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Volume XIII No. 3

Macomb Mathematics Science Technology Center

2011-2012

## SENIOR AWARDS DINNER



The date was Tuesday, May 1. The place was the Sterling Inn Banquet Center and the event was the Macomb Mathematics Science Technology Center Annual Reception gala. Parents, faculty and friends honored the Class of 2012 with over 240 people in attendance. This year's Class of 2012 represented 11 different high schools in Macomb County. The students will be continuing their education at various higher education institutions throughout the United States and pursuing careers as chemists, doctors, teachers, engineers and business majors. Others will study psychology, pharmacy, English and law. The highlight of the Senior Dinner was the announcement of awards, grants, and scholarships. Collectively the Class of 2012 was awarded over \$5.1 million dollars in scholarships! We are extremely proud of this year's class and wish them all the very best.



# From the Director:

**Dr. Catherine Neuhoff**

Greetings Everyone!

As this school year comes to a close I cannot adequately put to words how wonderful it is being the Director of the MMSTC. I have observed with wonder the commitment MMSTC teachers have to the integrity of the program and maintaining quality service to our students. Each newsletter stands as testimony to all things accomplished by both students and staff. It is hard to pick just one highlight as this program gives so much beyond an academic experience.



This year I “saw” our MMSTC staff present an outline of what they wish to accomplish at December Open Houses. Both nights featured presentations of rich, in-depth content area and IDS experiences that, over the course of four years, push students to develop higher level thinking skills; a program design that prepares students to be leaders, innovators, creators of new knowledge, and communicators. Teacher teams along with Mrs. Brown detailed how they use team-building and stress relief activities to refine the notion that we are a family here at MMSTC. And finally, staff told parents and prospective students that this program differs substantially from others because of the focus on research and guiding students to “use their powers for good.”

Evidence of the power of the MMSTC team’s commitment to these program pillars was clearly communicated in senior portfolios. Presented to district administrators and various practitioners active in the world beyond the classroom, seniors consistently mention MMSTC had instilled within them an ability to prioritize; to work collaboratively with others; to do meaningful research; the value of performing community service; the importance of having a strong work-ethic; and the capacity to communicate in written and presentation forms. Student work samples echoed the program’s growing emphasis on strengthening students’ ability to write critical and thoughtful papers across disciplines. Having seen these presentations, I feel confident that graduating seniors – class of 2012 – will make our world a better place.

Today, we have one eye on a productive, rejuvenating summer holiday and the other on the vision for another successful school year for our students at MMSTC. Looking forward to seeing everyone in September!

## **Everyone Survived AP Chemistry!**

On the last day of school for seniors, Mrs. Hilliard threw her class a well-deserved graduation party. All the students made it through the rigorous course work throughout the year, as well as studying for and taking the AP Chemistry Test. That’s definitely something to celebrate!



## A Heartfelt Goodbye to Mrs. Brown



MMSTC says Goodbye and Good Luck to an integral part of MMSTC. Mrs. Elissa Brown is retiring and moving to Florida, where she will join her husband who has begun a new career there.

Mrs. Brown has been an essential part of MMSTC for 14 years. She has been a staunch student advocate and supporter of students at every step of their way. She was the first face of MMSTC as she met with prospective 8<sup>th</sup> graders and encouraged them to test for the program. Once admitted to MMSTC, she would help nervous 9<sup>th</sup> graders learn to adjust to high school, balance two schools, and deal with all kinds of academic, personal and social issues. She would guide 10<sup>th</sup> and 11<sup>th</sup> graders through the exploratory processes of college decisions and encourage them through the complicated application process for admission, scholarships, and financial aid. She would celebrate the accomplishments of the 12<sup>th</sup> graders at the Senior Dinner and present them with an MMSTC medal. Mrs. Brown has been with students from the beginning to the end of their MMSTC life, always on their side, cheering for them, and offering constant support.

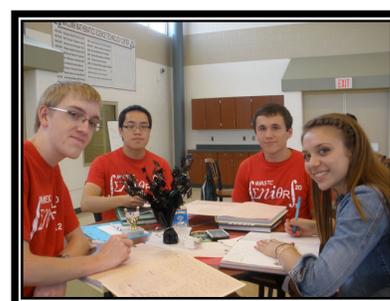
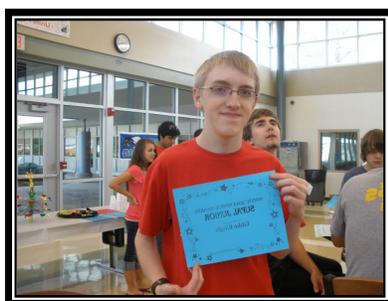
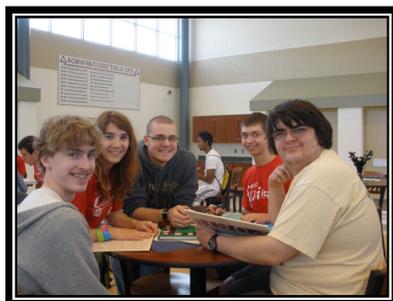
In supporting our students and helping them to be successful, Mrs. Brown has always gone above and beyond. She would help students navigate the complex maze of financial aid, scholarships, and the college application process. She would help students as they struggled to define themselves and make some critical decisions. She was always ready to listen to students, help them find the best solution for themselves, and be a resource and wealth of knowledge on all kinds of topics.

