Lead Story – Faculty/Program Coordinator Spotlight: Dr. Lalitha Vasudevan

Dr. Lalitha Vasudevan, Program Coordinator and Associate Professor in the Communication, Computing, and Technology in Education (CCTE) program at TC, is currently teaching Culture, Media, and Education, and Youth Media and Educational Justice.

She was born in Kolkata (Calcutta), India, and came to the United States when she was four years old. She grew up in suburban New Jersey and attended the University of Pennsylvania for undergraduate and graduate studies.

Dr. Lalitha Vasudevan

She began her undergraduate studies with a focus on environmental engineering and mechanical engineering; she wanted to be involved in aeronautics. Deeply moved by the Challenger explosion of 1985, she wanted to be an engineer that prevented those types of accidents. In her sophomore year of college, she took several social science courses, which directed her toward a path with an education focus. Dr. Vasudevan refers to this as her renaissance semester. Following this semester, she changed her major to psychology with a minor in linguistics.
Dr. Lalitha Vasudevan – Continued

Dr. Vasudevan recalls childhood experiences with technology. “My earliest memories included playing with a video camera for a variety of reasons and learning how to program in BASIC,” she says. She has always been a tinkerer and she enjoyed exploring new media and technology to explore the extent of her creativity. “Education for me was always connected to technology in some kind of way. At least personally in my life I never worked hard to integrate technology into my education. My education was always infused with technology of some kind, be it television, radio, tape recorder, video camera, computer. It’s just a very natural way I approach education specifically and the world broadly,” she explains.

As a child she loved to read and write. Her love of reading could take her to different places, getting so deeply lost in reading that she often got in trouble as a child for reading too late into the night. Dr. Vasudevan treasured the idea that she could learn about the world through reading the words that someone put on the page in years past. Her childhood explorations lead to several bicycle adventures throughout her neighborhood. She also played team tennis in her youth.

After her undergraduate studies, she worked for an alternative education program for youth who were on probation in Philadelphia. She began her work there in her junior year and two years after graduating, initially as a tutor then later as a teacher. She was teaching and learning with students from 16-20 years of age. At the time, she was in her early twenties and she described her experience as deeply humbling.

She return to the University of Pennsylvania to pursue graduate studies in the Reading/Writing/Literacy program after being moved by the experiences of the young people she was teaching and learning with at the alternative education program. She initially began in the masters program and then transitioned into the Ph.D. program. As a doctoral student, she was influenced by practitioner inquiry which allowed her to investigate questions that she had involving the literary identities of young people. More specifically, she was interested in exploring the ways in which media and technology are infused in how young people understand and express themselves as literate people. She also developed a focus on out-of-school learning where education develops outside the school walls.

Dr. Vasudevan mentioned several people who have influenced her graduate studies and her career path thereafter, including her dissertation advisor, Kathy Schultz; Susan Lytle, a professor in her program who developed work around practitioner inquiry; and Vivian Gadsden who has done work looking at issues of diversity, literacy, the arts, and the impact of incarceration on families. Her rich graduate experience provided a sound foundation for her research and work today.

For one year immediately following her Ph.D., Dr. Vasudevan was a postdoctoral fellow in the Curriculum and Teaching Department at TC. She came to know TC through that position and developed an appreciation for New York.

During that year, she was also searching for an academic position when a faculty position became available in CCTE. Following her fellowship, she joined the CCTE program as a full-time faculty member. “The CCTE faculty understood communication, computing, and technology in education in a way that was deeply resonant with literacy, identity, and a way of being in the world,” she says.
At TC, Dr. Vasudevan teaches courses related to the intersection of media, culture, and education. One of the courses she teaches is Culture, Media, and Education, a course she developed as a TC faculty member. “All the courses I teach take a sociocultural approach to trying to understand how technology and media, in particular, influence media production, media consumption, media representation, which are at play in how we understand the world and how we understand ourselves.” Some of her course listings include Television and Youth, Digital Geographies and Virtual Spaces, Adolescents and Digital Literacies, in addition to a year-long pilot course entitled Youth, Media, and Educational Justice that began this academic year.

She leads a research team comprised of graduate students and youth researchers. In their work, they use a pedagogical approach to the ethnographic research they pursue. In the past, she taught arts and media workshops that have influenced the participatory research that she and her team conduct in after-school programs located within an alternative to detention program for court-involved youth between the ages of 12-16. The research team works in partnership with the facilitators of the program to develop workshops that are responsive to the needs of the program and to help them understand the ways in which arts-based and media approaches can create spaces for young people’s inquiry and learning. These spaces will allow us to understand their literate lives and also allow them to cultivate a range of media practices.

