On Friday, November 19, 2010, TIME 2000 hosted its ninth annual conference, Celebrating Mathematics Teaching. The keynote featured Dr. Lee Stiff of North Carolina State University, a past president of the National Council of Teachers of Mathematics. After the keynote, conference participants attended workshops which featured innovative and engaging mathematics lessons. Five of the fourteen workshops were taught by TIME 2000 Alumni: Asma Ismail (T-8), Samantha MacKinnon (T-6), Jennifer Pastore (T-8), Rocio Saborido (T-2), and Luis Saltos (T-4). The conference was attended by 330 high school students and their teachers from 26 high schools in New York City and Long Island. The purpose of the conference is to celebrate great mathematics teaching while encouraging high school students to pursue a career in mathematics education. Not only does the conference inspire high school students and teachers but also the TIME 2000 students and faculty in attendance. Following are reflections of the conference by TIME 2000 students:

Josephine Caporusso (T-13): I enjoyed the conference and thought there were a lot of great lessons. The teachers did an excellent job. Jim Matthews was exciting. This was the first time I experienced a lesson taught by him. He made mathematics entertaining and the students really seemed to appreciate the real-world connections he made. Now I understand why everyone loves him so much!

During the conference, I had the opportunity to see different ways to teach. I believe that this will benefit me on my journey of becoming a math teacher. I previously thought that teaching simply involved lecturing; however, now I see that is no longer a viable belief. Teachers should actively engage their students and make their classrooms fun while providing real-world connections so that students can understand the importance of mathematics in their own lives.

Dwaina Screen (T-12): My experience at the TIME 2000 conference was very enjoyable. I really liked the opportunities we get to spend time with other TIME 2000 students in a relaxed setting. The conference is my favorite part of being in the program. My job this year was the same as it was last year: I was at the check-in desk for the Presenters, VIPs and the keynote speaker. I enjoy this job because it allows me to meet all of the presenters who are involved with helping the conference run smoothly.

I shared my job with freshman Andrea Kim and enjoyed the opportunity to get to know someone new.

The conference definitely influences my development as a teacher because I see all the ways that mathematics can be presented in fun settings that help build students’ knowledge.

Violetta Pinkhasova (T-11): My experience at the TIME 2000 conference was very fulfilling. Every year I feel the same excitement I felt when I was a high school student attending the conference for the very first time. I remember waking up extra early and being nervous, and the experience that I had that day was something I will never forget. So, every conference I attend is a reminder of when I was a high school student and wanted to be in TIME 2000.

For this conference, I escorted presenter Frank Signorello and attended his workshop, Moebius Math: Inquiry Into Critical Thinking. I participated with the activity during the first session and helped the presenter. During the second session, I focused more on assisting other students in the activity and helped the presenter distribute materials. The presenter introduced cryptograms to us which was something I found quite interesting. After that, he spoke about critical thinking and different types of reasoning. We used this reasoning when we cut different types of loops and created Moebius strips. It was a fun way to learn math.

(Continued on page 3)
Putting Theory Into Practice

About three months ago, a close friend who attends the University of Delaware called and asked if I would like to accompany her school’s Hillel organization on an eight-day trip to Miami, Florida. I could earn community service hours, and have an inexpensive vacation. I thought to myself, “eight days in the Miami sun?! I’m there!” and signed up for the trip. Little did I know, nearly 100 students from across the United States and Canada would be coming together in Miami from January 2 through January 9, 2011, to do something really remarkable. What I thought would be a week of sun-tanning on the beach was actually the most influential learning experience of my entire life.

Since I am not a Delaware student, I missed all of the orientation sessions for the trip and therefore knew little about it. We met as a group at the airport, and I was shocked to see so many students. We took a bus from the Miami airport to our hotel across from the University of Miami, and were assigned random roommates. When I looked at the schedule and realized that the week was PACKED full of service activities, informational speakers, and group discussions, I didn’t know what to think. I was thrown out of my comfort zone. I really didn’t think this was my type of trip and was resistant to giving it a chance.

My attitude quickly changed when we were addressed as a group by Andrea Hoffman, Associate Vice President of Hillel: The Foundation for Jewish Campus Life. Andrea outlined our goals and tasks for the week and explained that we would be working in underprivileged, inner-city schools in Miami to help educate the students and better their learning environments. When asked, “What are the objectives of this trip?” Andrea responded, “Great question! I think there are three main objectives: to provide meaningful service to a community in need, to provide participants with meaningful service opportunities, and finally, to help participants understand the Jewish imperative of tikun olam, or repairing the world.” We’d be doing mural painting and gardening at Lenora B. Smith Elementary School during the mornings, and private tutoring at after-school programs (Dunbar Elementary School and the Overtown Youth Center) in the afternoons. I realized that this trip was right up my alley! I couldn’t wait to see firsthand the issues concerning social justice that I had learned about in Dr. Curcio’s class (SEYS 201), and the diversity and multi-culturalism I had learned about in Dr. Artzt’s class (SEYS 221). Realizing that this trip would make everything I’ve been learning about come to life, I was eager to get to the schools and see if we could really make an impact on the students.

