



Δ Center Line Δ Clintondale Δ
 The *Cruse Cousino* Δ Warren Woods
 Fitzgerald Δ **CENTER PAGE** Δ Lakeview Δ
 Sterling Heights Warren Mott

Science and Engineering Fair of Metropolitan Detroit Grand Champions

In March of 2008, **Mike Newton** and **Justin Vail** were selected as Grand Champions in the team competition at the Science and Engineering Fair of Metropolitan Detroit. They were both awarded with full ride scholarships to Lawrence Technological University. In addition, they were invited to compete at the International Science and Engineering Fair in Atlanta, Georgia. The event occurred during the week of May 12th, 2008 and was sponsored by Intel Corporation. The science fair was a week long competition between high school students from across the US, and from over fifty countries. Newton's and Vail's project titled, "Putting Perfection," drew plenty of interest from many of the Nobel Laureate judges, but was not selected as the top project in the team category.



The participation of our school at International Science and Engineering Fair was a great honor for MMSTC and Newton, Vail, and teacher Mr. Supal had a wonderful time interacting with the many international students.

MMSTC SCIENCE FAIR WINNERS



First Place in the **Biology** Department:
Jennifer Scully and Heather Wagnier
Treating S. epidermidis

First Place in the **Chemistry** Department:
Stephanie Bamford and Lindsay Stoyka
Caffeine Craze.

First Place in the **Physics** Department
Mike Newton and Justin Vail
Putting Perfection

IN THE CENTER PAGE...

Class of 2008 Senior Dinner	2	7 th Annual Siersma Math Night	5
Pond Beautification Project	3	TrigStar 2008	5
Essays in Calculus Class	3	Spring Spirit Week	5
MSU Visit	4	Counselor's Corner	6
Pool Research	4	MMSTC Outreach	6
Zoo Trip	4	Chemistry Speaker	6
Cedar Pointe	4	Alumni News	7
Students Design Useful Products	5	Michigan Statistics Poster Competition	8

Class of 2008 Senior Dinner



Monday, April 28th the MMSTC senior class celebrated their accomplishments with parents, family members, teachers and administration at the 2008 senior dinner. Each student was recognized and their plans for the future were shared with all. Over 6.4 million dollars in scholarship money was procured by this year's senior class of 69 students. Mr. Walsh, WCS Associate Superintendent of Instruction shared some words of wisdom, telling our high achieving students that their accomplishments mean nothing if they don't use their talents to help others and ultimately make the world a better place.



Good luck class of 2008, you will always be thought of kindly and missed deeply.



**CONGRATULATIONS,
GRADUATES!**



Senior biology students participated in the “MMSTC Pond Beautification Project” as a hands on experience in plant/animal identification and habitat creation. Groups of students were given the task of scientifically identifying living organism within the pond court yard. Over forty different species were identified which included *Oryctolagus cuniculus* (European Rabbit), *Esox lucius* (Northern Pike), and *Viola papilionacea* (Wild Violet), just to name a few. All the species identified were categorized and described. In addition, the students were assigned sections of the courtyard to clean up and re plant. One group even created an MMSTC logo complete with flowers. In addition, there were several student designed bird house placed within the pond area. One bird house has a miniature video camera hidden inside which has allowed students to monitor the growth of seven baby Starlings. It can be accessed through our website by clicking on students and then Live BirdCam. The interest in the courtyard animals (especially, Huey Lewis, the rabbit), has lead to the pond area becoming a focal point for both MMSTC students and Community High students.

Essays in a Calculus Class?! Why not?

Seniors in Mrs. Copeland's and Ms. Malone's AP Calculus class wrote 4 essays on calculus topics throughout the year. This required students to reflect on the concepts, express it in written form, and then solve problems using the concepts. As a culminating activity, students had to “defend” their work to a panel of outside calculus experts. Former MMSTC teachers Mr. Copeland, Mr. Ervin, Mr. Klein, and Mrs. Beltz served as judges. Two former students, Aaron Setlak and Eric Gawel, and other professionals from the educational and engineering worlds served as well.