Dr. Vasudevan has recently published several pieces; among them a publication in the Journal of Adolescent and Adult Literacies titled, “In the Middle of Something: Reflections on Multimodal Inquiry as Artful Bricolage,” an article co-authored with Mary Ann Reilly, an educator and an artist in New York City. The article documents their conversation over the period of several months across a variety of social media platforms including Twitter, blogs, and Flickr.

Along with Tiffany DeJaynes, a CCTE alumnus, she has co-edited a volume called Arts, Media, and Justice: Multimodal Explorations with Youth. The volume features several graduates from the CCTE program, two faculty members from TC, teachers involved in the participatory research they conducted, and youth researchers. “The volume is a collection of chapters that explores the way media-based approaches were used in research and pedagogical work within two different alternative to incarceration programs in New York City,” she says.

She co-authored a piece in Reconceptualizing the Literacies in Adolescents’ Lives last year with a graduate school friend and colleague, Kelly Wissman, who teaches at SUNY Albany. They looked at the notion of autobiographies and authoring to understand the literate lives of young people.

Dr. Vasudevan has self-identified several consistent research threads that broadly span her published work, projects, and research interests in the areas of out of school community-based settings for education, how education is lived, and the use of spatial theories to frame ongoing exploration of how education is lived, enacted, and experienced. Related to that, she maintains a focus on adolescents, specifically court-involved youth and those in the foster care system.

A third thread was the presence of media and thinking about technology as, not only a tool for learning, but also a way to come to know and live in the world. Dr. Vasudevan and her research team investigate how media and media technologies can be and are used by young people as space to perform new identities and also as a space where they are making themselves known.
Dr. Lalitha Vasudevan – Continued

While Dr. Vasudevan maintains a full academic and research load, there are moments when she allows herself to indulge in activities such as walking, reading, letter writing, photography, and cooking. These are the quiet places she retreats to in contrast to the interactive work that she does while engaged in teaching, research projects, and collaborating with other people.

CCTE Colloquium Hosts Notable Technology Researchers and Developers

The CCTE program invited danah boyd and Duane Bray to speak at the Spring 2013 CCTE Colloquium to discuss technology-related issues. The colloquium also serves as a way to build community among CCTE doctoral students.

danah boyd is an academic and a scholar who examines social media, youth practices, tensions between the public and the private, social network sites, and other intersections between technology and society. Her many titles include Senior Researcher at Microsoft Research, Visiting Researcher at Harvard Law School, a Fellow at Harvard's Berkman Center, Research Assistant Professor in Media, Culture, and Communication at New York University, and Adjunct Associate Professor at the University of New South Wales.

A 2009 article in Fast Company named boyd one of the most influential women in technology. She also appeared in the 2008 PBS Frontline documentary Growing Up Online, providing commentary on youth and technology.

boyd’s research focuses on how young people use social media as part of their everyday practices. In recent years, she has studied Twitter, blogging, social network sites, tagging, and other forms of social media. She has an extensive publication list and has written papers on a variety of different topics, from digital backchannels to social visualization design, privacy to teen drama.

In May 2010, boyd received the Award for Public Sociology from the American Sociological Association's Communication and Information Technologies (CITASA) section. Also in 2010, Fortune named her the smartest academic in the technology field and "the reigning expert on how young people use the Internet” and she was included on the 2010 TR35 list of top innovators under the age of 35.
boyd has spoken at many conferences, including Special Interest Group on Information Retrieval (SIGIR), Special Interest Group on Graphics (SIGGRAPH), Computer Human Interest (CHI), Etechm Personal Democracy Forum and the American Association for the Advancement of Science (AAAS) annual meeting. She gave the keynote addresses at South by Southwest (SXSWi) 2010 and World Wide Web (WWW) 2010, discussing privacy, publicity and big data. Foreign Policy named her one of its 2012 Top 100 Global Thinkers "for showing us that Big Data isn't necessarily better data."

Duane Bray is a partner at IDEO, where he heads the firm’s Global Digital Business. He joined IDEO in 1995 to lead and develop the discipline of interaction design. Bray’s experience includes the development of major software and hardware programs and the integration of emerging technologies into human-centered products and services. He routinely explores the intersection of technology and people, revealing and elevating the emotional connections that we forge with digital media.

