Dr. Henry Pollak, Professor of Mathematics Education, celebrates over 25 years as a visiting professor at TC. He was born in Vienna, Austria, and moved to the US in February of 1940.

Dr. Pollak was a professional research mathematician for much of his career. Once he retired from research mathematics he extended his work in mathematics education.

His interest in mathematics goes back to the third grade. He has a composition book written in German where he wrote, “My father wants me to be a lawyer, but I want to be a mathematician.” He knew then that he wanted to be a mathematician. Later Dr. Pollak majored in mathematics at Yale University. He began his undergraduate work at Yale during World War II in the summer of 1944.

It became known to Dr. Pollak that a future mathematician should concentrate on analysis and topology. He took a year of point set topology with Dr. Ed Begle as a senior. This interaction was a critical time in his career.
Modern algebra began to be recognized as a third fundamental for a future mathematician a year or two later. He took a course with Dr. Birkhoff and Dr. MacLane at Harvard in his first year of graduate work and took a course on Riemann surfaces with Dr. Ahlfors, who became his thesis advisor. Dr. Pollak became fascinated with analysis as practiced by Dr. Arne Beurling during his year as a visiting professor. Dr. Henri Cartan taught what was perhaps the first course in algebraic topology on this side of the Atlantic at Harvard University during his second graduate year. “Professor Ahlfors told me to take it, and I am delighted that I did.”

In his last year of graduate work a notice appeared on the bulletin board that W. Deming Lewis of Bell Laboratories was interviewing doctoral candidates, including mathematicians. Dr. Pollak understood that, if he were offered a job at Bell Laboratories, it would be to do mathematics research, and he would not be paid to do something else, which appealed to him.

In 1951 he earned his PhD in mathematics from Harvard and went to work for Bell Labs, where Dr. Pollak became a successful research mathematician and was promoted to head the research organization in mathematics and statistics.

“You may begin to suspect that my experiences with the universality of applications of mathematics in the Bell System might inevitably lead to some involvement on my part with mathematics education. If, as I was beginning to see, interesting and useful applications of mathematics were everywhere around us and if in fact all major areas of mathematics were subject to the possibility of being important for applications outside of mathematics, should this not affect what mathematics we teach and how we teach it at all levels?”

With the great increase in importance of discrete mathematics, Dr. Pollak and a number of his colleagues at Bell Labs were drawn to this development. He often attended Al Tucker’s Combinatorics Seminar at Princeton University, where educational connections for the research we were also under discussion.

When the great Sputnik scare in the late 1950s hit the US, the National Science Foundation began to originate and support a number of educational projects at the elementary and secondary school levels in mathematics and science. After the beginning of the Physical Sciences Study Committee (PSSC) in 1957, the largest of the mathematics projects, the School Mathematics Study Group (SMSG), began operations in the summer of 1958. The chief organizers were Al Tucker, as the head of the organizing committee, and Ed Begle, the overall project leader. When they discussed whom to invite to the first planning and writing session in July, Dr. Pollak was invited although his work was primarily in industry.

About a year later, the National Science Foundation began to support a major effort to rethink undergraduate mathematics, which became the Committee on the Undergraduate Program in Mathematics (CUPM) of the Mathematical Association of America (MAA). Dr. Pollak was asked to join the CUPM effort as well, where he became a member of the overall committee and also of the panel on mathematics for physical sciences and engineering. There were other separate panels on pre-graduate mathematics, on mathematics teacher education, on mathematics for the social and biological sciences, on mathematics for computing and mathematics for statistics, mathematics for two-year colleges, on applied mathematics, and other specialized issues.
Faculty Spotlight – Continued

“But without question the most difficult task we undertook was to combine the results of all the individual studies into a single collection of courses which came as close as possible to covering all the needs for all the purposes and all the destinations of undergraduate mathematics students and could be offered by a fairly small department in a broad-purpose liberal arts college.” The result was called A General Curriculum in Mathematics for Colleges (GCMC).

