Reflections of TIME

Staff:
Editors-in-Chief: Quratul Ain
Wendy Soohoo
Secretary: Saeed Chaudhry
Photographer: Vidya Sriprasad
Editors: Rebecca M. Steiner
Ana I. Bernal
Advisor: Naomi Weinman
Email us at: RofT2K@yahoo.com

Volume: 2 Issue 2; Jan, 27 2004 **a publication of the TIME 2000 program**

LAMP

By: Jenny Cheung

Many students enter the TIME 2000 program thinking that teaching will be easy. But as Dr. Artzt has shown us, it takes a lot of work to be an effective teacher. In this program you learn techniques and ideas about being an effective teacher, which do not get put to work until your senior year when you're student teaching. However, this past semester, Vidya, Annie, and I had an early start in learning how to teach in a high school environment. We learned that a lot of experience and patience are needed to work with students.

During this past fall semester, we were given the opportunity to be part of a great program called LAMP (Literacy And Mathematics through Photography). LAMP is sponsored by the Kellogg Foundation and coordinated by Dr. Moncada-Davidson, a SEYS teacher in the TIME 2000 Program. LAMP is an extra-curricular activity held every Saturday geared to improving the quality of learning for Latin American students who attend John Bowne High School.

At first, I wondered to myself, if mathematics and English are completely different subjects, then how does photography fit in with them? Vidya, Annie, and I had a lot of work to do but, fortunately, we weren't alone for the ride of our lives. The program consists of seven full time instructors: two in photography, two in literacy, and three in mathematics. The other instructors were in their late twenties and some were fluent in Spanish.

The LAMP instructors wanted to create an environment where the students were comfortable and didn't feel like they were just sitting in a classroom. Most of us agreed that we would dress as if we were "hanging out" on a Saturday morning. This is where we encountered our first problems: we looked as young as the students and a language barrier existed. We had problems maintaining the students' respect. Since we lacked teaching experience, we asked Dr. Artzt and Dr. Moncada-Davidson for their advice. We concluded that we had to dress professionally but act like "we were in our own skin." Personally, the first two weeks were rough, but then they got rougher.

One third of our class was daydreaming and we wondered why. So we tried to put ourselves in the students' shoes. We learned that a lot of the students come from families that are struggling and have tough paths to cross. Some students feel that there is no purpose for a good education. For example, one student said, "there's no point in learning mathematics because I'm just going to join the army when I graduate." This student did not realize that many army jobs are related to mathematics. Our goal is to change pessimistic attitudes and help students develop connections between mathematics and everyday life.

We learned to become effective teachers by making our lessons student-centered, listening to our students, and understanding that "learning is an ongoing process." Students learned that each subject relates to the other one and that there is more than one way to solve a problem. Most importantly, our students realized that we care about them.

My advice to future teachers is to know your students and show them that you care. It is often the simple gestures that make a difference and as teachers our gestures may have a huge impact. Students will remember you not only as a teacher but also as someone who made a difference in their lives.

I must thank Dr. Artzt, Dr. Moncada- Davidson, all my friends in TIME2000 program and my colleagues in the LAMP program for making my experiences so rich and meaningful. As much as I will miss finishing the TIME2000 program and continuing the LAMP program, I am grateful to have been a part of something that will change the view of teaching. I have realized that I will continue to pursue becoming a teacher and I will always continue to be a learner. Learning is never just in one direction; it is in many different ones and in many different ways.

*Pictures (top to bottom): Jenny Cheung, Dr. Moncada Davidson

Celebrating Mathematics Teaching

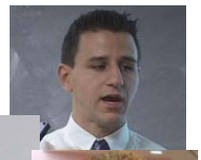
By: Isaac Borenstein & Sahil Kapoor

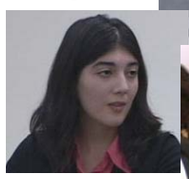
On Friday, October 24, 2003, TIME 2000 hosted its second annual conference, **Celebrating Mathematics Teaching,** funded in part by the Simons Foundation. The conference was attended by 100 high school students and their teachers, 14 professors and 76 Queens College and Queensborough Community College students. More than 60 TIME 2000 students volunteered to prepare for and assist at the conference.