Bray has led or contributed to scores of design projects, including product interaction, interactive exhibits, and software for desktop PCs, the web, and mobile devices. His recent endeavors have focused on larger clients and strategic programs, such as design-language initiatives that address a range of platforms and customers. He assisted SAP in forming a human-centered division for sustained innovation and has worked closely with Microsoft for more than a decade. His client list also includes AT&T Wireless/Cingular, BMW, Texas Instruments, United Airlines, and Xerox.

Prior to joining IDEO, Duane worked for Pentagram Design, where he established an interaction design practice in its San Francisco studio. He holds a Master of Fine Arts degree from the University of Florida and counts bubblegum pop music and his customized Mini Cooper among his leisure-time passions and pursuits.
CCTE Current Student Spotlight: Darnel Degand, Communication, Computing, and Technology in Education

Darnel Degand is a full-time doctoral student in the Instructional Technology and Media program within the Communication, Computing, and Technology in Education program. Darnel is also teaching a second-level interactive media course at Teachers College, *Theory and Programming of Interactive Media*, which covers user experience and ActionScript 3 programming. His academic interests include educational entertainment technology and media and social success skills (life skills) development.

His family is from Haiti. He was born in Brooklyn and raised in Queens but he also lived in Haiti for approximately two and half years when he was young.

He went to the University of Pennsylvania for his undergraduate degree in Mechanical Engineering and Applied Mechanics and upon graduation he worked for a company called AMC Computer Corporation. He then attended New York University and received his Master of Science degree in Digital Imaging and Design. Afterwards he began freelancing for various clients throughout White Plains and New York City.

He eventually began working full-time as a Multimedia Designer/Higher Education Assistant for the City University of New York’s Queensborough Community College campus.

While working at his first job for AMC Computer Corporation, Darnel was responsible for creating corporate graphics and online interactive multimedia tools to be used in business reports, advertisements, sales aids, and presentations. He also led workshops where he taught corporate clients how to use various desktop applications. He credits this job with introducing him to the concept of knowledge management within an organization. He began to see how media was being used to bring new employees up to speed as they learned their job responsibilities. Human resources departments always needed this work to be done and this was his primary role.

Darnel also stated “I thought from a young age that you could use media, cartoons, and T.V. to teach.” He received his first opportunity to do this full-time when he began working as an online game developer for Sesame Workshop. This job allowed him to connect with his passion for teaching interactively through media and entertainment and provided him with valuable experience designing and developing online media content for Sesame Workshop.
Following his work in the positions mentioned above, he began his studies at TC in the CCTE program. The people at TC have enriched Darnel’s experience as a student at TC. “The people that I have met here have been really good resources, both students and teachers.” Darnel mentioned Ronah Harris and Carla Engelbrecht Fisher as colleagues who encouraged him to apply to Sesame Workshop. Dr. Vasudevan, his advisor, and Dr. Kinzer have been mentors to Darnel. He also noted other faculty and students that he has met along the way and values the relationships that have developed. “The courses that I have taken definitely helped…. That was the major reason I came here, to get more of a research and design background, with theoretical and educational design knowledge that I did not have.” He also mentioned Jessica Hammer as a notable colleague at TC because she spearheaded creating a library of books in the Games Research Lab. This library exposed him to numerous educational entertainment media-related books that he eventually purchased for himself.

Darnel was equipped with technical digital media and gaming design knowledge and skills, however he felt he needed to develop his skills in educational research and educational game design. He had a desire to develop educational games and realized he needed a theoretical base for the design choices he made. Darnel was creating what he thought were educational games, however, he wanted to know more about education to ensure his educational games were targeting the skills he wanted people to learn after playing his game. Therefore he chose to attend TC to do that work. Isaiah Belle, a former classmate from UPenn, was enrolled at TC and first introduced him to the CCTE website. After browsing the website, TC seemed to fit his needs.

Darnel indicated, “Understanding what it means to really create something that is educational, that is entertaining, and is educational for x, y, and z reasons,” was of value to him.

Darnel has worked fulltime throughout his time at TC. He currently works at Digital Generation as the Team Lead of his company’s Product Innovation Team. His group works under Digital Generation’s MediaMind division and they create numerous rich media ad formats for various clients, such as Viacom, Microsoft, ABC, and NBC.

His research interest is closely tied to his academic interest; hence his dissertation title is Social Success Skills: Black Male High School Students’ Perspectives on Society and their Media Experiences. His study concentrated on the social aspects of his participants’ media products and media experiences.

