The Legacy of Dr. Robert Taylor, CTE Emeritus

Educator, artist, researcher, and vocalist, Dr. Taylor is a modern-day renaissance man. His art proudly displayed in the Academic Computing offices and all around CCTE, Dr. Taylor is an integral part of the TC community. He was a founding faculty member of the CCTE program and continues to be an impassioned advocate for technology in the classroom.

The TC community paused to reflect on Dr. Taylor’s accomplishments on May 8th. Students, staff, faculty, family and friends gathered to recognize his rich work and legacy in Milbank Chapel.

Dr. Glen Bull, Ward Professor of Education at the University of Virginia, prepared a lecture to celebrate Dr. Taylor’s fruitful career. Dr. Bull is Co-Director for the Curry Center for Technology and Teacher Education and a professor of Educational Technology.

Dr. Bull’s lecture, titled Dynamic Media: The Work and Influence of Robert Taylor, explored Dr. Taylor’s work The Computer in the School: Tutor, Tool, Tutee. Published in 1980, this text provided the foundation for further study in the field of technology in education. To innervate the lecture, Dr. Bull facilitated a live demonstration of Logo Programming language with the turtle graphics as well as a live demonstration of Alice, educational software that teaches programming language [www.alice.org].

Dr. Chuck Kinzer, CCTE Program Coordinator, offered both opening and closing remarks. In addition, he presented a slideshow of major events in Dr. Taylor’s life, including images from his world travels, musical encounters, and life at TC. Professor Taylor himself shared a few words at the very end of the program. “I think it is important to be able to work with people with different ideas from you and listen to them. Then you can decide, ok, that makes sense. Or you decide, no, that doesn’t quite. But to listen and watch what they do is very useful.”

He emphasized building cross-curricular relationships to enhance the quality of research. He said, “It’s useful to think about other people and what they’re trying to do. Ask yourself, could that be related what I’m trying to do?”

The MST Department honored Dr. Taylor at a faculty meeting with a plaque reading: “In recognition of your outstanding contributions and commitment especially in computing and technology in education. Your vision, leadership and encouragement contributed to the professional growth, development and achievement of faculty and students at the College. Your many years of dedication and devoted efforts will continue to make a difference as students, colleagues and others use what you have innovated and provided them.”

With a bittersweet farewell, MST watches Dr. Taylor embark on his next journey. He will surely be missed.
Sheila Borges, Current Student, Science Education

Entering her first year as a science student at Rutgers University, Sheila Borges saw “two different worlds of science:” students who were prepared for collegiate study and students who were struggling to catch up.

For Sheila, high school was a challenge; she attended two years in Puerto Rico and two years in Jersey City, NJ. Language barriers were difficult to overcome, and when Sheila encountered college level science courses, she felt completely unprepared. Full time student with a full time job, Sheila had to delicately balance responsibilities at home, her job and schoolwork.

“Getting through my bachelors degree was the hardest thing I’ve ever had to do” she said. This challenge was the catalyst for her science education passion. “I came from an urban classroom, so I understand some of the challenges and am motivated to help.”

She graduated from Rutgers University with a Bachelors degree in biology and Italian. This led her to a position at Merck Co. & Inc, working in the toxicology lab and successfully sending a study to clinical trials. She went on to pursue a Masters at NYU in biology and microbiology, teaching as an adjunct instructor and working on *Helicobacter pylori*. She began a Doctoral program at The Mount Sinai School of Medicine, but felt something was missing. She enjoyed working with exciting viruses, such as the flu and Dengue-2, but ultimately, Sheila felt unfulfilled; “I missed teaching!” she said. Then, Sheila discovered Teachers College. After meeting with the Science Education faculty, she decided to leave her lab and transfer.