Mrs. Brown has touched the lives of more than just students. The staff always appreciated her positive attitude, sense of humor, and ability to get to the heart of issues, diffuse tense situations and find solutions. Her kindness, dedication, insight and perspective have been legendary. The staff is losing a friend and a mentor.

Mrs. Brown hopes to continue working with students while in Florida, working in higher education in some capacity.

We wish her well in her retirement. The students and staff will miss her tremendously, but she will always be a part of the MMSTC family.

## SENIOR BREAKFAST WAS A BIG HIT!



## Senior Exit Interviews



In what is to become an annual tradition at MMSTC, the senior class of 2012 participated in Exit Interviews. First the students constructed both a physical and an electronic portfolio. They selected exemplary pieces of work from throughout their four years of high school, evidence of their solid academic records, and awards from scholastic and athletic achievements. They wrote three introductory reflective essays, which described their academic achievements, their skills, and their personal and social growth. They made a personal webpage which included all of those things as well. Finally, they presented their portfolio to a panel of judges. Judges included leaders from Warren Consolidated Schools, business professionals from various industries, educators, and MMSTC alumni.

The students found this to be a valuable and beneficial experience. Some sample comments from the seniors:

“The senior exit interviews helped me to recognize all of the work that I have done in high school over the last four years. I am sure that this process will help me later on when being interviewed for jobs, scholarships, internships, etc.”

“The thing that I liked the most about the exit interviews were the interviewers...I was able to obtain professional contacts for future reference...it allowed me to put my goals and accomplishments into perspective and holds me accountable for what I plan to do in the near future.”



The staff also felt that the experience was valuable for students. It allowed them an opportunity to reflect back on their high school experience, recognize their achievements and growth, and look forward to their future academic and professional lives.

### Career Exploration Day

Lawrence Tech University sponsored a Career Exploration Day on March 23, 2012. Sophomores took advantage of this opportunity and had a day of exploring dynamic career and education options. They individually registered for three interactive, hands-on sessions designed to expose them to the rich variety of programs at Lawrence Tech.

Selecting a major and ultimately a career can be hard. This event helped students to explore some of their options. They were also able to experience Lawrence Tech's state-of-the-art labs, studios and facilities first hand. A highlight of the day was eating lunch on the lawn outside the Student Union and enjoying a sunshine filled, warm spring day – a rare opportunity in March in Michigan!

## International Science and Engineering Fair (ISEF)

Written by: Catherine Buchanan and John Drabik



Every year, thousands of high school students, from over 65 different countries, plan, execute, and discover through the means of experimentation. Ranging from the simple to the complex, these experiments are condensed and analyzed. The projects that are the most profound and helpful to today's world win at the city and regional science and engineering fairs, eventually to go on to the Intel sponsored International Science and Engineering Fair (ISEF). This year at ISEF 1,500 students from 68 different countries came together to compete for \$3 million in prizes. This year, now

MMSTC alumni **Cat Buchanan** and **John Drabik**, experienced this year's science fair in Pittsburg, meeting new people and observing some extraordinary projects.