Darnel graduates this May and is currently working on projects that include a mix of real-world production and theory-based articles fit for journal publication. He plans to submit several articles for publication. He also continues to engage in the interconnection between theory and practice in his work to develop games for education. He is currently developing a game based on several cartoon characters from Coomacka Island, a series of stories he co-created and self-published with his partner Don P. Hooper.
Darnel Degand – Continued

Moreover, Darnel names professors that had an impact on his academic and research interest. Dr. Vasudevan taught the course, *Digital Geographies*, and Darnel stated “It just opened my mind to the socio-cultural side of technology, that it’s not just about the technical aspect and developing for a user that comes up to the machine and starts working with it. Digital Geographies brought up the concept of communities online.” This gave Darnel a new perspective on the use and outcomes of creating virtual spaces for people to engage online that are not necessarily physical communities. Additionally, Dr. Charles Kinzer recommended the book *Pause and Effect* by Mark Stephen Meadows and Darnel appreciated it because of its discussion about interactive media development and theory.

After completing his degree, he plans to continue his research in educational gaming design in addition to his current work in advertising technology. Eventually, Darnel hopes to find an opportunity in the future that will allow him to simultaneously conduct research and produce media products.

From his days as a child he has valued visual arts, specifically drawing. “**Visual arts is important to me. I also enjoy video games, comic books, and I really enjoy reading.**” Although his schedule is full he finds time to indulge in outdoor activities through sports and travel, especially during warm weather months. He believes his family would describe him as passionate, hard-working, and family-oriented.

_________________________________________________

Media Ideation Fellowship Awarded to Current CCTE Student, Tara Conley

Tara Conley is a third year doctoral student in the Communication, Computing, and Technology in Education program. She was born and raised in Cleveland, Ohio.

Her academic interests include mobile advocacy projects and participatory design, really focusing on how mobile technology can support communities, particularly urban communities. Hoping that in the near future she would be able to expand on this work to address the needs of rural communities, she seeks to understand the relationship between technology and epistemology and how technology can be used to enhance the lives of others in our communities.

*Tara Conley*  
Working closely with her advisor, Dr. Vasudevan, with court-involved youth by way of the course Youth Media and Educational Justice, she was able to connect with community members, case workers, attorneys, and young people. Being involved in Professor Vasudevan’s work enabled Tara to transition smoothly to her text line project.

Tara is building a text line for court-involved youth, an anonymous, SMS-based hotline that will serve young people involved in the welfare, juvenile court, and foster care systems in New York City. Text-line is now called TXT CONNECT ([http://www.txtconnect.org/](http://www.txtconnect.org/))
“The purpose of this communication platform is essentially allowing young people involved in foster care and the juvenile justice system to use their cell phones to text-in information that they need, if they need educationally resources, vocational resources, intervention support. The idea is that they would have intimate and anonymous means to do that using their cell phones.” TXT CONNECT will provide access to educational, employment, family planning, and mental health resources. Additionally, TXT CONNECT will provide instant support for youth in crisis and emergency situations. Since young people use their cell phones often, the SMS platform will serve as an accessible means to help them obtain the information and serve their immediate needs and requests.

The Media Ideation Fellowship, a Voqal initiative, was awarded to Tara and four others. She is under a three-month contract and the fellowship provides her with $12,000 to work on this project. In addition to the financial support that she receives, she also receives professional mentorship. She has from March 2013 to June 2013 to develop this project and submit a business plan at the end. Tara intends to build enough resources and network with enough people to move on to the next phase, apply for addition funding, secure 501(c)3 status, and actually produce the technology.

In addition to the fellowship work, this project serves as her pilot study, where she is investigating participatory design, an inter-disciplinary approach incorporating concepts, theories, and methods from digital humanities, social cognition, feminist ethnography, and communication studies. She is working with a youth advisory board to develop TXT CONNECT, the members of which are court-involved themselves and serve as co-designers for the project. These young people are building and developing this text line for themselves and their communities. It is important for Tara to consult with the community, truly listen to what their needs are, and develop a tool that is functional as well as useful for the community. She values the position, perspective, and experiences of the young people that are working on the project and the young people in the community.

Tara is also Hastac Fellow, which is part of a digital humanities scholarship ([http://hastac.org/scholars](http://hastac.org/scholars)) where they invite scholars to write/blog about different issues at the intersection of technology and humanities. She often blogs on hastac.org ([http://hastac.org/blogs/ara-l-conley](http://hastac.org/blogs/ara-l-conley)) to discuss various research interests, in addition to communicating with other scholars about the work they are pursuing. The purpose of this platform is to build a robust conversation with digital humanities at the center.