In SMSG, Dr. Pollak was assigned to the team working on the first course in algebra. For the next 28 years he spent approximately 10-15% of his time and intellectual capital thinking about mathematics education. In fact, Dr. Pollak become chairman of the advisory committee to SMSG in the late 1960s and in 1975 became president of the Mathematical Association of America (MAA). At the time he was deeply involved in two fields, one in mathematical research in an applied environment and the other in mathematics education at both the school and the college levels.

Dr. Pollak’s thirty-plus years as a mathematician at Bell Laboratories consisted of conversion from pure mathematics to an ever widening and deepening experience and an appreciation of what applied mathematics was truly all about. “I have no detailed records of how all this happened. It seems in retrospect as if, first of all, I had enough basic ability to become a reasonably good mathematician in whatever situation I found myself. Very importantly, I was not committed to any one particular branch of mathematics and had never developed the notion that there was one area in which I wanted to work exclusively. Yes, there were particular topics in which I became relatively expert but I never could turn down what looked like a nice problem no matter which field it was in. This was characteristic of many of the mathematicians at Bell Labs. They had their specialties but couldn’t resist a tempting departure.”

Occasionally he attended the International Congress of Mathematicians (ICM). At the 1966 ICM in Moscow, there was an arrangement for a small group of Americans to take a brief tour of mathematics education in the Soviet Union. Because he was involved in various mathematics education activities he was invited to be in this group. The head of the team was Professor Bruce Vogeli of Teachers College, who was a specialist of mathematics education in Russia. During this conference he and Professor Vogeli became acquainted and in the following years Professor Vogeli invited him to teach a course as a guest lecturer on the applications of mathematics.

He retired from industry in 1986 after 35 years of service. In the fall of 1987 he became a visiting professor at TC and has remained an integral part of the faculty for over 25 years. Dr. Pollak often recites to students in the mathematics education program, most of whom are practicing teachers, “I will be glad to try to teach you mathematics, if you’ll try to teach me how to teach.” Over the years Professor Pollak has taught several introductory graduate courses in a variety of mathematical topics: real variables, complex variables, dynamical systems, combinatorics, graph theory, applications of mathematics in engineering and the physical sciences (primarily information theory and coding), applications of mathematics in social sciences, which are problems of social choice voting and apportionment. The content of his courses include a discussion about issues related to the teaching of that subject and to connect topics in that course to the mathematics learned and taught in undergraduate and secondary mathematics. “We take the time to reflect on the topics the graduate students will be teaching at the undergraduate and secondary levels.”

While at Bell Labs, mathematical modeling was an important and interesting part of his work. Professor Pollak describes mathematical modeling as “using mathematics to help understand things in other fields.”
Faculty Spotlight – Continued

With the release of the Common Core State Standards in Mathematics (CCSSM) three years ago, modeling became a central focus of mathematics education. Since then there has been an increased interest in mathematics educators wanting to engage in mathematical modeling, although there is an instance of modeling in university mathematics and secondary schooling prior to the release of CCSSM. While modeling is a hot topic now, Dr. Pollak’s interests extend to the teaching of many topics in mathematics.

Recently Professor Pollak wrote a chapter on the psychology of mathematics, focusing on the relationship between pure mathematics, applications of mathematics and modeling, and the teaching of mathematics. He also gave an address on this topic at the International Conference on the Teaching of Mathematics and its Applications, held in Brazil this past summer. He regularly publishes a publication of in the Consortium for Mathematics and Its Applications, Inc., (COMAP) on mathematics or applications of mathematics that he particularly enjoys; over twenty individual articles have been published.

Professor Pollak has been a dedicated member of several professional organizations: the American Mathematical Society (AMS), an organization for mathematics research, for over 60 years; the Mathematical Association of America (MAA), which primarily focuses on undergraduate teaching for over 50 years; and the National Council of Teachers of Mathematics (NCTM) also for over 50 years.

In addition to his contributions to research in mathematics and mathematics education, Dr. Pollak finds great interest in collecting full stamp covers and is an honorary member of the stamp club in Austria and England. He also finds time to enjoy hiking, opera, and classical music.

New MST Faculty Spotlight: Dr. Nicholas Wasserman, Mathematics Education

The Mathematics, Science, and Technology Department have welcomed Dr. Nick Wasserman as the new assistant professor in the Mathematics Education program. He is currently teaching a finite mathematics course. Dr. Wasserman is also a TC alum, MA, Mathematics Education ’08 and PhD, Mathematics Education ’11.