Sheila is currently conducting research in a Bronx high school as an extension of Dr. Christopher Emdin’s work. Partnering with 11th grade Science Research teacher Melissa Villanueva, Sheila implements tools of Reality Pedagogy and The 3 C’s: Cogenerative Dialogue, Coteaching and Cosmopolitanism. Before tackling The 3 C’s, Reflective Dialogues are implemented and structured to empower students to air ideas, grievances, and encouragement to others, including the teacher; issues are put on the table to be discussed. Afterwards, everyone takes part in a Cogenerative dialogue and co-create a plan of action to improve classroom structure. In Melissa Villanueva’s classroom, certain practices and rituals inhibited her from getting through the science curriculum. After a rewarding Cogenerative dialogue, the class agreed on strategies and solutions.

In the following months, science teaching and learning was enhanced as the classroom became a community of learners. Students were encouraged to Coteach, sharing knowledge about individual scientific interests with the whole class. Finally, Cosmopolitanism ethos was achieved. Cosmopolitanism is the philosophical idea that all humanity is a part of a large, inclusive community with the responsibility to ensure equality for all members. In the classroom, this means that students no longer feel it is enough for them to do well but it is important to help each other succeed.

With the assistance of both Melissa and Sheila, the 11th graders created a very successful Science Fair on June 3rd. “Students spent months researching their science projects and used many resources, including physicians, dieticians, scientists, teachers and technology. Not only did students learn science but also they learned how to use technology in new and innovative ways while addressing science misconceptions and crafting their own pamphlets” Sheila said. Melissa concurred, noting “Through this project, students have learned to help each other more willingly and students have been fostering a type of unity not seen before in the classroom.” Over one year, student grades, class management, unity, communication and presentation skills improved.

Along with her research at the high school, Sheila is working in the Urban Science Education Center. Through the center, an NSTA proposal was submitted and accepted affording high school students the opportunity to present work in urban science education. In addition, Sheila is developing and implementing a science curriculum for the Boys’ Club of NY- The Gardiner School. The curiosity and enthusiasm of her students is what keeps Sheila motivated. When she does get time to relax, Sheila enjoys spending time with her husband and two cats or relieving stress by shooting clay discs.
Born and raised in New Jersey, Betty Chen knew right out of high school she wanted to combine her interest in business and technology. She found her match in the Management & Technology program at Rensselaer Polytechnic Institute with dual concentrations in Management Information Systems and Marketing. After a few internships during college, Betty found her niche at Deloitte; she joined the team as a System Consultant in the summer of 2003.

At Deloitte, Betty worked on project proposals, requirements analyses, solution modeling, vendor selection strategy, and managed a group of developers and business managers. One of her major projects was an extended Consumer Business project which allowed her to work directly with clients to develop and refine strategic marketing methodologies to reflect a more customer-centered approach. She was able to blend old methodology with new technology to create a “smart” marketing system to automatically suggest products the consumer is likely to enjoy. Betty was instrumental in the Women’s Initiative Network (WIN) Newsletter at Deloitte; she joined the team as a System Consultant in the summer of 2003.

At a turning point in her life, Betty decided she wanted to further her education, and the Instructional Technology & Media program at TC was a perfect fit. Betty’s initial plans after TC were to work in training, but the degree opened up a fascinating new door. Betty graduated TC in 2008 and was offered a position at Dow Jones & Company’s Consumer Media Group where she currently takes part in managing the Wall Street Journal Online.

Her day-to-day responsibilities include exploring how to best automate and streamline the WSJ website, allowing subscribers to self-serve. This reduces customer service call volume and allows subscribers to achieve real-time solution to their problems.

Currently, a major undertaking in Betty’s group is to push and extend The Wall Street Journal brand through popular mobile applications, such as the iPhone and Blackberry. She comments, “In this ever-growing media rich environment, the need to change and keep up is very real, and the way to do that is by tapping into the various media channels and outlets that are available out there these days.” Her advice to TC students? “Many people think graduate school is about finding your niche, but I see it as the opposite. If you’re already an expert in a field, broaden your horizon instead of increasing your depth. These experiences will allow you to be more flexible in your job searches later on.”