As founder of Media Make Change, in 2010 Tara intended to establish a non-profit, however in the summer of 2012 she changed to a LLC. Media Make Change is a multimedia production company that consults with schools and social entrepreneurs. In the past she helped build crowd-funding campaigns and assist in the design of media literacy curriculum for educational film companies. The mission of the company is to curate and produce digital media through action-based projects to enhance our community.
Adjunct Faculty Spotlight: Dr. Daniel Goroff, Mathematics Education

Dr. Daniel Goroff, a Distinguished Visiting Professor in the Mathematics Education Program at Teachers College, is currently teaching Advanced Proofs this semester. This course helps students formulate, write, and critique rigorous mathematical arguments.

He was born in Boston, Massachusetts, grew up in Fair Haven, New Jersey, then spent most of his life in Boston but now resides in New York City.

He became interested in education because he always liked talking about mathematics, “Once in a while when talking about mathematics you get a big kick out of understanding something that you didn’t understand before. Then, when you see other people get a kick like that from talking about mathematics, it can be tremendously appealing and exciting. Sharing these kinds of experiences lead to my interest in mathematics education.”

His curiosity about mathematics began before he started primary school. As a young child he engaged in discussion about abstract mathematical constructs by way of writing down the numbers he knew (1, 2, 3, 4,…), and then being prompted by his older cousin about extending his list of numbers to the right and the left. The extension to the right seemed plausible to him as a child, while the extension to the left was unsettling and intriguing.

Music was one of his passions; during high school he played in a rock band and he performed in different types of bands throughout college, too. Before his freshman year of college he was asked to rank his interests in potential college majors. His interests ranged across five subjects: physics, music, philosophy, economics, and mathematics. This posed a problem for him since he was equally interested in all five, however he placed mathematics at the top of the list since, to Dr. Goroff, mathematics seemed to have some connection with all of his interest, so he majored in mathematics. He continued to be involved in all of those interests; eventually he was able to teach physics, economics, engineering, and history of science at the college level as well as mathematics.

Dr. Goroff earned a B.A.-M.A. degree in mathematics summa cum laude at Harvard as a Borden Scholar, an M.Phil. in economics at Cambridge University as a Churchill Scholar, and a Ph.D. in mathematics at Princeton University as a Danforth Fellow. He also holds a Masters in mathematical finance from Boston University.

In 1983 Dr. Goroff accepted his first faculty appointment at Harvard University. He spent over two decades at Harvard, eventually becoming Professor of the Practice of Mathematics while also serving as Associate Director of the Derek Bok Center for Teaching and Learning and as a Resident Tutor at Leverett House. He is Professor Emeritus of Mathematics and Economics at Harvey Mudd College in Claremont, California, where he previously served as Vice President for Academic Affairs and Dean of the Faculty.
Dr. Daniel Goroff – Continued

Professor Goroff describes a common thread that runs through most of his teaching and research as, “Studying how systems evolve dynamically over time when they are optimizing some quantity. The Principle of Least Action in physics, for example, determines how mechanical systems evolve. Similar kinds of problems turn up in economics, too, when trying to maximize profits over time. It’s been fun to see – and to help my students see —how the same ideas and structures work in surprisingly different contexts.”

In pursuing his research agenda on nonlinear systems, chaos, and decision theory, Professor Goroff has held visiting positions at the Institut des Hautes Études Scientifiques in Paris, the Mathematical Sciences Research Institute in Berkeley, Bell Laboratories in New Jersey, the Dibner Institute at MIT, and at TC.

Dr. Goroff was invited to lead a seminar at TC in 2009. Following his seminar presentation the Mathematics program coordinator asked Dr. Goroff to teach a course within the Mathematics Education program at TC. Dr. Goroff was delighted to accept his invitation and has been a visiting professor ever since.

He is currently teaching an advanced proofs course, where students are learning to write rigorous mathematical arguments. Dr. Goroff provides the resources from this course; his lecture notes and exercises are a part of a textbook project. The set of notes for this advanced proofs course will eventually be presented in textbook form to help students learn how to argue mathematically.

“I’ve really been impressed by how all the students and faculty at Teachers College are so dedicated to helping everybody understand mathematics education. I just think that that kind of passion is great, especially when people are working very hard in both their jobs and in their courses.”