Dr. Wasserman was born in Arizona and raised in the Midwest, primarily in Oklahoma. He was interested in mathematics growing up and enjoyed problem solving; in addition, he was part of an accelerated mathematics program where he took algebra as a 7th grader and Calculus I and II as a junior and senior. But while in high school he enjoyed mathematics, he had not considered teaching mathematics nor considered education as a career path.

He attended the University of Texas at Austin to pursue his undergraduate degree in architecture, where he later changed his major to mathematics and mathematics education by enrolling in the UTeach program.
The UTeach program, developed for preparing secondary mathematics, science, and computer science teachers, has since expanded and been replicated at 35 institutions across the country.

When Dr. Wasserman began to study education in the UTeach program he realized that teaching mathematics was an extremely creative endeavor. Finding ways to present topics and help students understand concepts was both challenging and rewarding. During his time as an undergraduate, he was able to take both mathematics courses and courses about the teaching and learning of mathematics. All the while enjoying the outdoors through sports and activities such as tennis, skiing, and hiking. He had a number of professors in the UTeach program that shaped his understanding of mathematics education and education in general, “They were fantastic educators.”

After completing his undergraduate degree, Dr. Wasserman taught for three years in Austin as a secondary teacher and coached tennis. As a high school student, he remembers how influential taking calculus was for the first time; as a secondary school teacher, teaching calculus became a personal quest, which eventually led to teaching a variety of topics in secondary mathematics. Following these three years he began his graduate studies at TC. He spent two years at Southern Methodist University as an assistant professor of mathematics education, revamping and developing their sequence of graduate courses, before returning to TC as a faculty member in the Mathematics Education program.

As a TC student, Dr. Wasserman recalls his experience of beginning to think about research in a new way, as a contribution of new knowledge in the field. His dean at Southern Methodist, David Chard, helped him more precisely craft and define his research agenda, which relates to teachers’ horizon content knowledge.

Currently, Dr. Wasserman is teaching an introductory graduate mathematics content course on finite mathematics, MSTM 4038; in Spring 2014 he will teach a mathematics content course and a research seminar for doctoral students. Primarily his teaching load will include teaching both mathematics content and mathematics education courses. He enjoys working and interacting with teachers and thinking about the teaching and learning of mathematics.

Dr. Wasserman particularly enjoys teaching discrete mathematics topics, especially combinatorics. As a secondary teacher, he recalls his experiences with a finite mathematics course he developed for high school students finishing pre-calculus as juniors who do not enroll in advanced placement calculus or statistics. “The students in the course got to see a different side of mathematics and it was really powerful to see these kids that struggled with pre-calculus topics, primarily functions, and then to see them really thrive and enjoy some of the topics in discrete mathematics. And be surprised that mathematics could be so different from their previous experiences.” He also taught a finite mathematics course for undergraduate mathematics majors at Southern Methodist University.

His scholarly work and interests relate to studying how knowledge of advanced mathematics impacts K-12 teaching practices. Much of his research is guided by the Mathematical Knowledge for Teaching framework, which came out of the University of Michigan as a practice-based orientation toward developing a professional knowledge base. One element of this framework is called horizon content knowledge, which was less developed than the other aspects but focused primarily on how advanced mathematics impacts teaching practice. Dr. Wasserman recently published an article about horizon content knowledge, further developing and conceptualizing this component of the framework and its potential impact on practice. He used two vignettes to depict how teachers’ horizon knowledge may impact planned teaching practices and not just change teachers’ actions in the moment.
New MST Faculty Spotlight – Continued

Dr. Wasserman is also working on a number of writing projects from a funded study to explore how group theory impacts teaching practice. He is still analyzing the data from the group theory project in order to provide insight into how such advanced mathematics influences classroom teachers’ practices. Alongside this project he is analyzing the Common Core State Standards in Mathematics (CCSSM) through the lens of advanced content knowledge, which has led to doing some broader work conceptualizing the relationship between horizon content knowledge and more elementary mathematics. In addition, Dr. Wasserman completed a book chapter about the use of SketchUp, a dynamic technology tool, in mathematics education that will be published in the spring. In addition to these research projects, Dr. Wasserman is working with faculty at Rutgers University and Portland State University related to thinking about how a real analysis course could impact teaching secondary mathematics.

