

Reflections of TIME

TIME 2000 Newsletter

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TIME 2000 CELEBRATES ITS FIFTH ANNUAL CONFERENCE!

By: Damaris Herron (T-7), Ricky Lopez (T-7), Asma Ismail (T-8), Elisabeth Tulley (T-8)



Where's the Math? EVERYWHERE!

Another year, another conference, another opportunity to open children's minds to all that mathematics has to offer. This year's Fifth Annual TIME 2000 Conference, held on campus on November 17, 2006 had it all: interesting, innovative math lessons, another signature TIME rally, and a lecture about bees. Since we couldn't all get to listen to all of the lessons given that day, some of our TIME family decided to share their experiences with us.

Ricky Lopez: To all my fellow TIME students, I regret to inform you all that you have missed possibly the best lesson of the math conference (maybe even the month, the year, decade, even the century!) I was given the chance to sit in on Jim Matthews' lesson, entitled, "Red Hats, White Hats, Pirates and Gurus." Jim Matthews, from Sienna College, is no stranger to TIME; he hosted a seminar last year. So what exactly is so great about his lesson? EVERYTHING. He is very charismatic, and the math he was teaching was very fun. Jim Matthews is an expert at problem solving, a field that many TIME students will grow to hate during their first semester of junior year. Problem solving is a very difficult, albeit fun, course. The first problem Jim Matthews presented was this: there are three men with different colored hats on their heads (where else would they be anyway?). And the rules are simple: each man is either wearing a white hat or a black hat, but not all men can be wearing a white hat. With this, Jim Matthews asks the first man "Do you know what your color hat is?" and the man replies

"No." On to the 2nd man: "Do you know what YOUR color hat is?" and of course he replies "No." The third guy is asked the same question and he responds with "Yes!" How is this possible? You can pester Dr. Sultan with that question! As for me, I will be opening up a nice book on problem solving. Enjoy!

Asma Ismail: At the Conference, my job assignment was to assist Rocio Saborido, a graduate of TIME, during her lesson entitled, "What Does Your Sine Tell You About Your Future?" Once the students were settled down, she gave a little introduction to her lesson. I think what made the students interested was the fact that they had laptops in front of them, so they knew they would work hands-on and in groups, since one laptop was given for every two students. She worked along with them, by guiding them on how to draw their sine curves. She repeatedly asked if anyone had questions or difficulties, willing to help any students that needed assistance. She also asked the students if they enjoyed this activity, because she was interested in getting feedback. She was so into the lesson, and was hoping everyone would understand how to perform the activities. From what I saw, the students enjoyed it very much because

The conference was attended by 331 high school students with 29 teachers from 26 high schools!

they were able to work together and talk with Rocio because she made herself approachable and easy to talk with. As a future teacher, I would want to make my students feel like they can talk to me about anything, anytime the same way Rocio did with the students in a matter of 10 minutes. I would also guide my students by

asking leading questions and work with them just like Rocio, instead of dominating the classroom and making the lesson boring. Also, giving students hands-on work and allowing them to visualize concepts using technology are good ideas to use in the classroom. These would definitely enhance their understanding and capture their interest throughout the lesson, the same way Rocio's students were interested during her workshop.

Elisabeth Tulley: At the conference, I had the liberty of helping Lisa Clark with her lesson, called, "Math Potpourri." It was on applications of math in the real world. She made it fun for the students and masked the mathematics of the lesson with sugar and candy. It amazed the students to see how simple things like making a Hershey kiss require so much math in the shaping of the tin foil, the little piece of paper that sticks out, even the amount of chocolate within each kiss. After, the students ate their chocolate, and they got to get a little messy. First, they made cubes and other 3-D figures using gum drops and tooth picks. Next, they got to dip their figures in a bowl of soap and water and then, by using a straw, blow a bubble that emulates the shape of the outside figure. For instance, cubes had cube-shaped bubbles within them. Watching the kids' eyes light up as they saw the teacher spill the soap onto the desk in order to blow a bubble was enthralling; it's what any teacher would want to see in their students' eyes. I definitely hope I can do my best to emulate Lisa Clark when I become a teacher and incorporate these lessons into my classroom.

There were many great lessons and we couldn't possibly see them all but what great ideas we have gotten for use in our future classrooms. We look forward to next year and all the great lessons that will be seen there. Next stop, LIMACON!