He has written at length about Henri Poincaré, a great 20th century mathematician. Poincaré invented a great deal of 20th century mathematics. He wrote about mathematics education, the philosophy of mathematics, and the philosophy of science. Poincaré has been an immense inspiration for Dr. Goroff.

At the Alfred P. Sloan Foundation, Dr. Goroff serves as Vice President and Program Director. There he is particularly concerned with supporting research on economics, finance, mathematics, the scientific and technical work force, and higher education.

According to its web site, “The Alfred P. Sloan Foundation believes that a carefully reasoned and systematic understanding of the forces of nature and society, when applied inventively and wisely, can lead to a better world for all. The Foundation makes grants to support original research and broad-based education related to science, technology, and economic performance; and to improve the quality of American life.”

In 1994, Dr. Goroff was elected to a three-year term on the Board of Directors of the American Association for Higher Education. During 1996-97, he was a Division Director at the National Research Council in Washington and, during 1997-98, Dr. Goroff worked for the President’s Science Advisor at the White House Office of Science and Technology Policy. During the Obama administration, he also served part-time in that office as Assistant Director for Social, Behavioral, and Economic Sciences.
Dr. Daniel Goroff – Continued

Dr. Goroff is a former Director of the Joint Policy Board for Mathematics, an umbrella group that serves the Mathematics Association of America, the American Mathematical Society, the Society of Industrial and Applied Mathematics, and the American Statistical Association. The Joint Policy Board for Mathematics helps these organizations promote mathematics and negotiate policy with the federal government in regards to mathematics.

As Director of the Joint Policy Board for Mathematics from 1998 to 2001, Dr. Goroff was called to testify by the House about educational and research priorities and again by the Senate during the 106th Congress. He also testified before the 109th Congress. Dr. Goroff was also Chair of the U.S. National Commission on Mathematics Instruction at the National Research Council. He was co-director with Richard Freeman of the Scientific and Engineering Workforce Project based at the National Bureau of Economic Research. The book they edited together is entitled *Scientific and Engineering Careers in the United States.*

Dr. Goroff recounts experiences that have impacted his career and perspective on teaching and learning of mathematics, “I’ve really been blessed by terrific mathematics teachers throughout my postsecondary career and I have spent many years associated with the mathematics department at Harvard. Almost every professor there has taught me valuable lessons of one kind or another…. But, if I had to pick out one experience or mathematician that had quite an influence on me, I would have to mention Dr. Henry Landau, who is now also a faculty member at Teachers College.” When still a college student working on mathematics problems and conducting mathematics research at Bell Laboratories, Dr. Goroff became stuck on the particulars of a mathematics problem. Colleagues suggested he consult Dr. Landau, who spent most of his career at Bell Laboratories. Not only was Dr. Landau very patient, gracious, and insightful, he thought about the problem a little bit and actually came up with a wonderful idea. From this experience they became friends and remain so for many years now. “That experience getting to know Henry Landau really inspired me. I thought that, if someone could take such joy and satisfaction in thinking hard, puzzling out, and working through mathematical questions, then I should see if I could do something like that, too!”

Dr. Goroff still finds time to indulge in listening to music, although he does not have as much time to play his saxophone anymore. He also enjoys art and aesthetic experiences whenever he can, in addition to pursuing outdoor activities like hiking.
Distinguished Alumni Spotlight: Dr. Chin-Chung Tsai, Science Education, Ed. D. 1996

The Mathematics, Science, and Technology Department at Teachers College honored Dr. Chin-Chung Tsai (Ed.D. ’96, Science Education) with the Distinguished Alumni Award in 2011-2012. The Distinguished Alumni Award is the highest honor bestowed upon an alumnus by the Department of Mathematics, Science, and Technology at Teachers College. First presented in 2004, the award is voted on by current faculty of the department and is granted annually in recognition of achievements and contributions to the fields of mathematics, science, or technology.

Dr. Tsai is Chair Professor at the Graduate Institute of Digital Learning and Education, National Taiwan University of Science and Technology, and Co-Editor of Computers & Education. He is from a small town in the middle of Taiwan and majored in physics as an undergraduate at National Taiwan Normal University. He then worked as a science teacher in a public junior high school in Taipei and obtained his Master of Education degree at Harvard University before attending TC for his doctoral studies.