Although students were nervous about this type of presentation, it was a valuable learning experience for them! As part of the MMSTC philosophy, it is necessary for students to think about mathematics in a variety of ways, and expressing it as solutions to problems, in written explanation form, and verbally communicating their ideas each require students to think more deeply about the mathematics and ensure that they truly understand it.



MSU VISIT

The sophomore class had an opportunity to get a jump start on the college campus visit with a field trip to Michigan State University. The day started off with a presentation from Bess German, Director of Admissions and Student Affairs. Ms. German spoke of all of the great programs and opportunities that MSU has to offer our bright students including study abroad programs to over 60 countries on all continents. She also spoke on the importance of getting involved in school activities and academic excellence so that when you are ready to apply to various colleges you will be ready to present yourself in the best light! After the presentation Ms. German and her staff took the students on a tour of MSU's beautiful campus and a presentation from the College of Engineering.

Next up on the MSU tour was a trip to the National Superconducting Cyclotron Laboratory. This is the nation's leading particle acceleration facility. The primary goal of the NSCL is to unravel the mysteries that reside at the center of atoms, in atomic nuclei. Atomic nuclei are ten thousand times smaller than the atom they reside in, but they contain nearly all the atom's mass. Through this research astrophysics make and study atomic nuclei that cannot be found on earth and seek to understand how the elements were formed. They also discuss why basic research is important in forming new science and technologies.

After all of our hard work as astrophysics we were off to the MSU Dairy Store for a cool treat and a look at the chemistry of ice cream. It was a great day for all!



POOL RESEARCH

In true MMSTC fashion the sophomore team decided to help the 10th graders prepare for research in an unconventional yet highly fun way. Rather than reading books and looking at wikis we decided to take a hands on approach and head to the Warren pool. There is nothing like the warmth of 80 degree water and a huge water slide to help ease the chill of winter. At the pool students worked on finding their kinetic energy while they slid down the water slide, calculated the specific heat of water in the hot tub, and even tested Boyles Law of pressure and volume relationships in the lap pool. Students even brought along their TI-84 calculators and digital probes to help out. The students had a great time integrating math, science, technology, and fun!

FRESHMAN

VISIT

ZOO!



CEDAR POINTE

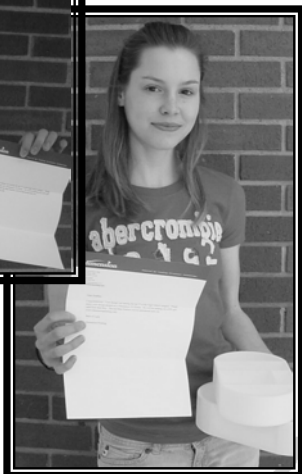
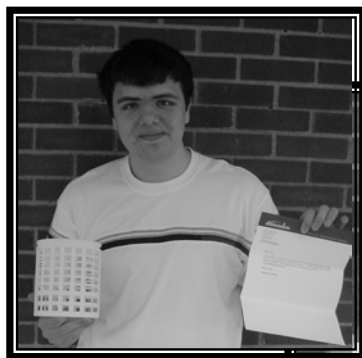
Tuesday May 20, the juniors and seniors of MMSTC attended a fieldtrip to Cedar Point Amusement Park in Ohio. The cloudy skies in the morning kept the crowds away and the sun broke through and treated the students to sunny skies the rest of the day.

Lines were very short for all rides. Rides such as Top Thrill Dragster, which normally have waits as long as 6 hours, had lines no longer than 30 minutes.

While at the Park, Physics students made observations and calculations such the acceleration of the Millennium Force Roller Coaster, the amount of G-Forces on Top Thrill Dragster, power of the Power Tower and the length of the Rip Cord.

The projects were turned in around 2:00 so the students had the rest of the day to enjoy the park. The short lines kept the kids busy and at 5:55 pm (new record) the students were back on the bus for the return ride to MMSTC.