Currently living in Princeton, NJ, Betty finds herself back in NYC on the weekends. She will “always be a city girl at heart.” In her down time, she loves to travel, and recently visited London and Paris with her long-time boyfriend. “Stumbling into great eateries in a completely foreign land is our idea of romantic fun!” In the future, Betty hopes to become the type of woman she admires most, “someone who can run a household and a career, ambitious perhaps, but I look forward to the challenge.”
Dr. Felicia Moore Mensah Invites Harlem Students to Explore Science at TC

With the help of Kasandra Brown, River East Elementary science teacher, Dr. Felicia Moore Mensah introduced a group of fourth grade students to TC. The students had a jam-packed day of fun, including a library tour, visits to science classrooms and an engaging set of science experiments. The purpose of the day was to alleviate looming stress engendered by standardized tests. Engaging students with science in a new way freed them to let loose, test ideas, and through experiments, learn more about magnetism, measuring and physics.

Three years ago, Dr. Moore Mensah met with Katie Smith, River East Principal, and found that the school had no science program. River East Elementary is a Title I school serving predominantly Latino and African American students. Dr. Moore Mensah knew she could be of service, so she stepped in to help. In addition, “This outreach is one way for preservice middle and secondary science teachers in the Science Education program to make connections to the importance of science education at the elementary level” said Dr. Moore Mensah. The three-year partnership has been fruitful, and changes in student behavior and performance are notable.

ABC News highlights Dr. Chris Emdin: Teaching Science through Hip-Hop

Did you know that Dr. Chris Emdin is an MC? ABC news caught him rapping at Marie Curie High School in the Bronx, where he currently studies the use of hip-hop language in science classrooms. Why hip-hop? Dr. Emdin notes that “You want a positive emotional energy surrounding science… and all those attributes that you want in a science classroom happens when

Pounding on desks and spitting rhymes about photosynthesis and sickle cell anemia may not hit Top 40, but the pattern and engagement help students remember science concepts. To see Dr. Emdin in action, visit:

http://abclocal.go.com/wabc/video?id=6795554

Bird’s Eye View: The Insight Project, Dr. Lalitha Vasudevan

“We all wear masks. They disguise our real selves, our real faces, and they give us power. The power to portray ourselves just right in the streets, at school and especially at church, if you know what I mean. Change your mask, you become a different person. Problem is, when we wear one mask too often, it might start to cling to our face, and after a while we stop trying to pull it off. You know you in trouble when you start to believe what you see in the mirror.”

This powerful quote was collectively written by court-involved youth for the Bird’s Eye View Script, performed on May 8th in the Cowin Center. The performance was a part of The Insight Project, a collaborative theater program for court-involved youth. Participants use story telling, improvisation, character development, and other forms of communication to provide a “Birds Eye View” of the “roots and branches” of offending behavior.

The project goes through three cycles per year, offering a new script and performance each cycle. In this performance, a cast of four performed seven roles, mentored by CCTE Professor Lalitha Vasudevan, a professional actor, and a Cases teacher. The Insight Project is sponsored by the Cases program, which offers court-involved youth internship programs, GED and college prep classes, and drug and alcohol treatment.

The evening ended with a question and answer session with the participants. Kristine Rodriguez, CCTE student, felt “the talkback at the end of the night was a powerful moment. The participants were able to interact with the audience not as characters, but as themselves. Not easy to do in front of a room full of strangers.” It was clear the process had a positive impact on the participants.

A final quote from the script:

“I say young but his age don’t have a thing on his experience. No, David’s lived a lifetime, in a few short years. He’s made a few mistakes, and bound to make a whole lot more, but trust me, he’s trying to keep his vision of life clear.”

Adapted from CUSpectator Article:

Adapted from ABC News Article:

“Chatting with Dr. Vasudevan.”

“Live theatrical reading.”
On May 16th, 2009, one-hundred-twenty individuals including TC students, faculty, staff and local community members, gathered together to learn about the MIT-designed game called Scratch. According to the MIT website, “Scratch is designed to help young people (ages 8 and up) develop 21st century learning skills. As they create and share Scratch projects, young people learn important mathematical and computational ideas, while also learning to think creatively, reason systematically, and work collaboratively.” In Scratch, users are creatively empowered to write stories, dream up characters, make art and share their work with others.