As a doctoral student at TC, he investigated the relationship between Taiwanese junior high school students’ epistemic beliefs regarding science and how they organized scientific information during their learning process. The primary conclusion from his study was that learners with advanced epistemic beliefs tend to acquire richer and integrated knowledge structures in science. For Dr. Tsai, his TC experience included not only excellent science courses provided by the Science Education program but also courses in instructional technology, curriculum, and educational psychology. This rich experience has allowed him to conduct extensive research in his field furthering his research agenda after graduating from TC. “Teachers College has the longest history in the field of educational research and it has a diversity of departments which offer a wide range of courses. Besides, it has a prestigious reputation in science education. Therefore, I decided to choose Teachers College for my doctoral study,” he explained. Dr. Tsai described several valuable resources at TC, from a range of fascinating courses across programs and departments to meeting people from around the world, as opportunities that greatly enhanced his academic vision and worldview. The library offered abundant research resources that helped enrich his academic work, especially at the early stage of his research career.

Dr. Tsai can vividly remember professors and courses at TC that shaped his academic and research interests. A course on neurocognitive models, taught by Professor O. Roger Anderson, exposed him to cutting-edge perspectives in science education and education in general. A course on telecommunication, offered by Professor Robert Taylor, enabled him to establish a firm foundation that has informed his current research endeavors in e-learning.

He has approximately 100 publications in international journals. There are two major themes that describe his research publications. The first one is students’ conceptions of learning science, their epistemic beliefs about science, their approaches to learning science, and how these beliefs and approaches vary across different cultures. The second theme is chiefly concerned with technology-enhanced learning. His research team conducted a series of studies on people’s perceptions, attitudes, and behaviors in technology-assisted learning environments. If you are interested in learning more about his work, please visit www.cctsai.net.
Dr. Chin-Chung Tsai – Continued

Dr. Tsai does exemplary leadership work as the Chair Professor at National Taiwan University of Science and Technology, where he leads a research team of three faculty members, five postdoctoral researchers, and twenty doctoral students. In July 2009, he was appointed as co-editor of *Computers & Education* (ranked seventh among more than 200 educational journals indexed in Social Sciences Citation Index by 2011 impact factor values). Annually, he manages more than 400 submissions from scholars around the world.

In addition to his academic and leadership responsibilities, Dr. Tsai is an active member of education associations, such as the National Association for Research in Science Teaching and the American Educational Research Association, and has been a keynote speaker and conference chair at major national and international meetings. In spite of his demanding schedule, he enjoys jogging to help him relax. During longer vacations, he enjoys adventurous escapes to different countries.

Accomplishments and Announcements

**Mary Gastrich**, Science Education Ph.D. 1986. As of March 5, 2013, she received a promotion to Adjunct Associate Professor (from Clinical Assistant Professor) in the Department of OB/GYN and Reproductive Sciences at the UMDNJ Robert Wood Johnson Medical School. She is a member of Cardiovascular Institute of NJ and the Myocardial Infarction Data Acquisition System (MIDAS) research group and RWJMS Department of OB/GYN and Reproductive Sciences Research Pod.

**Maria Hwang**, CCTE, Ed.D. candidate, and Pantiphar Chantes presented an educational nutrition awareness game that was created with two other TC colleagues at the 7th Annual International Technology, Education, and Development (INTED) conference. The game is currently a paper-based prototype and they continue to work on turning it into a mobile version as an app for all platforms. The title of the game is "Monster Appetite" and it is designed as a supplement to health and nutrition education by promoting awareness about calories in daily food items. The goal of the game is to feed your pet monster avatar over the course of 7 days (in game time) and the monster with the highest calories at the end of the week wins. The designers of the game hope the game could be a good starting point to extend conversations into more in-depth discussions on calories, nutrients, food intake, consequences of careless consumption of food, obesity, anorexia, and bulimia. The 2012 Innovating Mobile Tech for Development Competition awarded Maria Hwang an $800 first prize. She also received an award from the New Media Task Force (NMTF) at the School of International and Public Affairs (SIPA), Columbia University.

**John Russell**, Science Education Ed. D. candidate, was chosen as National Finalist for the Ed Roy, Jr. Award for Excellence in K-8 Earth Science Teaching, an award from the American Geosciences Institute designed to award those who inspire a love of Earth Science in their students.

**Michael Shapiro**, Science Education M.A. and Columbia University School of Dental Medicine candidate, was selected as one of two national recipients for the ADEA/Crest Oral-B Laboratories Scholarship for Predoctoral Dental Students Pursuing Academic Careers.
The award is given annually to two students in the nation. The Masters program at TC undoubtedly aided his candidacy and he thanks Dr. Anderson very much for his help and support in the program.