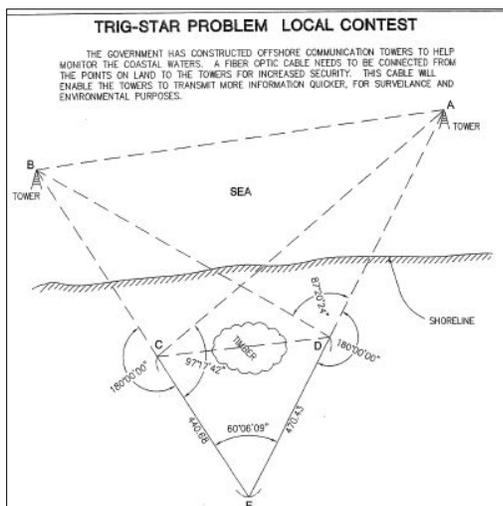
The duo missed a week of school to represent MMSTC on a global level, bringing along with them their senior research project, *The Effects of Cow Urine and its Components as a Fire Retardant on Cotton Fabric*. It could easily be said that their project was made up of profound ideas, after all, who would ever use cow urine as a means to prevent fire, let alone even want to handle it? The brave souls that they are, conducted the experiment within a classroom setting (as most of the school knew due to the horrid smell). Taking their project to Pittsburgh, Cat and John were not expecting to win much. "It was just really cool to be around all of these different cultures and ways of life, without having to cross an ocean or two," said John on his time with different people. He and Cat met several students from all over the United States, Egypt, Hong Kong, Jordan, England, Italy, and Slovakia. Ivan Ševčík, a nineteen year old from Slovakia, was one friend that they hope to keep in contact. Cat in particular will miss Ivan. "Although it's hard to say if we will ever see him again, but Ivan was a really nice and interesting guy to meet. We'll have to use Facebook."



Unfortunately, Cat and John did not take home any additional prizes. Even though money is nice, recognition and prizes are not that important. "It was an honor just being there. How many people get to say they were an Intel ISEF Finalist? Not many. I hope that the students from MMSTC decide that they would like the chance to go, and will put the work into their research projects over their four years of high school," said John. Cat agrees with him, adding that "students don't seem to put too much effort into their projects, trying to get by for school. Instead they should have fun with a project they enjoy and wish to present to others, giving them the chance to excel at a higher level."



How is trigonometry used in the real world? What professions use trigonometry in their fields? The Sophomore class of 2014 got a glimpse of the answers to these questions this spring through the efforts of **Mr. Craig Amey**, a professional surveyor at Anderson, Eckstein, and Westrick, Inc. and a Board Member of the Michigan Society of Professional Surveyors. Mr. Amey talked with students about the career opportunities in surveying and sponsored the annual TRIGSTAR contest. In **Mrs. Kincaid Dewey's** class, students prepared for the contest by completing sample problems like the one shown below.



On May 2, 2012 sophomores and select juniors competed in the TRIGSTAR contest. **Mackenzie Eddy** (Fraser) won the school contest, earning 84 points. Junior **Nick Higgins** (Cousino) and sophomores **Ashley Meerschaert** (Cousino), **Jaimie Bell** (Fraser) and **Antonio Liccardello** (South Lake) rounded out the top five for MMSTC. All earned 75 points in 28 minutes or less.

In addition, we are proud to congratulate **Mackenzie Eddy** (Fraser) on her **THIRD PLACE** state level award. Over 1,000 students take this contest statewide. For her efforts, Mackenzie earned a \$250 cash award.

## It's Spring? That Means Research Season at MMSTC!

Nicer weather means goodbye to winter jackets and hello to green grass, but here at MMSTC it always means the beginning of RESEARCH for underclassmen! Walk the halls during this season and you'll see students growing plants or bacteria, constructing calorimeters out of PVC piping, and outfitting 'Amber' -- a mannequin head -- with different sports safety helmets. All grade levels are busy researching the scientific concepts behind their topics, collecting data, analyzing that data through different statistical tests and drawing conclusions. Information is compiled into an extensive research paper. Students then create a formal presentation, complete with a Power Point slide show, to share with their fellow classmates and teachers as well as family and guests. It's not uncommon for students to stay late after or come early before school to practice and their professional "Butcher presentation clothes" give away who is presenting on a specific day!

Kudos to our students on completing this particular rite of spring at MMSTC! Family and staff are proud of their accomplishments and acknowledge all the time, effort, teamwork and stress that goes into the final product.





## Tenth and Eleventh Graders Honored in Michigan Statistics Poster Competition

As a culminating project to incorporate all the skills learned throughout the semester in statistics, the sophomores were required to complete a study done on a question of their choice then display their results on a poster. Grand Valley State University hosts the Michigan Statistics Poster Competition in order to encourage and reward students that study statistics. This year three MMSTC sophomore teams received honorable mentions in the 10<sup>th</sup> – 12<sup>th</sup> grade category of the competition and one team of two juniors and a sophomore were National Qualifiers, meaning that their poster will go on to Washington to compete at the next level. **Dr. Robert Kushler**, statistics professor at Oakland University, **Dr. Kathleen Peterson** and **Dr. Al Schulte** retired Consultants from the MISD came and presented the certificates to our students.