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Congratulations:

- Sarit Ebrani (Livi) (T-6) on the birth of her son, Joshua
- Congratulations to all the new officers of MT4:
 - ◇ Sarah Hofer (T-8) as president
 - ◇ Jackie West (T-8) as vice president
 - ◇ Mi Rim Kang (T-9) as treasurer

VOICES FROM THE FIELD

By: Sara Liu (T-3)

I have been teaching now for three years. I am currently teaching at Townsend Harris High School on Queens College Campus. This is my second year teaching there, and I love it.

My first year teaching was at a middle school on Long Island. I worked with many amazing teachers, but I did not enjoy my full experience there. There were too many discipline problems in the school, and the administrators were not very effective in dealing with them, thus creating bigger discipline problems in the classroom. There was also a lot of parental power. Parental involvement is like two sides of a coin. Many of the parents were very responsive and helped encourage their children, and were very appreciative of my input. However, there were also parents who believed their child could do no wrong and place the blame on the teacher.



Another issue that I did not like about teaching at the middle school was the inclusion program. I had to do a lot to accommodate students with special needs. I had to provide them with daily scribed notes, extra time for exams and differentiated exams. It created a lot of extra work and students often took advantage this. I wanted to teach middle school because I thought if I can make students appreciate mathematics at a younger age, they will continue their love for mathematics. Often, students start disliking mathematics at about 7th or 8th grade. All in all, I felt I had to accommodate my teaching in ways I didn't believe in. I went into teaching mathematics because I love teaching, helping kids learn, and more importantly, helping kids learn mathematics in a

meaningful way.

I am so happy teaching where I am right now. I am currently teaching Calculus and Math B. The students at Townsend Harris are very motivated and hard working. It's really a dream come true for me. In addition to the amazing students, I work with amazing teachers who always look out for my best interest.

I would like to give special thanks to Dr. Artzt, who if it was not for her, I would not be where I am, and Ellen Fee, Math AP, for believing in me and, of course, offering me the job. Thank you! Good luck to everyone!



Sara Liu

EXPERIENCES OF A TIME STUDENT

STUDYING ABROAD IN LONDON

By: Julie Mehta (T-7)



When I was a sophomore, I took SEYS 201, Foundations of Education, and the students in the class had to do a term paper on a reasonable subject of our choice. I chose to do it on the Indian Education system, which was modeled after the British system, and I learned how differently students in other countries studied and learned and was quite interested when I interviewed people about their own experiences. Last year, I was lucky enough to study abroad, so

work, whereas in the States, students are encouraged to get their Bachelors' Degree as soon as possible. To get an undergraduate degree in England, a student must complete three years of University and do not need to take any classes that do not relate to their major.

I found out that British College students already decide what they would like to major in after they finish their secondary schooling, which also is completely different than our own system. During my first semester at Kingston University, I took Physics, Computer Science, and English Literature which were all four credit classes. I didn't realize that these classes were actually designed for students who were already in the major. I took an English class as a Mathematics student; I had no idea exactly how hard an English class could be!

The next semester, I had the chance to take an actual math class with British math majors, and once again I was shocked! Their math classes are a lot different than ours, not only in the way they are taught, but more so in what the students expect from themselves. A passing grade is 40%, and a lot of students find this quite hard to do. I found this hard to believe, because many students in the U.S. try hard to get an A in any class they take. Most American students I've met want to get at least a B in their classes, which is only a 50% in the English grading system.

Getting a 40% is a little harder than it seems. A lot of the work is independent studying. In my Linear Algebra class, we had four quizzes, a final, and the midterm was actually coursework,

a research assignment on various Linear Algebra questions which required in depth answers through heavy research. For some, definitely not an ordinary college midterm!

The classes met twice a week: one day was a three hour lecture and the second day was a two hour class where we got to ask questions and work with MATLAB, computer software used to solve mathematical problems. This class was a lot more advanced than my own freshmen year math classes. It relied heavily on how much work a student was willing to put in. The coursework was the hardest part of the semester because it was not something that could be studied. The coursework had fifteen problems that had to be researched profusely. Finals week actually lasts a month, which can be either a test or another piece of coursework, depending on the class. I don't prefer a whole month to study but British students believe it gives them more time to go over the material. However, I feel that this allows students to procrastinate even more.

Unfortunately, I was not allowed to take an education class while I was in England, but, I did learn a lot from the people around me.

Studying abroad was probably one of the best choices I have ever made. Not only did I get to learn about a different education system firsthand, I saw the differences between the way students learn and study in another country. I recommend studying abroad to anyone who is even slightly considering it, even if only for one semester.



I was able to see how the British colleges were structured in person.

