.

Everyone's family lives in the same town, if not the same house. Families are the center of the culture. By enmeshing with the family, we are learning the language and the culture, but also letting the rest of the community know that we have stable roots.

### PREPARING FOR LESSONS

In the States, it would take me 10 minutes to put together a PowerPoint for vocabulary. Here, it takes much more time and creativity. There are no computers, projectors, paper, or markers in the classroom. To prepare for my vocabulary lesson on technology, I bought paper, markers, and tape at the local supply store. For each word, I drew a picture, and used large pieces of plastic tape to jerry-rig lamination, because the paper rips so easily in the humidity.

### TEACHING UNIVERSITY STUDENTS

In the university, I mostly work with the students who are majoring in English and studying to be English teachers. Students in Nicaragua face tremendous challenges in order to earn a college degree. Many work full time, take care of their families, or live in rural communities, so students studying English attend for a full day on Saturdays. Many have to wake up at 3 a.m. and travel by bus to get to 7:30 class.

### STARTING A COMMUNITY CENTER

My Nicaraguan co-teacher, Diana, and I noticed that a lot of people in Nueva Guinea are interested in learning English but have few opportunities outside of the high school or the university to learn it. Books are hard to find, in Spanish or English. We had the idea to create a resource center where the whole community could learn, practice, and enjoy

## TIPS FOR TEFL

- Starting to learn a new language can intimidate students. **Create a learning space where it's OK to make mistakes.**
- Students come to your class with many skills and experiences. **Help them apply what they already know about their first language to learning a new one.**
- **Ask students what they're interested in learning and layer it into the content you have to teach, whether by sharing English slang, analyzing pop songs, or incorporating celebrities into class examples.**

English. We wanted to coordinate with university students so they could complete their practicum English teaching hours in our center. We also wanted to offer free community classes and homework help for high school students.

The local mayor's office donated a building and computers, and with the help of family and friends back home, I coordinated the donation of 3,000 English books. We applied for a grant to help renovate the building and fill our center with shelves, tables, chairs, and teaching supplies, and attended a workshop with two community members to learn how to

run a lending library. The center will offer a library, computers with internet access, conversational English groups, story hour, classes, homework help, and workshops for English teachers.

### ACCEPTING THE UNEXPECTED

In the last year and a half, I have encountered something new every day: a sleepy sloth and her baby wandered into the school to escape the rain, students brought their machetes (which, in Nicaragua, are common household tools) to school, the classroom was used as a storage space for 100 bags of government-issued rice and beans and we couldn't teach. It was total chaos. I felt lost in a new culture and a new school system, and spent the first half of the year feeling frustrated and confused.

But with each day, I learned a little more. I learned to accept that classrooms are noisy here and that students don't raise their hands. I learned to go with the flow when classes are canceled. I learned how to differentiate between what I had control over and what was beyond my realm. Outside class, I no longer gawk at the cows meandering down the street, I can sleep through the mariachi bands early in the morning, and I scoot over on the bus because, of course, three more people could fit on the seat. Though there are many differences between the US and Nicaragua, the undercurrent is the same: people care tremendously for their friends and families, work hard to better their lives, and do the best they can with what they know and what they have. ■

Follow Bauerlein at [www.isabelsadvnturesinnicaragua.wordpress.com](http://www.isabelsadvnturesinnicaragua.wordpress.com).

Opposite: During a two-year stint with the Peace Corps in Nueva Guinea, Nicaragua, Isabel Bauerlein is teaching English as a foreign language to high schoolers (at center with Bauerlein and co-teacher Juan Carlos, second from left) and university students. In June 2014 she opened a community English center with her colleague Diana (at top left with her husband and Bauerlein). The inauguration ceremony was attended by more than 100 people, including Nueva Guinea's mayor. But more exciting, Bauerlein says on her blog, was "seeing people actually come in and sign up for classes, register for library cards, and take books home" on opening day.

# RETURN ON INVESTMENT

As a second-career teacher, I call on my former life in business in unexpected ways

BY MARIANNE PUDDISTER KEITH ('08)

**WHEN I GRADUATED FROM COLLEGE, I WAS THRILLED TO LAND MY FIRST "REAL JOB" AS A JUNIOR ANALYST** at a large portfolio management company in Boston. For three years, I put on my suit, took the train into the financial district, and analyzed performance data. I found the pace energizing and considered my managers to be brilliant and inspiring. So when they suggested that I pursue my MBA, I smiled and nodded. But inwardly, I panicked. I thought of my job as just that—a job. Not a career. Not a passion.