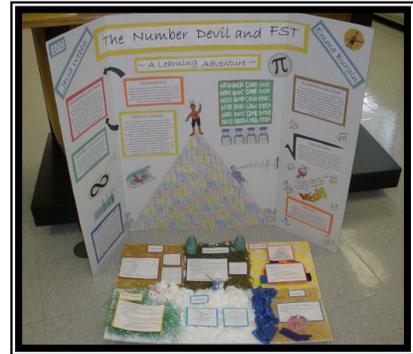
The poster titled “*Scrub vs. Dress*” by **Naim Cekaj** (Lakeview) and his partner **Andrew Baran** (Mott) showed that high school students prefer to come to school more casually dressed early in the week then get more “dolloed-up” as the week gets closer to Friday. **Ryan Hallock** (Cousino) and **David Pokriefka** (WWT) with their poster “*Get Your Game On*” found that girls prefer to play Wii, boys prefer X-Box and that there was no significant difference in game preference between the different grade levels. **Tasnim Choudhury** (Mott) and **Rachel Kloski** (Fraser) found that under-age drinking was not really a problem at STEM schools. Their poster was titled “*Underage Drinking: A Real Problem?*” According to the National Qualifying team, **Nick Higgins** (Cousino), **Dylan Twardy** (Cousino) and **Noah Conner** (Cousino), with their poster titled “*Who’s Greener?*” found that Warren adults and students are about equal in their knowledge of the city’s recycling program, with both groups answering less than 50% of the questions correctly. I can see we need to brush up on our recycling facts!

## Junior Physics Students and Seniors Go to Cedar Point



## WHAT'S GOING ON IN MATH CLASS?

FST students completed their final project of the year in June. After reading *The Number Devil: A Mathematical Adventure* by Hans Magnus Enzenberger that contained a myriad of second semester FST topics, students choose from a list of projects to 'show what they know' about the content. Projects ranged from the displays shown to Jeopardy games, new chapters of the book, videocasts of interviews with the main characters, skits based on the story and even a *60 Minutes* parody



### Math & Poetry? Why Not?

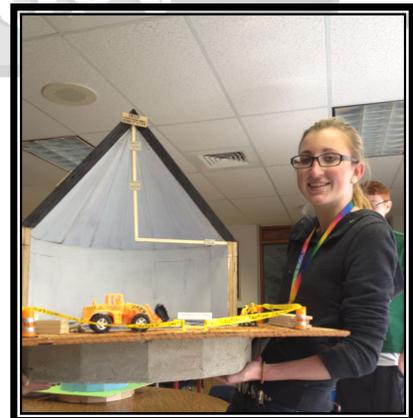
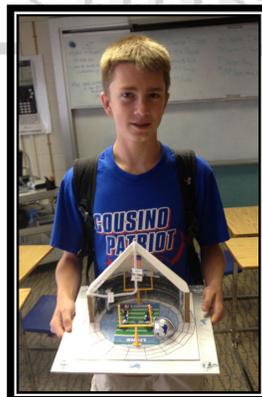
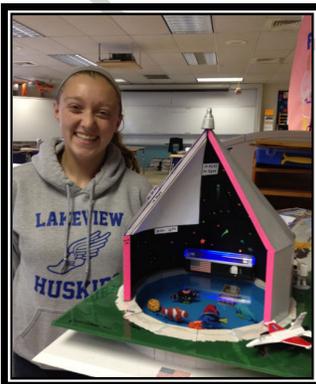
Students in **Mrs. Kincaid Dewey's** calculus class had an unusual assignment: write a poem on a calculus topic in the "poem for two voices" genre. These poems are meant to be read aloud by two readers and have two columns – one for each person who is reading. These poems often sound like a dialogue for two people.

**Paul Stabile (Cousino)** and **Christian McClusky (Cousino)** wrote "The Function and The Tangent Line" and **MacKenzie Krolczyk (Cousino)** and **Kyle McKee (South Lake)** wrote "Derivatives".

The Function and The Tangent Line	
I am a function.	And I'm the tangent line.
If you put us together on a graph,	We look so darn fine!
Look at us	Side by side
Riding next to your slope	We really make things glide!
Some call you the derivative.	Yes, that's true.
As long as you stay with me...	I promise to always be next to you!

Derivatives	
Calculus	Calculus
Derivatives	Derivatives
What IS a derivative?	The instantaneous rate of change.
The slope of the tangent line,	at any given point on a function.
The derivative of $\sin(x)$	is $\cos(x)$ .
The derivative of a position function	is velocity.
The derivative of a velocity function	is acceleration.
Chain Rule	Product Rule
Quotient Rule	L'Hopital's Rule
Derivatives make calculus possible!	Derivatives make calculus possible!