In conclusion, Dr. Wasserman reflects on the positive influences throughout his career, “At every stage and every step there have been people that I’ve wanted to emulate, wanted to learn from, and who have pushed me toward what came next.”

Dr. Wasserman maintains active membership with several professional affiliations, including the National Council of Teachers of Mathematics (NCTM), Mathematical Association of America (MAA), American Educational Research Association (AERA), and Association of Mathematics Teacher Educators (AMTE).

Aside from his busy academic schedule, he tries to maintain a balanced lifestyle, which includes spending time with his family, traveling when time permits, homebrewing, and his preferred form of exercise: playing tennis.

More Information:
TC Faculty Profile: http://www.tc.columbia.edu/academics/?facid=nhw2108

Personal Professional Website: http://www.columbia.edu/~nhw2108/

Available at: http://flm-journal.org/index.php?do=show&lang=en&showMenu=33%2C3
Alumni Spotlight: Dr. Maria Rivera Maulucci, Science Education PhD ‘05

Dr. Maria Rivera Maulucci is an associate professor of education at Barnard College. Her responsibilities include foundations courses on contemporary issues, secondary education and science education courses, and student teaching supervision.

Dr. Maulucci is second generation Puerto Rican American, one of eight children, born and raised in Bronx, New York.

She attended Bronx High School of Science, and then completed her undergraduate work at Barnard College. She earned her master’s in forest science at Yale University. Dr. Maulucci completed her doctorate in science education at TC ‘05.

She began teaching in the Bronx, New York, at a private urban school for low-income gifted youth, where she taught for seven years. Soon after she took a position with the Department of Education in a K-8 science cluster at a school in the Bronx. She became the science, mathematics, and technology developer there. She took a year and a half off to complete her master’s degree at Yale University. Following the completion of her degree she returned to the Department of Education and became a district staff developer and director of the Science and Technology Center for three years.

Many of the projects she was involved in at Yale were interdisciplinary projects, with an education component where her expertise as a science educator was a resource. Urban forestry, her focus at Yale, concentrates on community participation, where the community is involved in the decision-making related to forest resources in their area. Dr. Maulucci’s work at Yale transferred to pedagogical strategy to involve students in the science education curriculum decision-making, which led to her work as a doctoral student at TC.

As a TC student, she was a science educator as well, which afforded her the opportunity to apply the theories she learned to her teaching practice in the classroom. She took a course with Dr. Michelle Knight on critical pedagogy that resonated with her; the course focused on the development of skills for teaching for social justice.

In addition to her academic work as a graduate student at TC she was able to develop and teach two graduate-level courses at TC, which really helped her transition into the faculty position at Barnard College.

Dr. Angie Calabrese Barton was her dissertation sponsor. She worked very closely with Dr. Maulucci in the Urban Science Center. She has been a mentor throughout her career, providing her with advice and opportunities.

When she was working as a district staff developer, Dr. Maulucci established a Science Center in one of the schools, where urban fellows worked in the school directly with youth and teachers around science education during the school day and developed after-school programs. Dr. Maulucci said, “The work with the Urban Science Center really transformed my thinking in a lot of ways about what’s possible when schools and universities collaborate for the benefit of youth.”
As an associate professor of education at Barnard College she developed and taught a course entitled *Science in the City*, where pre-service and in-service teachers form teams. “The essential elements of that course were to incorporate the resources of the city to enhance science teaching and learning.” The teams work directly with the American Museum of Natural History, where the classroom teachers take their students on a field trip to the museum to participate in three seminars held at the museum. “The course is very hands-on, blending theory and practice.” Dr. Maulucci is in the process of developing *Science in the City II*, to focus on the next generation science standards and the implications those standards may have on teaching and learning. In addition to the standards focus, engaging families in the work of helping students persist in science will be integrated into the course. For example, the teams will develop related after-school programs, such as family science nights.