STUDENTS DESIGN USEFUL PRODUCTS



Students in the 11th grade IDS class used Solid Works to invent new and useful products during their first semester. Each student created a unique and innovative product of their choice with the use of Solid Works, a 3D computer aided design package. Students submitted their designs to the "Extreme Redesign Contest" sponsored by Stratasys, Inc., manufacturers of an automatic plastic printing machine. The contest awards prizes to high school students who design new and useful products. This Spring, MMSTC had two winners in top 25 product designs out of entries from across the country. **Heather Jagoda** won a gift certificate from Best Buy for her Bento Box, which is a Japanese lunchbox. **Cory Page** also won a gift certificate for his Clothes Catching Basket, which helps to remove clothing from deep within a washing machine. Heather and Cory also submitted their products to the Michigan Industrial and Technological Society (MITES) State Competition held in Lansing, Michigan, May 7 – 10 of 2008. There they were awarded fourth and fifth places respectively for their product designs.

7th Annual Siersma Math Night

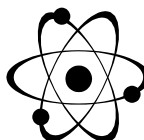
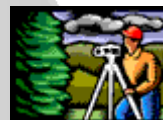
On April 22, 2008, many MMSTC students taught math concepts to elementary students at Siersma Elementary School. For the last 7 years, MMSTC students have shared their talents, time, and enthusiasm for mathematics with the younger grades. Activities included such things as Bingo, Twister, Candy Land, and Dress-Up. Siersma staff was very appreciative of the quality of educational activities. Mrs. Copeland, Mrs. Kincaid Dewey, and Ms. Malone were also impressed by the way MMSTC students interacted with the younger students.

TRIGSTAR 2008

Mr. Craig Amey, our sponsor from the Michigan Society of Professional Surveyors, visited MMSTC once again this year to introduce students to the surveying profession and to proctor our participation in the National TRIGSTAR contest. Sophomores enjoyed an informative presentation about this career field and stories from Mr. Amey's own experiences and then spent time preparing for the contest in Mrs. Kincaid Dewey's FST class. The contest was administered on May 8th where all sophomores and some juniors tested their skills. The year's school winner was **Brad Barry** with a perfect 100 point score in 31:20 followed closely by **Brittany Auld** with a perfect score in 41:15. **Bach Nguyen** (95), **Frankie Yoskovich** (94) and **Corrine Green** (88 in 16:04) rounded out the top five finishers. Congratulations to all who participated!

SPRING SPIRIT WEEK

What does spirit week at MMSTC look like? Take a look at our themes for each day: home school spirit day, professional Detroit sports day, aluminum foil deflector beanie day, character day and MMSTC spirit day. Only at Butcher! The week was capped off by a spirited and fierce set of basketball games in the morning and afternoon. For the first time in MMSTC history, the freshmen class teams in both the AM and PM achieved victory over the upperclassmen! Everyone also enjoyed the celebratory pizza, courtesy of the bagel fund.



THE COUNSELOR'S CORNER

Two new programs were added to the spring lineup at MMSTC this year. Both programs were aimed for the college bound student to better prepare them for the days ahead. MMSTC held their first ever Senior Seminar on Friday, April 25th. The program was designed to help seniors be as prepared as possible for the academic and social challenges of the transition to college. Subjects covered were how to avoid the "freshman fifteen," binge drinking on college campuses, how to register as a first time voter, techniques for de-stressing, and a large group presentation on "making college count." Topics in this seminar covered everything from study habits to credit card spending. The students left with new information, a snack, and the infamous MMSTC ball point pen!

The second program held on Wednesday, May 14th was geared for our junior students and parents as they begin the college application process. The title of the program was Making your College Search Count! The evening was filled with lots of anxious parents and students hoping that this would all just disappear and that they could just magically make their college choice a reality, without ever having to break a sweat! Unfortunately, since this is just a fantasy, a much needed information session was presented to assist our students and families in how to make this whole college process just a little more sane and a lot less overwhelming. Topics covered included how to find the right fit, standardized testing, college essays, application mistakes, scholarships, and financial aid. Parents walked away with a packet of information, greater understanding of the college process, and a multitude of resources to help assist them when working with their student during this exciting and often overwhelming process.