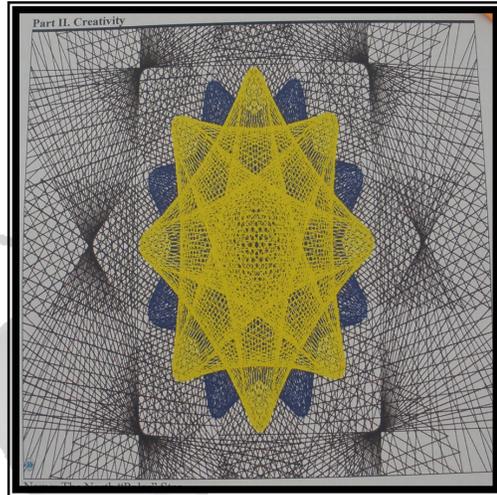
### Freshmen Do The Tower Project



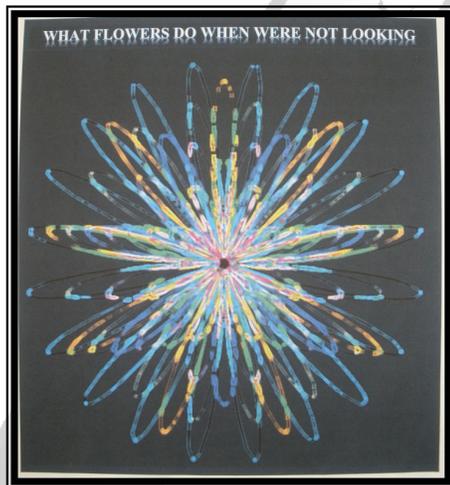
## WHAT'S GOING ON IN MATH CLASS?

### Exploring Polar Curves!

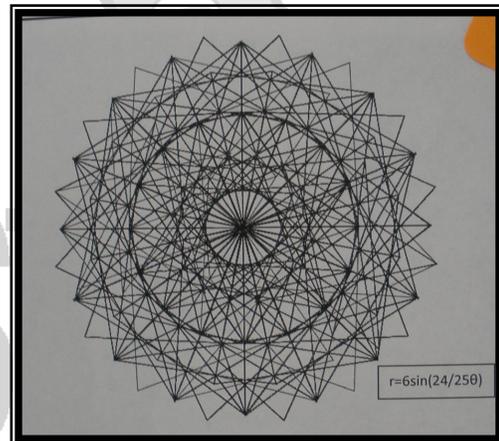
Sophomores re-visited “Polar Land” in FST this semester. This year, they went and extended their knowledge in exploring a variety of polar curves. The unit culminated in a project where students investigated changing the parameters of chosen polar curves including the rose curve, Liitus, Archimedes Spiral and limaçons. They also researched real-life applications and made their own Masterpiece composed of several polar graphs. Students and staff at Butcher voted on a People’s Choice Awards and the winners are pictured. Winners were given McDonald’s gift cards by Mrs. Kincaid Dewey.



**1<sup>st</sup>: Jacob Arche (SHHS)**



**2<sup>nd</sup>: Megan Satawa (WWT)**



**3<sup>rd</sup>: Kristian Wilks ( Lake Shore)**

### Solids of Revolution in Calculus

Seniors completed a project to demonstrate their understanding of the application of integral calculus. Students created their own problem to find the volume of a solid of revolution and created a model to show the disc, washer, slab and shell solution methods. Student models will be used in future calculus classes to enhance conceptual understanding of this otherwise abstract concept.



## MMSTC Mars Rover Team Places 2<sup>nd</sup> in Competition



The University of Michigan's Mars Rover Design Contest was an unforgettable experience that taught us much more than we had anticipated. This year's contest required a team of high school students to investigate the environment of Mars and the needs of astronauts in space. Then we designed a base station that would adequately sustain six to eight astronauts on Mars for two years. After research, we learned a great deal about the hardships of being an astronaut, such as having to bathe without water for an entire year or two. We had to research and consider

the effects the Martian environment on the astronauts and the base station. We also learned about how much potential information is still out there in space, including the environment of Mars.

Through this competition we realized that MMSTC has prepared us so much. Our ability to write research papers helped us write a tremendous entry and create a marvelous presentation. Having to present our research to a panel of University of Michigan professors and students was very intimidating, but useful. We realized how much MMSTC has prepared us to give speeches and presentations. Half of our entry was scored based on the ability of our team to present the information, so the tips we learned from MMSTC helped us immensely.

The design contest was informative and enjoyable and we met many peers who shared the same interests as us. We even had the chance to tour U of M and learn about its history. Our team plans on competing again next year and we encourage other students to compete as well. We would also like to thank **Mrs. Dewey** for all her help and support!

