Technology Research to Help Students with Mild Disabilities: Integrated Curriculum Project led by Dr. Charles Kinzer

Professor and Program Coordinator in the Program in Communication, Computing and Technology (CCTE), Dr. Charles Kinzer, leads a team of TC students as they engage in the third phase of the Integrated Curriculum Project (ICP), a project born out of a partnership between Vanderbilt University and The University of Texas at Austin. “The purpose of ICP is to develop, implement, and evaluate powerful instructional curriculum in the areas of literacy and social studies... using multimedia technology through an anchored instruction model,” (published material provided by http://icp.tc.columbia.edu/). The anchored instruction model was also present in Dr. Kinzer’s last research endeavor, the Case Technologies to Enhance Literacy Learning (CTELL) project, and has proven to be very instrumental in this project as well. “anchoring instruction is an instructional technique developed to present information to students in a relevant, understandable, and organized manner by ‘anchoring’ or embedding the instructional content in meaningful video contexts and problem solving situations.” The CTELL project revealed promising results of the anchored instruction platform as a professional development tool, to the extent that the ICP team hopes to prove its sustainability in inclusion classroom instruction.

The ICP’s 2nd phase focused on a professional development plan for the teachers, collaborating with them to integrate the new technology into their existing curriculum. The current 3rd phase of the project evaluates instructional implementation in social studies and literacy units within middle and high school inclusion classrooms. Research will include observation and field notes from sites in Texas and the northeast, sites with differing technological resources. Students with mild learning disabilities will be given a standardized critical thinking evaluation both before and after the unit instruction, as well as content related assessment. Prior research has suggested that attendance and class participation will also be positively affected by the use of multimedia, anchored-instructional interventions.

The project’s hypothesis states that “the use of multimedia, anchored-instructional interventions in inclusion settings will result in higher-level thinking and questioning behavior... in learners with mild disabilities”
International Study Tours: An Educational and Cultural Exchange

Upon returning from a recent Study Tour to Korea with the Program in Mathematics, Lauren Nelson, TC masters candidate, observed, “Before this tour, I may have agreed that culture plays a role in what goes on in the classroom and how students are taught, but I never would have imagined the degree to which it affects outcomes.” Ms. Nelson is among over 60 TC students and alumni who participated in International Study Tours this past year coordinated by the Program in Mathematics and the Center for Educational Outreach and Innovation (CEO&I). Nelson and others enjoyed a rare opportunity to observe first-hand what mathematics instruction looks, sounds and feels like in other parts of the world. Together with CEO&I, the Program in Mathematics sponsors multiple Study Tours to observe instruction in countries like China, Nepal, Mexico, Guatemala, Iceland and Finland to name a few.

Dr. Bruce Vogeli, Professor and Coordinator of the Program in Mathematics, spear-headed an emphasis on Asia, during this past year, specifically Asian mathematics instruction practices. There were Tours to China and Korea this past spring, a Tour to Nepal and Tibet this summer, and another Tour scheduled for Vietnam in 2008. In addition to these Tours, the Program in Mathematics’ Seminar course in the spring featured lectures and open dialogue about the very concept Ms. Nelson observed in Korean classrooms. The Seminar series and Tours focused on the on-going discussion of what’s best along the instructional continuum of traditional, skills oriented instruction versus a more constructivist, creatively engaged approach. Dr. Vogeli’s vision for this year was to introduce students to the cultures that have been at the center of these discussions for decades. “The Study Tours provide unique opportunities to observe education practice in other nations.”

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Dr. Vogeli commented. Instructor Stuart Weinberg attributes the success of this “Year in Asia” directly to Dr. Vogeli, “He’s a visionary in many ways. [Dr. Vogeli] pulls all the relevant pieces together, he created the Seminar Series in which we carefully scrutinized mathematics education in six Asian countries, and organized the Tours. It comes at a time when we are grappling with this important question of how to best teach mathematics and which topics to include in the curriculum.”

This year students have been exposed to this relevant debate of best practices, centered around an East-West exchange of ideas and instructional practices. The Study Tours in Asia brought TC students quite literally into classrooms a world away from New York City and Western instructional practices.

Upcoming International Study Tours:
St. Petersburg, Russia, Fall 2007; Vietnam, Spring 2008.

For more information on Study Tours, contact CEO&I at 212-678-3987, continuingeducation.tc.columbia.edu,
Program in Mathematics at 212-678-3381, tcmath@tc.edu
Alumni Highlight: Dr. James Mack, (PhD, 1971)

Program in Science alumnus, Dr. James Mack, continues to play a strategic role in attracting and training the brightest and best of New Jersey’s aspiring medical doctors through a unique program he helped start at Monmouth University. Dr. Mack, professor of Biology, and Dr. Datta Naik, professor of Chemistry, launched the Monmouth Medical Center Scholars program in 1996 and personally direct the program alongside other faculty members who make up Monmouth’s Pre-Professional Advisory Committee. This committee guides MMC Scholars through their four years of undergraduate study and prepares them for the following four years in medical school at Drexel University’s College of Medicine in Philadelphia, where they are guaranteed acceptance upon fulfilling all academic Scholar requirements. In addition to their undergraduate studies, Scholars engage in a preceptorship at Monmouth Medical Center, a teaching hospital near the university. “Medical schools are seeking outstanding students committed to practicing medicine. The MMC Scholars program helps recruit high-achieving students that will enter the field of medicine and who are expected to practice in New Jersey,” says Dr. Mack, “this program makes Monmouth University very attractive to a higher profile student interested in a medical career.”