Dr. Maulucci’s current academic focus is teacher learning. She wants to know what prompts teachers to learn, what helps them learn, and what that learning process is like. Most recently she became interested in teachers’ emotions and the role emotions play in teacher learning. “Really thinking through how we can support teachers in teaching for social justice.” Dr. Maulucci continues to think about how we prepare teachers to cope with the challenges that lie ahead and how we can give teachers the tools and strategies to reflect on their experiences to help them (a) stay in the field, (b) be successful, and (c) hone their craft and improve.

At Barnard College, Dr. Maulucci is the principle investigator of Barnard’s Noyce Teacher Scholar Program, funded by the National Science Foundation (NSF), a five-year 1.2 million dollar grant. The purpose of the program is to develop and carry out programs to recruit and retain quality STEM teachers. All but one component envisioned for the programs have been implemented. By the end of the project they will have recruited and trained 16 new STEM teachers at Barnard. The program provides scholarships, mentoring, and internships for students. This year they have their first cohort of three Noyce Scholars. The intention is to support them now during student teaching, and then mentor them for the first two years of teaching.

In the *Journal of Research in Science Teaching* Dr. Maulucci published an article describing the development of an emotional genealogy of a pre-service science teacher. Through a life history, Dr. Maulucci was able to look at her early school experiences, her beliefs and attitudes about science, experiences becoming a teacher, experiences in teacher education courses, methods courses, student teaching experiences, and the role emotions play in teaching and learning science.

She works in museums with pre-service and in-service teachers about what learning is like in museums, how learning is different, and how learning is similar to learning in the science classroom. Dr. Maulucci considers the influence informal experiences have on teacher learning. When teachers bring their students to the museum, teachers are given the task of analyzing evidence of engagement and learning in their own students. “My current projects are looking at what evidence of learning do teachers identify, what evidence of engagement do they identify, within these museum settings.”

Along with her academic commitments, she is a member of National Association for the Research in Science Teaching (NARST), Association for Science Teacher Education (ASTE), National Science Teachers Association (NSTA), and American Educational Research Association (AERA). Dr. Maulucci is heavily involved in the NASRT equity committee, both as a volunteer, committee member, strand coordinator, and a part of their ad hoc committee for equity and history.
 Alumni Spotlight – Continued

Through her involvement she has been able to mentor scholars of color within that particular organization. Dr. Maulucci is also a member of the equity committee with ASTE.

In addition to her academic work, Dr. Maulucci finds the time to enjoy creating music by playing the guitar, writing music, and singing. She belongs to Our Lady of Grace Parish in the Bronx, where she sings in the choir.
Joey Lee has received TC’s 2012 Strage Prize

Joey Lee, Assistant Professor of Communication, Computing and Technology in Education, is the recipient of the 2013 Strage Junior Faculty Prize. Created in 2009, the prize supports the production of a short video to highlight outstanding work by the recipient from the previous calendar year that best reflects innovative thinking in educational research and education.

Lee’s design-based research projects seek to apply the principles of games to address some of the most important challenges of the 21st century, including the development of skills such as creativity, collaboration and problem-solving. He has created teaching games that challenge players to combat the dangers posed by climate change and create solutions to promote sustainability.

“There is an increasing interest in the concept of gamification, loosely defined as the application of game design concepts in non-game contexts,” Lee writes. “In the business world, gamification is primarily used as a way to increase customer engagement and loyalty. However, gamification has much to offer classrooms, where problems such as high school dropout rates and low test scores have been attributed to students’ lack of intrinsic motivation to learn. Gamification of the classroom can use active learning approaches to supplement traditional methods of classroom teaching, e.g., to help improve student motivation and engagement with learning.”

Lee’s projects have included:

- Science City Heroes, a gamification of education project that creates a game layer for urban minority students to promote science-mindedness and active learning in underserved schools and classrooms;
- Scholar’s Quest and the Gamified Classroom, a game layer to address the challenges of K12 and higher education using game mechanics and tools to promote creativity, collaboration and active learning in classrooms;
- EcoChains: Arctic Crisis, a multiplayer card game to teach threats to Arctic species and how to protect ecosystems;
- and Greenify, an online game and social network that uses game mechanics and peer-created missions to foster sustainable communities and climate change education.