I remembered playing school with old teaching materials from my mom, who worked as a reading specialist, and planning science activities for the three young children I babysat as a teenager. I felt happiest and at my best as I laughed, played, and shared with the kids. Visiting SED confirmed what my gut had been telling me, and I entered the early childhood education master's program. Later, as a new teacher, I was struck by the many parallels between my former life and my life in the classroom. I continue to use what I learned at my old job, including these three tips, to grow as an educator:

**COLLABORATE.** Working in a cubicle or a classroom can be isolating. It is important to step out and collaborate with colleagues as often as possible. Without much face-to-face contact with clients and colleagues in the office, I often felt lonely and sought more feedback than I was given. In school, I've

made it a point to begin and end each day by popping into different classrooms, whether it's to plan a lesson or share a success or failure from the previous day. This contact anchors me on stressful days and helps me to not only reflect, but begin and end each day with a clear vision.

*Working in a cubicle or a classroom can be isolating. It is important to step out and collaborate with colleagues as often as possible.*

**MAKE TIME TO SOCIALIZE.** My life was very different when I worked in business. Without a husband and child, I had a lot more time to grab a bite with coworkers at the end of a long day. Now that I am married with a family and have less free time, I find it is even more important to strike a work-

life balance. I try to grab coffee with fellow teachers as often as possible, and we make it a rule to chat about anything but work. I recently attended a paint night with my grade-level colleagues. It was refreshing to trade mothering tips and to poke fun at our lack of artistic ability.

**KEEP LEARNING.** In portfolio management, I had a lot of contact with clients and I learned just as much from some of them as I did from my superiors. I see this in teaching year after year as I learn from students and their families. In the classroom, we initiate inquiry units with K-W-L charts, tracking what we already know (K), what we want to know (W), and, at the end of the unit, what we have learned (L). During a recent sea-life unit, a student asked me whether sharks are born with teeth. It was actually satisfying not to know the answer to his question. To witness young learners approaching education with such curiosity is truly inspiring. It is for this reason that I continue to educate myself with as many professional development workshops and opportunities as possible.

It may have taken me a little longer than some to choose a career, but I feel lucky to have had a mixture of professional experiences. When asked what I do for a living, I proudly respond, "I teach." But I should probably add, "And I learn." Teaching has become a way of life for me. I no longer leave the job at the job, and that's alright with me. ■

Submit your op-ed at [www.bu.edu/sed/oped](http://www.bu.edu/sed/oped).

Reggie Bradley says Dads Read has helped his family become better readers and given his son's assurance a boost. "He can speak out in a crowd more," he says. "It gives him more confidence."

## STORYTIME WITH DAD

### READING BEDTIME STORIES ISN'T NEW TO REGGIE BRADLEY.

But until two years ago, he hadn't thought of those stories as a way to spark conversation and activities with his son. Now, he says, "We're learning to use our imagination more." He and eight-year-old Reggie discuss the books they read and look for connections to their own lives. Then, "We write a little book about it ourselves." What changed Bradley's outlook was Dads Read, a biannual book club at Reggie's school.

SED launched Dads Read in 2008 at Boston's William Monroe Trotter Innovation School in Dorchester, Massachusetts, as part of its collaboration with the school. Each Wednesday evening for six weeks, students in grades K-3 and their fathers or male mentors gather in the library for dinner, reading, and group activities.

By giving students the chance to read and discuss books with their dads and peers, along with books to take home and keep, Trotter and SED aim to encourage voluntary reading—which correlates with higher academic achievement and better job prospects, US Department of Education studies show. "Some of the men said they didn't read at home with their children before this club," says **Jennifer Bryson ('98, '05)**, SED program director of elementary education and faculty coordinator for the club. "Now I have fathers still engaged in reading with their children when they're fourth or fifth graders." She also points to another sign of success: not only do the men help plan and lead the activities, they bring their friends. —JULIE RATTEY

*Read more about SED's partnership with the Trotter School on page 4.*

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