Written by:

**Gretchen Grade** (SHHS)

**Marla Nazee** (SHHS)

**Sarah Myers** (SHHS)



**Michigan Mars Rover Team**

*It's not what you drive... it's what drives you*

## MMSTC Teachers Work on Another NASA Adventure



Four MMSTC teachers will participate in a NASA program called the **Wallops Balloon Experience for Education** (WBEE) this summer. In July 2012, IDS teachers **Mrs. Duddles** and **Mr. Supal**, Physics teacher **Mr. McMillan** and FST teacher **Mrs. Kincaid Dewey** will travel to Palestine, Texas where they will work with other high school educators and students to conduct experiments involving balloon flights. Balloons can help NASA inspire and train the next generation of engineers and scientists. WBEE will build upon an existing NASA program, High Altitude Student Project (HASP) which has flown 44 payloads involving more than 200 undergraduate students from across the United States.

WBEE will involve teams of students and educators in classroom and hands-on balloon science activities. The teams will be given the opportunity to build their own science payload. The WBEE experience culminates with the launch of their payload onboard a NASA scientific balloon from the Columbia Scientific Balloon Facility in Palestine, Texas.

## Mr. Supal Scores Again!

According to the PR Newswire of United Business Wireless:

“The winners of the [National STEM Video Game Challenge](#), a competition to motivate interest in science, technology, engineering, and math (STEM) by learning, playing and making video games, were announced today at The Atlantic's Technologies in Education Forum in Washington, DC. The Middle School prize was awarded to **Mark Supal**, an educator from Warren, Michigan, for his game *Energy Tycoon*.”



Mr. Supal's game incorporates scientific and engineering practices from the physical, earth/space, and engineering fields, challenging players to create energy with renewable technologies in an efficient and cost effective manner in order to power homes and create a sustainable community. The winners were invited to demo their games at the *Atlantic's* Technologies in Education Forum in Washington D.C., where they were presented their awards by Tom Kalil of the White House Office of Science and Technology Policy. Each winner received a prize of \$10,000 and will continue to receive mentorship and guidance from the challenge partners and sponsors for their winning game. Go to <http://www.youtube.com/watch?v=pohc3jV8E8M> to listen to a description of the game Energy Tycoon. Supal hopes to refine the game and distribute as application to students on their smart phones.

## College Campus Visit: Michigan State University

The Class of 2014 visited the East Lansing campus of Michigan State University on March 26, 2012. This year's campus exploration began at the popular **National Superconducting Cyclotron Laboratory (NSCL)**, a center for world-class rare isotope research and education. where nuclei are accelerated, smashed, filtered and studied. Education Outreach Director **Zack Constain** gave an informative and entertaining presentation for one of his favorite audiences – MMSTC students – about how nuclei are accelerated, smashed, filtered and studied at NSCL.



A campus tour ended at Holmes Hall, where sophomores experienced the plethora of food choices available for lunch to college students. Better yet, it was “all you can eat”! It is amazing what some sophomores, boys especially, can consume in one hour!

After lunch, Admissions Counselor Bess German talked to students about MSU and the Lyman Briggs and James Madison Colleges. MMSTC alumni were on hand to answer questions from students regarding college, college life, programs of study and how the preparation received at MMSTC translates to the college experiences.

## MMSTC ENVIROTHON TEAM TRAVELS TO STATE COMPETITION!



One very full mini-van filled with students and gear traveled to Lake Superior State University in Sault St. Marie, MI for the Michigan Envirothon State Competition in early May. Established in 1994, this statewide environmental



education program for high school students is the largest of its kind. In Envirothon, teams utilize resource materials and local resource professionals to gain a knowledge and understanding of the following natural resource subject areas: agriculture, aquatic ecology, **energy**, **forestry**, **soils/geology**, **wildlife**, and this year's **current environmental issue** of Low Impact Development. The Michigan Envirothon program focuses on using the outdoors as a classroom and utilizes diverse "eco-stations" as competition testing sites.

MMSTC's team, **The Green Turtles**, placed in the middle of the pack in overall standings. In the Community Service

Project category, they were awarded Second Place out of 24 teams! This year's project was collaborating with Nike's **Reuse-A-Shoe** program, as noted in our winter newsletter. Team members **Dylan Twardy**, **Nick Higgins**, **Noah Conner**, **Erin Drylie** (all from Cousino)



along with **Drew Martin** and **Rasika Patil** (both from SHHS) put collection boxes at various locations and managed to collect 277 pairs of used athletic shoes – 441.25 pounds in all! Shoes were sent to a Nike recycling center where they will be turned into 'Nike grind' and used in athletic court surfaces as well as formed into carpet padding. In addition, 100 additional pairs of gently-used shoes were donated to an area charity. Sponsor **Mrs. Kincaid Dewey** is proud of the accomplishments of such a small group of MMSTC juniors and sophomores. It just goes to show that each of us can make a significant impact on the quality of our environment. Congratulations students!