Dr. James Muyskens, President of Queens College stated that he "loved the fact that TIME 2000 will advance the next generation with qualified math teachers and help the US economy and small businesses." Dr. Penny Hammrich, Dean of the Division of Education, relayed a great example of a mathematics teacher. She told us the story of her brother who was dyslexic and thanks to his high school math teachers he became an engineer. As Dr. Artzt says, "the goal of TIME 2000 is to put together the best mathematics teachers and students and hope that the magic will come."

The magic did come alive during the keynote address. Bradley Fields, professional mathemagician for almost thirty years, blew the audience away with his performance of math-based magic. The most memorable piece of his performance was when he did his rope trick. He asked, "how long will it take to travel from point A to point B if you only travel half the remaining distance each day?" Mr. Fields kept taking away a half of the rope and demonstrating that another half will always remain. This means that you'd never reach point B!

Next we all went our own ways to different sessions. This year was special, though, because we had TIME 2000 graduates, Eric Glatz, Rocio Saborido, and Irina Zavurov presenting sessions. Local and nationally acclaimed dynamic mathematics teachers made exciting presentations that involved the conference participants in mathematical investigations and explorations. All the sessions were amazing with many demonstrations of





Continue ⟶

how mathematics applies to different aspects of life.

The celebration ended with the Student Panel. Selected students from each year and some graduates participated in answering questions from high school and college students interested in the program. Kendal, a freshman, stated how she likes the program because students begin preparing for their teaching careers from the very first semester of college. Sahil expressed that "this is the best program because you'll have the confidence to teach and be in front of the classroom."

The conference was a huge success. We look forward to next year's conference celebrating mathematics teaching!

*Pictures (Counterclockwise) Eric Glatz, Irina Zavurov, Rocio Saborido

Voice from the Field

By: John Chae

My name is John Chae. After finishing the undergraduate program of TIME 2000 in 2002, I was blessed enough to be employed by the Baldwin Union Free School District even *before* graduation.

My first year in Baldwin was not a smooth ride at all, which is not unusual for any first year teacher. Yes indeed, TIME2000 has prepared me to be the best but like Dr. Artzt once said, "Nothing can replace experience." Preparing lesson plans and taking QC graduate classes was not an easy task. Moreover, due to my lack of seniority, all of my assigned classes were comprised of lower-level math classes. It was quite a challenge.

Some nights, I would have nightmares of my classes getting out of control while I am in front of the classroom applying all the strategies and methods I've learned. Nothing seems to be working and I finally scream, "Help!" For the first couple of months, I had to drag myself to work. It was a stressful year to endure. How did I survive?

My first year seemed like a test that measured where my heart was and what the driving motivation was for me to be a teacher. It was a test that measured the beliefs written in the portfolio and how sincere I was when I wrote them. It was and still is ironic that because of students, my first year was very challenging and painful at times, but also exciting and enriching. The students gave me joy, satisfaction, and strength. I would not have survived my first year without true passion for my students.

I love my students and seeing them everyday brings me the joy of teaching. If I sound like I am teaching angels in heaven, trust me, I am not; but even the Bible says, "Love the sinners but hate the sin." Even though the students may hate me, or what I teach them at times, I find something positive about each one of them. My love of mathematics and my love of my students kept me going, and keep me going today.

Now that I'm a teacher, I appreciate my experiences as a student at Queens College. I would like to thank the TIME 2000 faculty for their relentless effort to be the best they can be, showing passion for their subject and compassion for their students.