The Strage Prize was made possible through generous funding by TC supporters Alberta G. and Henry M. Strage. Alberta Strage (M.A., 1962) is a member of TC President Susan Fuhrman’s Advisory Council and also served on the College’s first International Advisory Committee.

Previous Strage Prize winners include Christopher Emdin, Assistant Professor of Science Education, and Lalitha Vasudevan, Assistant Professor of Technology and Education.
TC’s Strage Prize – Continued

Winning submissions for the Strage Prize are chosen by a College review committee led by Gary Natriello, the Ruth L. Gottesman Professor of Educational Research, for their originality, innovation and viability. Strage Prize winners are featured in a web video program, created by TC’s Gottesman Libraries’ EdLab division, highlighting and documenting the work of the Strage Prize recipient. The video about Lee’s work will be posted to the library web site later this fall.

More Information:
http://www.tc.columbia.edu/news.htm?articleID=9182
Frank Moretti, Technology Leader and Philosopher, Has Passed Away

Published in TC People 7/16/2013

Frank Moretti (Ph.D. ’83), TC Professor of Communications and one of the nation’s leading theorists and practitioners in the use of digital technology in education, passed away in early July after a long illness. He was 69.

Moretti co-founded and led the Columbia Center for New Media Teaching and Learning (CCNMTL) and launched the software company Learn Technologies Interactive. He was also the long-time President of the Black Rock Forest Consortium, an alliance of colleges and universities, public and independent schools, and leading scientific and cultural institutions that promotes scientific research, education, and conservation in the Black Rock Forest north of New York City. TC joined the Consortium this spring.

“Frank was a strong and wise presence for many years at Teachers College and Columbia University who played numerous roles and made multiple contributions to education,” said Thomas James, TC Provost.

A high school teacher who wrote his TC dissertation on Roman funerals as a form of public pedagogy, Moretti came to national prominence during the early 1990s as Associate Headmaster at the Dalton School, a private co-educational day school in New York City. At Dalton he and his TC thesis advisor and close friend Robbie McClintock equipped classrooms and corridors with workstations for teachers and students, a dedicated server, and an industrial-scale local area network that linked teachers and students to Dalton’s library, New York City cultural institutions and—via email—each other. The project was considered so cutting-edge that Time magazine devoted a feature story to it titled “The Learning Revolution.”

The story describes Dalton sixth-graders simulating an archeological dig at an ancient Assyrian site while tapping into collections at the Metropolitan Museum of Art, and seniors using a program called Voyager to look at images of stars and nebulae recorded by the telescope at California’s Palomar Observatory.

The more broad-based Dalton Technology Plan and resulting Dalton New Laboratory for Teaching and Learning have become internationally recognized models.

“Frank was a man of immense vitality, wide learning, and generous spirit—unique and irreplaceable,” said McClintock, TC’s John L. and Sue Ann Weinberg Professor Emeritus in the Historical and Philosophical Foundations of Education. From 1988-1992 Moretti worked with McClintock as Co-Director of TC’s Institute for Learning Technologies.
Frank Moretti – Continued

“He was an educator of genius who spoke directly, meaningfully, to countless young persons,” McClintock said. “Quick to perceive each person’s potential, interest, anxiety, curiosity, and concern, he engaged each in active thinking, valuing, and feeling. He had an unmatched knack for designing powerful curricula such as Archaeotype, creating opportunities for students to exercise their curiosity about matters of intrinsic interest and importance.”

McClintock added on a more personal note, “Frank and I were both only children and thought of each other as the closest we would come to having a brother.”

Moretti frequently credited McClintock with helping to shape his ideas about education and, in particular, with sharing an epiphany about the importance of technology.

 “[Robby] and I taught human communications, about the emergence of printing and the formation of nation states,” Moretti recalled in a profile in TC Today magazine in 2009. “We looked at what was going on around us with computers, and we said, ‘Jeez, we’re living in another great revolution.’”