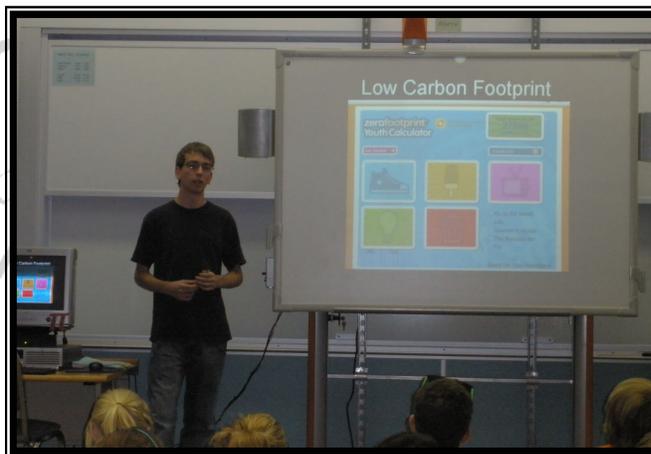


## Fraternizing with Celebrity, Bill Nye

While working on his Einstein Fellow duties, **Mr. Supal** meets **Bill Nye the Science Guy**. It's good to be Supal!

## Earth Day 2012

Students at MMSTC celebrated Earth Day by learning more about environmental topics and cleaning up the area around our building, The Butcher Educational Center. The MMSTC Envirothon Team gave presentations to all students about recycling and the ideas behind measuring our 'carbon footprint'. The Team's community outreach project – The Nike Reuse-A-Shoe Program – was explained in detail and students were invited to calculate their own carbon footprint at <http://calc.zerofootprint.net/youth/neew>.



## FRESHMEN VISIT THE ZOO

In keeping with tradition the freshmen class closed out the school year with an exciting trip to the Detroit Zoo. Students and parents were exposed to a variety of newly renovated exhibits. Mr. Brian Hassig a long time Detroit Zoo visitor was excited to see all the wonderful animals in their new homes. **Austin Hauer** a **Sterling Heights High School** student found the trip most exciting when socializing with his new friend from the morning MMSTC session. Mr. Hauer also expressed that the perfect weather was a factor that added to his experience. The late spring temperatures and cloud cover made it ideal for the animals to be out and about during our visit so viewing was at a premium. **Sam Tracy** a **Saint Clair High School** student found that he enjoyed the new addition to the tiger exhibit and was in wonder as he looked at the large variety of frogs in the amphibian exhibits that were available for viewing at the Detroit Zoo. **Zack Hoisington** a P.M. student from **SHHS** enjoyed making monkey noises with his new friends from the A.M. session. All in all with the addition of the late spring temperatures the freshmen at MMSTC had a very informative visit. Have a great summer and we look forward to seeing you in the fall.

## How MMSTC Made a Difference for Me

I was always going to be a writer....

By Wayne Stiles (MMSTC Class of 2008)

Sure, as a young kid I went through phases wherein I wanted to be an archaeologist (dinosaurs!) or a veterinarian (animals!), but before middle school I knew I was going to be an author. I really had no thoughts of computer science on my mind - I wrote a couple calculator games after my brother showed me how, but I wouldn't say I knew programming logic much at all. HTML was this magical art a few of us tampered with in 8th grade, never comprehending what we did. Computer science, as a career field far broader than simply programming, was unheard of.

Then I came to MMSTC. As part of the general IDS curriculum, everyone learned Visual BASIC in 9th grade. We learned the logic - Mrs. Gerling convincing us that "If you can learn one programming language, you can learn any programming language." From there it was JAVA the next couple years, and I slowly realized that programming was... well, *fun*. Not unlike math, you knew when you were right, and you knew exactly what to do if you were wrong (I have since been cured of this notion). As I researched the challenges a new author faces, it occurred to me I should go into computer programming. Originally it was going to be a day job -- something to pay the bills while I wrote. I've realized, though, that I've my entire life ahead of me in which to write, and can afford to focus on my career for now.

Now, at the end of my Computer Science degree, I have learned much more than just programming. I find all the design and engineering that goes into writing good code and making useful software fascinating. C# is now my favorite programming language, though the thought of it used to inexplicably scare me in 12th grade. I have dappled in magics more arcane than HTML seemed so long ago: working some in assembly, understanding software lifecycle, and creating client-driven products for real companies. I have learned networks and security, graphics and game design.

And the world is open to me. I almost cannot count how many interviews I received this last year alone, several of which went on to on-site invitations or even job offers. It's a great time to be in the field of Computer Science, and (as cheesy as it sounds) I truly owe it all to MMSTC.