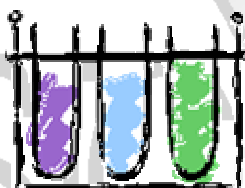
Matchmaker Sales!

Under the leadership of **Amber Hauer** and **Sasha Rudow**, \$290.48 was donated to Mrs. Copeland's Breast Cancer 3 Day Walk. The girls researched, organized, and completed the entire operation. Also, through the collection of returnable cans and bottles, another \$150 was raised for the walk.



MMSTC OUTREACH

For the second year in a row, MMSTC was the site for the DACTM/MMSTC Annual K-8 Mini-Conference on April 16, 2008. Teachers and those studying to become teachers attended this event from across the tri-county area. Our staff & students assisted the Detroit Area Council of Teachers of Mathematics in many ways. Several of our students were volunteer hosts and were invaluable to the success of the event. Display tables of student work, flyers and newsletters were distributed to attendees. Mrs. Copeland gave a workshop on teaching strategies for algeblocks and graphing calculators while Mrs. Kincaid Dewey (next year's DACTM President) served as site coordinator.



CHEMISTRY SPEAKER

On February 15th the MMSTC sophomores were in for a special treat, Dr. Emil Lozanov from Wayne State University came to discuss a variety of topics with our students. Dr. Lozanov runs an outreach program in conjunction with Wayne State and the National Science Foundation. Each year he travels to hundreds of schools in the Metro-Detroit area giving students a peek into the magical world of science.

Dr. Lozanov is a true scientist and when asked why he is willing to pack up his car at 5:00 in the morning with hundreds of pounds of glass wear, gadgets and solutions he explains that he wants to share his love and passion for chemistry with anyone who will listen. "Science should be fun and empowering. We just have to show our youth its magic and then they will be interested" says Lozanov.

ALUMNI NEWS

1994: Colarossi, Michael

Cousino High School

Michael graduated in 1998 with a BSE in Chemical Engineering. He currently works for the world's largest coatings company, Azko Nobel (based in the Netherlands), which has required him to travel across the U.S., Southeast Asia, South America, and Europe. After a ten year break, he is returning to school later this year to pursue his Executive MBA at Duke University.

1995: Robinson, Duncan

Fraser High School

Duncan graduated from the University of Michigan in December of 1999 with a Bachelor's of Science in Engineering of Nuclear Engineering and Radiological Sciences degree. He is working at Westinghouse in Pittsburgh. He is an Associate Engineer of Nuclear Core Engineering - Core Design.

1996: (Kara) Cochran, Heather

Clintondale High School

Heather graduated with honors from Aquinas College in Grand Rapids. She has completed her Masters and is currently a staff psychologist and the Posttraumatic Stress Clinical Team Coordinator at the Iowa City VA Medical Center. She received her Ph.D. in clinical psychology from Central Michigan University in 2006.

1997: Kapadia, Chaitali

Warren Mott High School

Chaitali finished her bachelor's degree in economics at Columbia University. She is a certified career coach and had her own company, Muse Coaching. In 2007, she took a full-time position at Ann Taylor in the Organizational Effectiveness department while beginning a Masters degree in Organizational Psychology at Teachers College/Columbia University part-time.

1998: MacDonald, Patrick

Lake Shore High School

Patrick graduated from Purdue University in May 2003 with a B.S.M.E. He works for Los Alamos National Laboratory where he is a Technical Staff Member in the Detonator Technology Group. Patrick is pursuing a Master's Degree focusing on non-linear dynamics and non-destructive testing via a joint program between the Laboratory and the University of California: San Diego's Department of Structural Engineering.