TC was one of about one-hundred-forty locations to host Scratch Day. TC’s Scratch Day was sponsored by the department of Mathematics, Science and Technology, the department of Human Development, the Institute for Learning Technologies, and the Office of School and Community Partnerships. The event was free and reached out to local parents and their children. The age range was 7 to 65!

Attendees included over forty students from the A. Philip Randolph Campus High School (a partner school with the TC Office of School and Community Partnerships) in the Bronx. In addition, Jared Jax, current MST student, brought fifteen students from his physics class at the Bronx Engineering and Technology Academy.

The day was filled with interactive presentations, hands-on instruction and a game jam event for the youngsters, led by Lance Vikaros, Dan Hoffman, Jonathan Vitale, and Greg Hallman. Guest presenters included Tammy Stern (Google, MIT), Sheila Tejada (Brooklyn College), Tim Cooper (Friends Seminary), Kim Tresohlavy (American School of Doha, TC Alumna), and Andrew Gardner (The School at Columbia).

“We think Scratch Day was a great success” said Ronah Harris, one of the dedicated team of organizers and a CCTE doctoral student, “it speaks volumes to the need for more engaging technologies in the classroom.” Cameron Fadjo, TC Scratch Day Committee Chair and HUD doctoral student, agreed. “My hope for the event was that we aim big, create an event in scope and breadth appropriate to a school and neighborhood of our size, and create a chance for those in the community with little opportunity to experience Scratch.”

Dino Sossi, CCTE doctoral student and Scratch Day attendee, commented “I was most impressed by the engagement of all the participants: children, teens and parents alike. You could feel how much everyone thoroughly enjoyed themselves, not even in terms of the experience of using Scratch but also the sense of camaraderie fostered by the organizers.”

Eric Carson, a CCTE student, [pictured above], “really enjoyed working beside some of the high schoolers who were just learning how to program with Scratch.” He commented, “While helping them out, I learned some new techniques myself.”

The day ended at 5PM with the presentation of student work. “The culmination of projects at the end was exciting to watch, as the kids explained their projects, laughed at their mistakes, and took pride in their accomplishments” noted Zainab Kabba, CCTE student.
Dr. Neil Grabois, Adjunct Professor, Mathematics Education

A native New Yorker, Dr. Neil Grabois went to elementary school in Brooklyn. It was “very dangerous and very uncomfortable. Kids had zip guns, knives, and brass knuckles.” Looking for a way out, Dr. Grabois took a qualifying test for a math and science high school in Manhattan. He was admitted, and soon enough he was applying to college. His guidance counselor recommended Swarthmore College, and he felt at home in the small liberal arts community. He was married during his senior year at Swarthmore, and decided to continue his studies in a PhD program, thanks to a professor’s encouragement. As he was finishing up his PhD in Mathematics, Dr. Grabois decided he wanted to become a professor at a small university. His thesis advisor went to Williams College, so he called up a few colleagues, and the rest is history. “Those were not the days of elaborate searches.” He said, “They were old boy days.” He began teaching Mathematics at Williams.

Fortuitously, Dr. Grabois was asked by the Williams College President to become Dean of the College. He accepted, and just before he took office, the Cambodian Incursion and Kent State occurred, resulting in incredible student unrest. “Those were not the days of elaborate searches.” He said, “They were old boy days.” He began teaching Mathematics at Williams.

In order to deal with the challenges, Dr. Grabois set up T-Groups to facilitate dialog about tough issues. The groups included school psychologists, students and faculty. “Colleges didn’t know what they were doing when they made an effort to be more diverse. Black students often came from poor communities in urban areas and were, not surprisingly, uncomfortable in a tiny, homogeneous community.” The first T-Group dealt with racial issues and lasted about nine months. “Students explored who they were, who they weren’t, and it was extraordinarily powerful.” The following year, they did a T-Group with men and women, in light of the college’s move to co-education. “It quickly became difficult for students. There was crying, students left the group, and after the first meeting, one of the psychologists quit.” The group only lasted a few more weeks. “It still surprises me that male/female issues were much more difficult to handle than racial issues.” After five years of being Dean, “I had enough. I was burned out. I hadn’t signed up to be a psychiatrist or counselor. I was interested in the institutional issues.”