**Wayne Stiles** graduated with Honors from Michigan State University in May 2012, with a Bachelor's degree in Computer Science from the College of Engineering and from the Honors College. He is currently undergoing security processing to join the Department of Defense.

### ALUMNI GIVE BACK TO MMSTC

Recent WSU and U of M grads **Grace Hsia** and **Rashmi Patil** (MMSTC Class of 2008) visited MMSTC sophomores and freshmen this spring to share their college experiences. Their talk to sophomores (complete with a Power Point!) was entitled College: An Insider's Look. They shared 'what they wish they knew' when going through the process of choosing a college and the ins-and-outs of that critical first year. With morning freshmen, they shared tips on being successful at MMSTC and how their studies here benefited them in college.

**Rashmi Patil**, an M.D. Candidate at University of Michigan and **Lauren Sackey** who works as Marketing and Annual Giving Producer at the University of Michigan served as Judges for the Senior Exit Interviews this inaugural year.

**Juzzlyn Perry** and **Holly Steinberger** (MMSTC Class of 2011) volunteered to lead freshmen in their study of QBasic, a variation of the BASIC computer programming language this spring. They did a fine job of introducing students to their first computer programming language as well as being role models for current students. We appreciate the time these alumni devoted to help current MMSTC students. The MMSTC Family is truly special.

## COUNSELOR'S CORNER – E. Brown

### The Extracurricular Edge



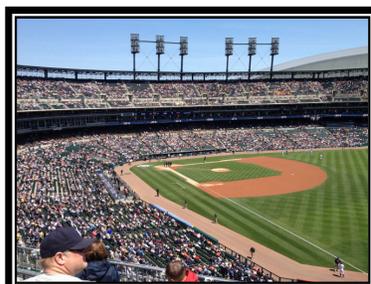
When it comes to college admissions, there is more than meets the eye. Admissions officers know that what potential students do with their time outside of school reveals important personal dimensions that statistics just can't show. Participating in an extracurricular activity can demonstrate time management skills, ability to prioritize, motivation, responsibility, and leadership qualities.

Below are some tips for selecting your extracurricular activities:

1. **Choose depth over breadth.** Admissions officers are more likely to consider an applicant who is **deeply and passionately committed** to a specific activity, rather than one who is superficially involved in multiple activities.
2. **Consider interests and abilities.** Choose activities that complement and enhance your **specific interests and skills**. For example, a talented writer should consider working on the school newspaper or yearbook. And remember that a passion unrelated to school counts too. An avid dancer or ice skater does not need to add on a school activity to look well rounded.
3. **Seek a balance.** Achieving a balance between academics and extracurricular activities can be a challenge. Remember that participating in **too many activities can take away from study time**. It can also lead to burnout and exhaustion.
4. **Count working and volunteering.** The commitment to working at a job or volunteering reveals certain personality characteristics that appeal to admission officers. It usually works in an applicant's favor to show a significant level of employment or community service while maintaining academic excellence.
5. **Use internships to develop interests.** Internships can help students discover activities they feel passionate about. **Work experience assists in identifying career interests and goals**. It provides an opportunity to apply classroom learning to the real world. It's also a great way to earn money for college.
6. **Realize that inclusion in most lists and publications is not significant.** Colleges are interested in actual achievements. Colleges do not give much weight to being listed in *Who's Who Among American High School Students* or other "name only" accomplishments.

By supplementing your individual study with a study group, you can reinforce what you've learned, deepen your understanding of complex concepts, and maybe even make a few new friends. Whoever said learning can't be fun?

## Seniors Enjoy a Day at the Ball Park



# CONGRATULATIONS!



## CLASS OF 2012

### MACOMB MATHEMATICS SCIENCE TECHNOLOGY CENTER

27500 Cosgrove | Warren, Michigan 48092 | [www.wcskids.net/mmstc](http://www.wcskids.net/mmstc)

Dr. Catherine Neuhoff, Dir. of Special Programs  
MMSTC Newsletter Committee: MMSTC staff  
Editor: Rosemarie Cybulski  
Printing and Distribution: Secretarial Staff



#### MMSTC MISSION STATEMENT

The mission of the Macomb Mathematics Science Technology Center, in partnership with families and community, is to create the best innovative environment which fosters excellence and vision in teaching, learning, and discovering the relationships of mathematics, science, technology, and society.

### WARREN CONSOLIDATED SCHOOLS

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#### Student Achievement

*A focus on measurable student achievement in our Professional Learning Communities.*

#### Clear Expectations

*Clear expectations for every stakeholder, including students, staff and parents.*

#### Strong Relationships

*Strong relationships among all stakeholders, including: teacher-student, parent-teacher, principal-teacher, and superintendent-board member.*

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