Our first stop was the Belafonte Tacolcy Center to familiarize us with what we’d be doing in the days to come. Tacolcy is a non-profit learning environment for children of all ages that fosters increased literacy through a rigorous reading program. The center is a Freedom School, where children express themselves while (hopefully) falling in love with reading and, therefore, bettering their attitudes towards learning. Alison Austin, CEO of Tacolcy, explained that the program helps students in all subjects because you can’t have math or science literacy without having basic literacy. The students are encouraged to read, at their own pace, pre-approved books that discuss the issues prevalent in their lives which could capture their attention. Tacolcy has a student-centered environment which gives children of underprivileged districts the support that they need to eventually go to college. After visiting Tacolcy and seeing the children that I would be helping throughout the week, I was ecstatic.

Our work on the grounds was done in the mornings at Lenora B. Smith Elementary School and was led by a team of individuals known as the City Year Care Force Team. These outstanding people devote their entire careers to community service and are assigned to places such as inner-city schools in Miami to coordinate service projects. They kept us motivated by doing team-building games every few hours and “spirit circles” many times a day to keep our positive energy flowing. The work that we did was definitely hard. We started transforming the school’s playground (which was nothing more than a field of dry grass) into a beautiful garden by digging a 40’x60’ area of land down to the coral underneath, and layering it with almost one ton of lush soil for plants. We then made the posts for a gate around the garden. My favorite tool to use was the pickax, which digs into the earth with a sharp point and tears up the desired area with a swinging-over-the-head motion. It was astonishing to see the progress that the field underwent during the five days that we worked on it. It was extremely hot out and the days were long, but thinking of the students planting and walking through their new garden sometime in the near future was very motivating.

Another project that our group worked on during our time at Lenora B. Smith was mural painting. When we walked into the school on the first day, the walls were completely bare. Over the course of five days, the building underwent a complete transformation. Many murals and canvases were sketched and painted with inspirational quotes, pictures, and sayings such as, “Shoot for the moon. Even if you miss, you’ll land among the stars,” and, “All our dreams can come true, if we have the courage to pursue them.” The vibrant colors that soon filled the walls of the music room, hallways and cafeteria greatly improved the school’s atmosphere. My favorite mural was painted in the teachers’ lounge and reads, “Be the change you wish to see in the world.” One of my favorite memories happened during mural painting. I was working on a hallway mural and a teacher passed by with his class. The teacher said, “So, what do you think of all these new paintings on our walls?” The students started cheering and saying, “Wonderful!”, “Fantastic!”, and “Beautiful!” It was reassuring to hear how appreciative they were of the work that we were doing.

My favorite part of every day was the work we did in the afternoon. My group went to the Overtown Youth Center, which is an after-school program for students in elementary school, middle school, and high school. I was assigned to work with a seventh-grade student named Jamiya. On the first day, we worked on a paper for her Civics class. I realized that Jamiya was copying the words directly from the Internet. When I asked her if she knew what plagiarism was, she did not. I asked her if she understood what she was writing about; she did not. I was determined to teach her a way to think of her own ideas and put things into her own words. We played a game where I would say a sentence or two, and she would have to re-word what I said. It took her a while in the beginning, but she soon got the hang of it and began using Web sites as resources rather than copying from them. Soon, her paper was finished, and she did an excellent job. She could hardly wait to hand it in! I also taught her several tricks on the computer and helped her with fractions in math. I felt so successful, and I couldn’t help but tear up when I saw the look on Jamiya’s face when I had to tell her that I wouldn’t be returning the following week. It was at that moment that I realized the true impact I had made on her. I had only spent a few afternoons with her, and had gotten to know her talents, weaknesses, and personality so well. I can only hope that the lessons I taught Jamiya will help her to succeed even more in the future.

After spending a week helping those in need, I am motivated to continue to serve such communities. Opportunities such as this alternative winter break are ones that should definitely be seized. My time in Miami supplemented everything that I am learning about in school and enhanced my points of view on community, social justice, volunteerism and education as a whole. This experience of putting theory into practice was life-changing and even further confirmed my desire to become an educator.

By: Mara Markinson (T-11)
Voices from the Field: Samantha MacKinnon (T-6)

Samantha MacKinnon (T-6) graduated from the TIME 2000 Program in 2007 and is in her fourth year of teaching. This past November at the annual TIME 2000 conference, Samantha taught a workshop, “Bungee Barbie,” a hands-on lesson on correlation and line of best fit. In May, Samantha received the 2010 Alice Arzt Award for Mathematics Teaching. The award is bestowed upon a master’s degree graduate for academic excellence, passion for teaching mathematics, and commitment to the profession. Below is a recent interview with Samantha.