We didn't start classes until two weeks after our arrival into England. The first week of college is called "Freshers Week" where a lot of learning about surroundings, meeting new people and mainly just getting adjusted took place. No classes go on during this time. Before starting classes, I didn't think that our system was different at all, aside from a whole week of just fooling around. However, as soon as all the students settled into the halls of residence, I quickly learned how wrong I was.

It took me a while to learn how their pre-university schooling worked, but I did finally understand, and found it quite interesting. For one thing, College actually comes before University. What we consider our junior and senior years of high school, the British call "College." During those years, they take classes they are planning to major in when they get to University. Students are also encouraged to take a gap year after they finish college to travel or

HAVE YOU MET SUSAN SLADOWSKI?

By: Samantha MacKinnon (T-6)

During the fall 2006 semester, I had the pleasure of working with Mrs. Susan Sladowski at Bayside High School as part of the requirement for SEYS 371.2. Every Tuesday afternoon, nine of the middle school practicum students would meet with Mrs. Sladowski to discuss teaching strategies and collaborate on different teaching methods. "If I have a specialty, it is team building, with a class of students or a department of math teachers. Along with that, one must have a vision that can be shared and accomplished as a team." She is absolutely right! I can speak for all 9 of the middle school practicum students when I say that we learned many innovative teaching methods that we were able to utilize during meetings as well as observe in the classrooms of our cooperating teachers.

Mrs. Susan Sladowski has been teaching for 34 years. She began at Grover Cleveland HS and returned to teaching after her childcare leave to Oceanside HS. She then taught at Benjamin Cardozo HS in Queens before accepting a position at Bayside HS. Mrs. Sladowski has been the Assistant Principal of the Mathematics and Business and Computer Science Departments as well as a classroom teacher at Bayside HS for 8 years now! Her duties as an assistant principal include "curriculum, staffing, student issues relating to mathematics, parent relations, textbooks and supplies, professional development of

teachers, Regents exams, and student and teacher discipline."



Susan Sladowski

When asked what Mrs. Sladowski's favorite class to teach is, she answered "One in which there are students! In other words, I like to teach. Period!" It is obvious through working with her that she has a great passion for teaching mathematics. She goes on to say that "mathematics is elegant in its simplicity and connectedness. One only needs to know a few principles in order to rebuild or create anew." As for her position as assistant principal, "the best part is working with the teachers to help them become the best teachers that they can be, with respect to (but not limited to) content, delivery of instruction, use of technology, creating student assessments, home contacts and to keep up with the ever changing NYS Math Curriculum and Regents exams."

The Association of Mathematics Assistant Principals Supervision of New York City (AMAPS) which was established in 1932 is a city wide private organization of AP Math supervisors, for the purpose of sharing concerns, networking with other AP's, brainstorming current situations and creating collective solutions, learning about new technologies that enhance math instruction as well as introduction to new textbook materials. As the President of AMAPS, Mrs. Sladowski works closely with the Department of Education

in molding policy applicable to city-wide math instructors.

As a graduate of Queens College, Mrs. Sladowski was asked to be a cooperating teacher for a QC student teacher about 15 years ago. She was asked to be a cooperating teacher every year after that and when she became an AP at Bayside, she agreed to take on even more QC student teachers to work with the best teachers in the department. Through this experience she met Dr. Artzt and Dr. Curcio: "I have always been impressed with the quality teacher produced by Dr. Artzt and her colleagues over the years. It has been a pleasure to participate in the small way that I have been allowed."

Mrs. Sladowski offers some words of advice to future mathematics teachers: "Never give up learning about your craft and trying new ideas and techniques; look for more connections between content areas within mathematics and with other disciplines. AND remember that at some point in your career you will be teaching a particular topic or lesson for the -nth time but for the students sitting in front of you it will likely be their first time! They are entitled to your enthusiasm and a fresh delivery as if it were your first time too."

Mrs. Sladowski is the ultimate professional! I am fortunate to have had the experience of working with her before I begin student teaching.

WHERE'S THE MATH? AT THE MUSEUM OF MODERN ART!

By: Ferrin Mohammed-Bujan (T-9)

At first glance, the Museum of Modern Art (MoMA) is indistinguishable from the numerous other skyscrapers in New York City. After a closer look, the vertical "MoMA" sign protruding from the building marks it apart from the other buildings. The recently renovated museum by Japanese architect Yoshio Taniguchi transformed what used to be a series of separate buildings into one amazing modern structure which is twice the size of the original museum. Taniguchi's design makes the most of natural light to emphasize the unique and beautiful art found within MoMA's walls. The inside of the museum is airy and spacious, providing lots of room to house the numerous collections and pieces that are on display.