While at TC, Dr. Mack was a HEFT scholar under the advisement of Dr. O.R. Anderson. Since leaving TC, Dr. Mack has served as Chair of the Biology Department at Monmouth and was appointed by NJ Governor Thomas Keane to serve on the NJ Clean Water Council. Along with these appointments, Dr. Mack has received numerous awards, of which he states, “I could not have accomplished without the excellent education and training I received at TC.”

To find out more about the Monmouth Medical Center Scholars visit: www.monmouth.edu/mmc

Adjunct Instructor Highlight: Dr. Maritza MacDonald

Dr. Maritza MacDonald, TC alum and current adjunct professor in the Program in Science Education, is the Senior Director of Education and Policy at the American Museum of Natural History. Dr. MacDonald has directed the education and professional development initiatives at the Museum for nearly 10 years. The AMNH boasts multiple ways for educators in and around the city to participate in professional development and school outreach programs throughout the year, at the museum and elsewhere. These initiatives include Touch Carts throughout the Museum, Movable Museum buses that go to schools and after-school program locations, as well as the Museum’s Discovery Room that combines hands-on exploration for young students as well as a research and observation space for educators studying at local undergraduate and graduate institutions. Dr. MacDonald is especially interested in developing partnerships with higher education institutions to open dialogue and further research opportunities for a “cadre of professionals who really know the diversity of resources available in and outside the classroom,” Dr. MacDonald says. Dr. MacDonald wants to “put all the resources together, it’s not just one or the other,” she claims, it’s more about an “interrelation between formal and informal science education,” where there is a mix of expert teaching in the classroom while also providing instructional opportunities outside the classroom.

Dr. MacDonald is also personally interested in observing a national perspective on goals in science education in the absence of a national science curriculum. To that end, Dr. MacDonald recently traveled to Europe to look at national curriculum models abroad and spoke at an international conference about science education and the role of museums. Because Dr. MacDonald is invested in the development of the theory of learning in museums, she particularly values her role at TC as an adjunct professor and advisor, and has advised multiple dissertation students on this subject. Her relationship with TC goes back to her days at NCREST with Linda Darling-Hammond, before Dr. MacDonald started working at AMNH nine years ago. Today Dr. MacDonald enjoys her multifaceted job description as director and instructor, and she says, “it’s a lot of fun working in a museum!”

For more information on the education programs at AMNH, go to www.education.emnh.org
Congratulations Dr. Alexander Karp, awarded Associate Professorship

Originally from St. Petersburg, Russia, Dr. Alexander Karp has been an instructor at TC since 1998. He was a visiting professor in 1998 and 2000 before accepting a full-time position in the Program in Mathematics in 2001. Prior to his engagements at TC, Dr. Karp was a lecturer at St. Petersburg University of Education from 1989 to 2001, he was a curriculum and mathematics education evaluation consultant to schools, districts and colleges in Russia, and has published numerous works on Geometry, Methods of Education, Evaluation of Student Achievement, Elementary Mathematics and the History of Mathematics Education. Dr. Karp received undergraduate and graduate degrees in Mathematics and Education from Leningrad State Pedagogical University, a graduate degree in History and Education, as well as a PhD in Mathematics Education from St. Petersburg State Pedagogical University. Dr. Karp created the “International Journal for the History of Mathematics Education,” a journal dedicated to supporting new research in this field not completely established. This journal combines two of Dr. Karp’s passions, history and mathematics education, “I want to know the real history, what was really happening in the mathematics classroom.” You cannot easily answer these questions.” Along with the Journal’s chief Editor, Dr. Gert Schubring of Bielefeld University in Germany, Dr. Karp gathers articles of historical significance from around the world. In addition to the Journal, Dr. Karp completed what he calls, “my Russian project,” a 7-book series of curriculum textbooks and workbook texts for teaching mathematics in humanities classes at the high school level, a series specifically designed for those not going into mathematics or engineering fields. Dr. Karp has also written a book on secondary mathematics and problem solving, currently in publishing. Today, Dr. Karp is preparing to lead a group of TC students on a Study Tour to Moscow and his native St. Petersburg in the fall. His first goal of the trip is to show students that “people are different, that they learn in different ways, the ask different questions, etc.” Study Tour participants will visit classrooms as well as some of Dr. Karp’s favorite tourist attractions in both cities. After being awarded associate professorship at TC, Dr. Karp continues to focus his research efforts on the history of Russian mathematics education, as well as a more general observation of problem solving education through major comparative studies. Dr. Karp will also be speaking at the annual gathering of the Commission for the Study and Improvement of Mathematics Education (CIEAEM), an international organization meeting in Budapest this fall.

New book by Dr. Robin Stern, The Gaslight Effect

Why are so many otherwise confident and successful women locked into relationships where they give up their power, their sense of reality, their very sense of themselves? The answer is The Gaslight Effect—a set of subtle and not-so-subtle manipulations used by boyfriends, spouses, bosses, friends, and family to make us think we’re wrong, and crazy, and they’re always right. In this groundbreaking guide, prominent psychotherapist Dr. Robin Stern shows how The Gaslight Effect works, what you can do to overcome it, and how to decide whether your relationship can be saved. Filled with quizzes, stories, and solid advice, The Gaslight Effect is the first book to fully explore this insidious form of abuse—and to help readers take back their lives.

Dr. Robin Stern is an Adjunct Associate Professor in CCTE

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If you have any submissions, please contact Kenny Nienhusser at nienhusser@tc.edu