Q: What made you decide to teach math?
A: While I was in high school I contemplated the idea of becoming an elementary school teacher. After applying to various colleges, I received the TIME 2000 application. It’s hard to turn down a TIME scholarship! So, I ended up at Queens College and I wouldn’t trade it for anything. Now I could never even dream about being an elementary school teacher!

Q: Where are you currently teaching? What do you teach?
A: I am teaching at I.S. 93 in Ridgewood, Queens. I teach 7th and 8th grade mathematics. I taught an honors class last year which involved teaching the Integrated Algebra curriculum which I loved! I also have been teaching ESL classes for the past few years which is definitely a challenge.

Q: What is one lesson you have taught that you believe was successful?
A: Just a couple of weeks ago I taught a lesson on addition of integers using two-colored chips. It went really well and students developed the concepts on their own! It’s great because now that we don’t use the chips, when the students get confused, I refer back to the idea of “red” and “yellow” and they get it again!

Q: What was your students’ response to this lesson?
A: They really enjoyed it. It was something a little different than our daily routine.

Q: Where did you get the idea from?
A: I know of variations of this lesson using chips and tiles but this idea came from one of my colleagues.

Q: What is the most rewarding part about teaching mathematics?
A: The most rewarding part about teaching math is definitely when I can see the so-called light bulbs go on when students finally get it! It might just be that I used one different word but that one word really changed the meaning of the concept. Another great aspect of being a teacher, in general, is that you form a different relationship with every student in your class and you really get to know the kids for the silly, funny, and intelligent people that they are.

Q: What advice do you have for future mathematics teachers?
A: This year is definitely the toughest so far. It’s easy to give up, it’s hard to keep trying. So my advice would be to not take the easy way out, even though it may seem to be the right thing at the time. If you have four bad days in a week and only one good one, try and focus on the good day or else you’ll drive yourself crazy!

Q: How was your experience as a presenter at the TIME 2000 Conference in November?
A: Presenting at the conference this past November was an interesting experience for me because in the past I was on the other side of the conference as a member of TIME 2000. Being a presenter was great because I got to meet some very intelligent students who were excited about math. Since I work in a middle school, I also enjoyed being able to interact with high school students at the conference, and even talk with them about college applications.

Q: What did the experience mean to you?
A: It was nice to give back to TIME 2000 after being out of the program for over three years. I also enjoyed being a presenter because it is not every day that you come across students who are interested and excited about math, so to spend a whole day with them was really special. It is also not possible to teach with outrageous, hands-on activities in my classroom every day so it was nice to have an entire day dedicated to just that.

Q: What else would you like to share with TIME 2000 students?
A: Having completed the program and then an additional three years at QC with Dr. Arzt and Dr. Curcio to earn my master’s degree, I feel like I can really relate to every stage of the game. I know you definitely have a TON of work to do and it seems as if there aren’t enough hours in the day to finish it all. But, you’ll get there. Eventually you start seeing the light at the end of the tunnel. And even though the job market [now] isn’t looking too good, there are opportunities as substitute teachers and in after school programs; take advantage of them—you didn’t do all of that work for nothing! Good luck! ☺

Making Math Count At Molloy

By: Rachel Wessel (T-12)


The keynote speaker, Dr. Carole Greenes of Arizona State University, gave a wonderful presentation about introducing algebra in the younger grades. Although I’m pursuing a secondary school teaching career, I found the presentation wonderful and realized the untapped potential of students even in elementary levels. I was reminded of my own mother, a kindergarten teacher, introduces new topics in non-threatening ways so the students can understand them. That is one of my many goals of teaching, to prepare young minds for what lays ahead.

The conference continued with three workshops. My first and most memorable one was taught by Jim Matthews, a professor at Siena College and a much loved speaker at the annual TIME 2000 Conference. Matthews taught a lesson on how comic strips can make a math lesson much more exciting for students. When students are excited about a lesson, they become engaged and thus learn more. Cartoons not only hold mathematical significance, but also can be connected to other subjects. You can use a cartoon to integrate another subject with math thus making connections to which students can relate.

All in all, the conference was very informative and allowed me to learn new techniques as I prepare to become a great teacher.

Useful Web sites for comic strips are www.gocomics.com/features and comics.com/peanuts. Matthews recommends Peanuts, Fozzter, and Calvin and Hobbes for their mathematical references.

Conference, continued from page 1

Michelle Yacoub (T-10):

This conference was the last conference I will go to as a TIME 2000 student, but the seventh conference I have attended: three as a high school student and four as a TIME 2000 student. Each presentation I have seen over the years has made me more and more appreciative of good teachers who care enough to create engaging lessons. Now that I am a senior and soon to graduate, I think back to my first conference and how it affected my choice to become a teacher as well as my goal to be the kind of teacher I want to be. Hopefully, one day I will be able to do the same for a high school student with one of my own lessons at the conference.

Please join us in November when we host the 10th annual TIME 2000 conference!
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Special thanks to retiring editor-in-chief Michelle Yacoub for her guidance and contributions to this edition.

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Fun Pictures
From The Conference