---

**Faculty, Adjunct, Student, and Alumni Publications and Presentations**


**Cheng, T. J., Meier, E. B., Hakim, S., Mineo, C. M., & Sanchez, R.** (2013, March). *Situating professional development for online and blended learning contexts: The case of one growing private school consortium.* Paper to be presented as part of the Invited Symposium, Developing technology-infused professional learning experiences for teachers and administrators: Considering the educational context (Meier, E.B., Symposium Leader), at the Annual Meeting of the Society for Information Technology and Teacher Education (SITE), New Orleans, LA.


Gastrich, Mary Downes; Gandhi, Sampada K.; Pantazopoulos, John; Zang, Edith A.; Cosgrove, Nora M.; Cabrera, Javier; Sedjro, Jeanine E.; Bachmann, Gloria; Kostis, John B. (2012, October). Cardiovascular Outcomes After Preeclampsia or Eclampsia Complicated by Myocardial Infarction or Stroke. Obstetrics & Gynecology. 120(4): 823-831.
Faculty, Adjunct, Student, and Alumni
Publications and Presentations


Graves, K. E., Mineo, C., Meier, E. B., & Cheng, T. J. (2013, March). A moment of clarity: Using situated professional development in a district-wide summer school program to shift teachers’ perspectives on technology integration. Paper to be presented as part of the Invited Symposium, Developing technology-infused professional learning experiences for teachers and administrators: Considering the educational context (Meier, E.B., Symposium Leader), at the Annual Meeting of the Society for Information Technology and Teacher Education (SITE), New Orleans, LA.


**Faculty, Adjunct, Student, and Alumni Publications and Presentations**


**Meier, E.B.** (2013, March). *Developing technology-infused professional learning experiences for teachers and administrators: Considering the educational context.* Invited Symposium to be held at the Society for Information Technology and Teacher Education (SITE), New Orleans, LA.

**Meier, E. B., Sanchez, R., & Mineo, C. M.** (2013, March). *Supporting teacher leaders to drive innovative practice within an international context.* Paper to be presented as part of the Invited Symposium, Developing technology-infused professional learning experiences for teachers and administrators: Considering the educational context (Meier, E.B., Symposium Leader), at the Annual Meeting of the Society for Information Technology and Teacher Education (SITE), New Orleans, LA.

**Mineo, C. M., Meier, E. B., & Sanchez, R.** (2013, March). *Using technology to shift the culture of teaching: Exploring a three-year professional development initiative at one independent school.* Paper to be presented as part of the Invited Symposium, Developing technology-infused professional learning experiences for teachers and administrators: Considering the educational context (Meier, E.B., Symposium Leader), at the Annual Meeting of the Society for Information Technology and Teacher Education (SITE), New Orleans, LA.


Sanchez, R., Meier, E. B., & Graves, K. E. (2013, March). *Teachers leading by example: Deepening teachers’ science content knowledge through authentic technology-infused student-centered projects*. Paper to be presented as part of the Invited Symposium, Developing technology-infused professional learning experiences for teachers and administrators: Considering the educational context (Meier, E.B., Symposium Leader), at the Annual Meeting of the Society for Information Technology and Teacher Education (SITE), New Orleans, LA.


The MST Times is available online. The e-newsletter features interview videos, active links, and articles archives.

MST Times e-newsletter:
http://blogs.tc.columbia.edu/mst

MST Department YouTube Channel:
http://www.youtube.com/user/teacherscollegemst

Kenny Nienhusser, Former Director of Academic Administration for the Department of Mathematics, Science and Technology, created MST Times in Fall 2005.

Deiana Jackson, the Assistant to the Director of Academic Administration for the Department of Mathematics, Science and Technology, created the MST Department YouTube Channel in Spring 2012.

Each year, the MST Department Graduate Assistant is responsible for writing and editing the newsletter. Below, editors and respective volume numbers are listed.

Volume I (2005-2006): Raven Hebert
Volume V (2009-2010): Amy J. Rae and Diane R. Murray
Volume VI (2010-2011): Diane R. Murray
Volume VII (2011-2012): Yamit Daon (editor of Issue I) and Deiana Jackson (Issue II and Issue III)
Volume VIII (2012-2013): Deiana Jackson, deiana.jackson@tc.columbia.edu

If you would like a copy of the MST Times, please email your request, including full name, phone number, and mailing address to Jeffrey Jaech at jj2205@tc.columbia.edu.