1999: Markham, Adam

Stevenson High School

Adam graduated Magna Cum Laude from the University of Michigan with a major in mechanical engineering. He moved to the Washington, D.C. area to pursue a job with the Naval Surface Warfare Center and is now the project manager for the government. He attended classes for a Masters Computer Science program at Johns Hopkins University and received a Masters of Science in April of 2006.

2000: Vicki Niebrzydowski

Sterling Heights High School

Vicki graduated in 2004 with a degree in Mechanical Engineering (Biomechanical Concentration) from Cornell University. She has been working for a medical device company since March of 2005, where she began as a Manufacturing Engineer working in Ann Arbor. She transferred out to Southern California in the summer of 2006 and is now working as a Quality Engineer.

2001: Clark, Joel

Warren Woods Tower High School

Joel graduated from Hillsdale College in December, 2005, with degrees in Mathematics and Physics. He is currently finishing his initial tour as an officer in the U.S. Navy, in the nuclear power program. Joel was married in May, 2006. After the military he plans to enter the field of actuarial science.

2002: Kinch, Ryan

Armada High School

Ryan graduated from the University of Michigan in May 2006 with a Bachelor of Arts, double majoring in Political Science and Philosophy. He is currently pursuing a J.D. at Indiana University-Bloomington School of Law. During the summer of 2008 he will be working for the law firm Cozen O'Connor in Chicago. While Ryan chose a degree in the liberal arts, he remains convinced that the skills he attained while attending MMSTC have proven invaluable. Employers are both intrigued and extremely impressed with the MMSTC curriculum, and it is a constant subject of interest amongst the federal judges, attorneys, and employers that Ryan encounters.

Warren Consolidated Schools

△
Dr. Robert D. Livernois Ph.D., Superintendent
David Walsh, Associate Superintendent,
Of Instruction

△
Macomb Math Science Tech Center
Lauran Hoven
Director of Special Programs
MMSTC Newsletter Committee: A collaboration of
MMSTC parents and staff
Printing and Mailing: Secretarial Staff

△
Board of Education 2007-2008
Loretta A. Crow, President
Brendan Paul Wagner, Vice-President
Brain White, Secretary
I. Susan Kattula, Treasurer
Sherry Brasza, Trustee
Jon L. Green, Trustee
Diane Holden, Trustee

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 is committed to the concept of equal employment opportunity as a necessary element in its personnel program. It is the policy of the district to prohibit discrimination on the basis of race, color, sex, age, religion, national origin, height, weight, marital status, handicap, or other characteristic in concordance with the law. Compliance inquiries should be addressed to the Assistant Superintendent for Human Resources, 31300 Anita, Warren, MI 48093. (586) 825-2480

Macomb Mathematics Science Technology Center

27500 Cosgrove
Warren, Michigan 48092
586-698-4394
www.wcs.k12.us/mmstc/index.htm

Non Profit Org
U.S. Postage
PAID

Warren, MI
48093
Permit #87

10th Graders SWEEP Michigan Statistics Poster Competition

Yes, First, Second and Third places were claimed by this years MMSTC sophomores who entered the Michigan Statistical Poster Competition hosted by Grand Valley State University. **Brad Barry** and **Brandon Cadrette** placed 3rd. Second place was claimed by **Anna Salvaggio** and **Frankie Yoskovich**. Finally not only First place winners for the Michigan Statistics Poster Competition but also Third place winners at the National Statistics Poster Competition, were **Tammy Hsia** and **Christopher Bush**.

Friday, May 23, Dr. Robert Kushler from Oakland University, Dr. Al Schulte retiree from the Oakland Intermediate School District and Ms. Carrie Roberts, engineer and statistician from Ford Motor Company, all representatives from the American Statistical Association came to MMSTC to present this year's poster winners with plaques, certificates and checks

Honorable mentions went to many students also, **Nick Catoni**, **Corrine Devlin**, **Devin Rosni**, **Brittany Auld**, **Rebecca Prus**, **Matthew Adams** and **Peter Jaworski**. **Karen Stabile** and **Corinne Green** received an Honorable mention and National Qualifier status for their interactive statistics poster.