Story from a TIME Student

By: May Wong

Ever since I was a little girl I enjoyed mathematics because it makes me think. I like mathematics because it is a subject where I can use critical thinking skills to solve problems. When I was a senior in high school, my math teacher, Mrs. Tokarska-Cooksey, was a positive influence in my decision to become a math teacher. Her teaching method was innovative and comprehensive. Mathematics can be easy, but it can also be complicated if students do not understand the concepts. TIME 2000 courses are challenging. The most challenging task for me is to succeed and achieve high grades in my studies.

Being in TIME 2000 has helped me improve my teaching abilities. I have learned many techniques from the education courses and from observations. I have started tutoring a 5th grade student who has attention deficit disorder. I try to use many techniques to help him understand mathematical concepts. I use different wordings to get him interested in the problem itself. Many times I use drawings and hands-on activities to keep him focused. For example, there was a question that asked if there is a football field that has length of 100 ft and width of 50 ft, and there are four teams, what are the dimensions of the part of the field that each team will get if the field is divided equally? I used loose-leaf paper to demonstrate the dimensions of the field. First I folded the paper in half and asked him what are the dimensions and how many teams can use the field. Next I folded the paper again and I asked him the same questions. Then I asked him if the width has changed and he told me with complete understanding "no, because we didn't fold that side."

TIME 2000 is a great program, because I've participated in so many activities involving mathematics during our seminars, workshops, and trips. For example, when Sarah demonstrated her wheel of triangles, I had fun competing even though the questions were easy. I know I was motivated to win, so I'm sure I'd use games like that as a future mathematics teacher.

Mathematics is a hard subject and many students despise it. Hopefully, I will be able to put mathematics in a new perspective, where my students will enjoy math as much as I do.

"Euler Almighty"

By: David Chow

What is faith? Someone once told me that to have faith is to believe in something that cannot be proven. An example of that would be the belief that God exists. After all, we cannot prove for certain that God really does exist. A famous French writer named Voltaire once said, "If God did not exist, it would be necessary to invent Him."

When Catherine the Great was the ruler of Russia, she appointed Euler to be the chief mathematician of her academy. At this time, there was a famous French philosopher named Diderot, who went from country to country to convert people to atheism (persuade them to believe that no God exists). This would have been embarrassing for the kings and queens because during that period of time, European nations were dominated by imperialism (kings or queens were appointed by God to rule their country).

When Diderot came to Russia, Catherine the Great invited Euler to face off against him. Euler decided that there was a mathematical proof for the existence of God. He said to Diderot,

"Sir, $\frac{a+b^n}{n} = X$, hence God exists."

This formula may seem meaningless, but since Diderot didn't understand mathematical concepts, he was speechless. All the subjects laughed at him and he left.

TOUCHED BY AN ANGLE

Dell Word Search Puzzles

October 2003

L	C	M	A	N	O	I	T	A	G	I	V	A	N
L	A	C	U	T	E	N	A	L	P	S	O	P	S
F	I	W	P	H	Y	S	I	C	S	H	I	P	S
R	O	E	S	R	U	O	C	H	C	A	T	L	A
E	O	R	Y	M	O	N	O	R	T	S	A	I	L
R	U	O	M	D	O	P	A	S	A	C	R	C	C
U	Q	C	S	U	R	V	E	Y	I	N	G	A	S
S	R	L	L	U	L	E	L	R	F	H	L	T	E
A	I	E	I	I	R	A	E	A	T	C	N	I	L
E	G	D	N	G	D	H	S	G	U	I	G	O	G
M	H	T	E	I	P	E	N	L	O	Q	E	N	N
A	T	D	S	S	S	E	A	P	P	F	E	S	A
T	N	R	A	E	L	T	A	N	G	E	N	T	I
H	I	A	E	R	E	H	P	S	T	U	D	Y	G

Acute	Math
Angles	Measure
Applications	Navigation
Arch	Physics
Astronomy	Plane
Calculate	Points
Class	Properties
Course	Ratio
Degrees	Right
Equal	Sides
Euclidean	Sine
Formulas	Sphere
Laws	Spherical
Learn	Study
Length	Surveying
Lines	Tangent