Providentially, the President invited Dr. Grabois to become Dean of the Faculty. He held the position only a brief period when the President asked him to serve as Provost. He was Provost from 1976-1980. At Williams, Dean of College, Dean of Faculty and Provost are rotating positions. In other words, faculty members rotate in and out of positions. “It’s very unusual, but it means that separation between faculty and administration is almost non existent.” After his stint as Provost, Dr. Grabois went back to the faculty and became Chair of the Mathematics Department. His term as Chair was followed by another five years as Provost.

During an accreditation meeting at Colgate University, the President of Colgate addressed Dr. Grabois: “I think I will be leaving, would you like to be President?” Of course Dr. Grabois acceded, and after a short vetting process, he became President for an eleven-year term. After his service at Colgate, he and his wife [a native of Washington D.C.] agreed it was time to move back to a big city. Dr. Grabois took a position at Carnegie Corporation of New York as Vice President for Programs and Strategic Planning. He held the position for eight years.

Through a friend, Dr. Grabois was introduced to Teachers College. He met with Dr. Kevin Dougherty in the Higher Education program about teaching a course in The Liberal Arts College. Since then, Dr. Grabois has taught in the Organization and Leadership and MST Departments. In his spare time, he holds positions on many boards, including Swarthmore College and Smith College. He enjoys playing tennis and seeing live music, especially performed by his two talented sons.
Recent Publications & Presentations


Recent Accomplishments


Natalie Berkowitz, 2002 Science Education alumnus, writes a blog covering current educational issues. Check it out: http://whereiskatima.wordpress.com/

Kyong Mi Choi, 2009 Mathematics Education alumnus, was appointed as an Assistant Professor in Mathematics Education at the University of Iowa for the 2009-2010 school year.

Tim Gildner, CCTE alumnus, currently works with Think!Kidz (www.thinkkidz.com) creating applications for the iPhone and other mobile devices. He is working with other educators to create language and communication applications for children with learning disabilities.
Recent Accomplishments, Cont.

Dr. Ellen Meier, CCTE Professor, invited Harry Phillips III, member of the NYC Board of Regents to speak at the CCTE Colloquium on April 2nd.

Dr. Felicia Moore Mensah, Science Education Professor, authored “Teachers’ Coping Strategies for Teaching Science in a “Low-Performing” School District.” The work was honored by NSTA and included in the Summer Reading List.

Dr. Frank Moretti, CCTE Professor, served as the convener of the Georgetown/Columbia Conversation on Technology and Education on November 19th & 21st, 2008 at Georgetown University. He also served as a visiting distinguished professor at The University of Buenos Aires in July 2008.


Dr. Michael J. Passo, 1974 Science Education alumnus, has been elected a Fellow of the Science Teachers Association of New York State. He also serves as the President of the National Earth Science Teachers Association, the largest organization devoted to supporting K - 14 Earth Science Education.


Jaime Sanchez, CCTE Alumnus, received the Outstanding Paper Award at the ED-MEDIA 2009 Conference for his work: “Best pedagogical practices with ICT in Chilean classrooms.”

Barbara C. Siegell, 1963 Science Education alumnus, currently works as a patent attorney for the DuPont Company and teaches a course in the DADA Art Movement at the University of Delaware's Academy of Lifelong Learning, for individuals age 50 and older.

Phillip Stewart, Science Education student, was awarded the Walter M. Sindlinger Excellence in Writing Award for his essay titled “How does prior 3D gaming experience affect or inform how a science teacher foresees using Physics Geeks with students to support learning?”

Dr. Lalitha Vasudevan, CCTE Professor, received three grants in 2009: Dean’s Fellowship Program for Teaching and Diversity; Dean’s Competitive Grant for Pre-Tenured and Non-Tenured Faculty; Zankel Urban Fellows Internship Award.

Congratulations MST Graduates!

Check out the new interactive MST Times Online for additional links, photos and video clips: blogs.tc.columbia.edu/mst

and

Join your MST colleagues on Facebook: www.facebook.com/group.php?gid=30288599145