Since 1999, Moretti has served as executive director of CCNMTL, which he co-founded with Maurice Matiz. Housed on Columbia’s Morningside campus in Butler Library and Lewisohn Hall, as well as at the 168th Street medical center, CCNMTL serves all 18 schools within the university, as well as more than 3,000 faculty members. Under Moretti’s leadership, the Center has helped introduce technologies such as CourseWorks, an online course management system that supports 6,000 offices of instruction, and VITAL, a tool co-developed by TC cognitive psychologist Herbert Ginsburg that archives video and embeds it, footnote-style, in text, so that academic papers become multimedia presentations.

At TC the Center helped create the TR@TC urban teacher residency program. The Center also served as the lead partner with WGBH Public Television in Boston in creating “Vietnam Online,” a digital library anchored by footage from the station’s landmark 1980s documentary Vietnam: A Television Experience. Moretti engaged faculty from across TC — including Margaret Crocco and William Gaudelli, who produced their “Vietnam Now” curriculum.

“We’re information consultants who promote the purposeful use of technology in education,” said Moretti. Yet he always retained a philosopher's outlook. “Twitter, Facebook—who ever thought capitalism would get to the point where the product is created by the consumer?” he said to TC Today. “Marx would have loved it!”

Moretti is survived by his wife, Robin Stern, a psychoanalyst and author who serves as Adjunct Assistant Professor of Education at Teachers College; and by his children from two marriages: Nkirote Mwaria, Antonio Moretti and Niccolo Moretti, and Scott and Melissa. Another son, Kathurima Mwaria, is deceased.

Accomplishments and Announcements

O. Roger Anderson and Julie Contino, Science Education EdD 2011, are the authors of Chapter 1 of the same book: The role of visualization in conceptual learning and conceptual change (pp. 3-22).

Phillip Boda, Science Education EdM candidate, facilitated a roundtable discussion about utilizing multiple early children's television show videos with increasing conceptual complexity to dampen cognitive load. In addition to providing a venue for elementary school teachers to integrate the nature of science within their pedagogical practice - emphasis was made on using content models in the classroom to aid in adopting the NGSS.

Phillip Boda, Science Education EdM candidate, presented a single qualitative case-study that utilized participatory research paradigms to investigate the use of a co-generative dialogic process in order to describe the reflective process of participating in research analysis for conceptual change. The specific emphasis was on making the participant's conceptual ecology transparent about her ideas of multicultural science education after taking a semester-long Urban and Multicultural Science Education course.

Karen Blumberg, CCTE MA 2013, launched edcampMumbai, the first edcamp in India, on October 26. This was followed by edcampNYC, the 5th edcamp in NYC, on November 9th. Edcamps are unconferences, and they are unlike any other professional development experience. First, there is no set schedule until the morning of the event. As attendees arrive, they can post topics to the empty session board. (We have examples of session boards from previous years to give you an idea of the types of conversations held.) Second, you get to choose what sessions you want to attend based on your interests. If the topic doesn’t apply to you, or you don’t enjoy the session, you can leave and choose a different one. For more information, visit http://edcampmumbai.org and http://edcampnyc.org

Diane Murray, Mathematics Education PhD 2012, has published her first book, *A Cabinet of Mathematical Curiosities at Teachers College: David Eugene Smith's Collection*. The David Eugene Smith archives at Columbia University's Rare Book and Manuscript Library contain the printed material, manuscripts, portraits and medallions, autographs, and mathematical instruments from his collection. The collection is no longer open to the public as an exhibition. This book provides a special look at the collection by using Smith's own words to guide the reader into what he recollected about the piece while also pinpointing what he valued and thought most important in his collection. For more information, visit http://www.amazon.com/Cabinet-Mathematical-Curiosities-Teachers-College/dp/0988744910

Jason Wu, Science Education PhD candidate, received a Phi Delta Kappa scholarship in October 2013 to travel to Ireland and the United Kingdom to learn about their education systems. Joined by accomplished professors, teachers, and administrators, they visited schools of education at Trinity College and the University of London. They also visited and met with students and staff at various primary and secondary schools. His anecdotes about his experience can be found here: http://thoughtsofwarrior.wordpress.com/2013/10/28/us-and-the-uk-who-has-the-better-education-system/


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
Volume VIII (2013-2014): 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.