Some of us may be confused about the terms "modern art" and "contemporary art." It is believed that modern art started with such artists as Francisco Goya and Edouard Manet, while others who believed the period of modern art started later may name artists like Paul Cézanne, Paul Gauguin, Vincent van Gogh, and Georges Seurat as some of the pioneers. The era of modern art ended about 1970. Art created after this time is often referred to as contemporary art.

Twenty TIME 2000 members visited the

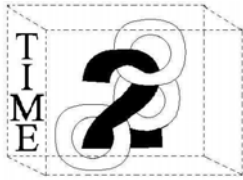
museum on Wednesday, January 18, 2007. We gained a lot of valuable information. Our guide, Richard Turnbull, seemed to find it amusing that we visited an art museum to find math. According to Dr. Artzt, "Where's the math? Everywhere!!!" However, he did a wonderful job of finding math in the paintings. He started with Paul Cézanne, a French painter, whose paintings were gridlike in nature, the result of rectangular brush strokes used to create his paintings. For those who believe that modern art started at a later period, Cézanne is seen as leader of this era. Richard explained that Cézanne looked at the geometric structure of things, rather than employing a three-dimensional point of view. Next, we went onto cubism, which is centered on flatness, geometric shapes, and the ability to see objects from different views. Every face of an object is represented in two dimensions. We looked at a painting done by Georges Braque who is believed to be the brains behind cubism, and compared it to one right next to it by Picasso. The paintings seemed to have been done in the exact same style and colors which was probably the result of both artists working in the same studio at the same time. Of course, this concept of similar works should not be applied to our lives as it is seen as plagiarism instead of genius!

Next, we visited a gallery solely devoted to Piet Mondrian whose paintings seem to be the most mathematically directed. Mondrian's usage of lines and primary colors (red, blue and yellow) identify his paintings. His paintings can best be described as grid-like structures, which as Turnbull explained, may have been resulted in his love of the structure of New York City's streets and the order to them. After this, we saw a stained glass window created by Frank Lloyd Wright who is better known for his architectural works. The window is a composition of circles, squares and rectangles which was originally designed for the Avery Coonley Playhouse in Chicago. Last but not least, we visited a gallery which housed furniture, mostly chairs. The chairs were for the most part very geometric. They were not made to accommodate the curves of a human body, although their structures were beneficial in supporting the neck, Richard Turnbull noted. This, sadly, was the end of the tour. Many of us chose to continue to broaden our horizons and stay in the museum.

Thank you Dr. Artzt and Mrs. Weinman for this wonderful experience.



Richard Turnbull



New Web Address!
<http://time2000.qc.cuny.edu>

If you would like to write an article, please contact us at:
irrationalwriters@yahoo.com

INTERESTING MATH WEBSITES:

www.nctm.org
<http://www.math.uri.edu/~bkaskosz/flashmo/>

MATH IN THE MEDIA

Have you seen the new TGI Fridays commercial?
 It uses combinations correctly!



**“3 course meals are back for \$12.99... 210 combinations:
 Choose from 5 appetizers, 14 entrees, 3 desserts.”**

If you notice any math in the media, either positive or negative,
 please let us know!

Email submissions to irrationalwriters@yahoo.com

CLUB ANNOUCEMENTS

MT4 is in the process of redesigning their website. Visit it at www.mt4.org

*Lixu (Lily) Li (T-7) has created a club called **Falun Dafa (Falun Gong)**, promoting A Traditional Self-Cultivation Practice to Improve Mind and Body. If you would like to know more, you can contact her at falundafaclub@gmail.com.*

*If you would like more information about **Black Student Union** events, please contact Randall Clarke (T-7) at rclarke100@qc.cuny.edu*

Please go out and support your fellow TIME students in all their extracurricular activities!

The new officers of MT4! (From left to right): Jackie West (T-8), Sarah Hofer (T-8), Mi Rim Kang (T-9), Xuilden Payano (T-



WHERE'S THE MATH?!? EVERY-WHERE!!! - Lirit Kozuch (T-8)

Connection: **Card Games: Poker**

Mathematical topic: **Probability**

Explanation: When playing a card game a player has to know what the odds are for winning a hand and what the likelihood is of the card he needs showing up. This hand could be a \$1,000,000 hand!!!!



Test your mind! Try our new Kakuro Puzzle!

Best defined as a number crossword, the task in Kakuro puzzles is to fill all empty squares using numbers 1 to 9 so the sum of each horizontal block equals the clue on its left, and the sum of each vertical block equals the clue on its top. In addition, no number may be used in the same block more than once.

