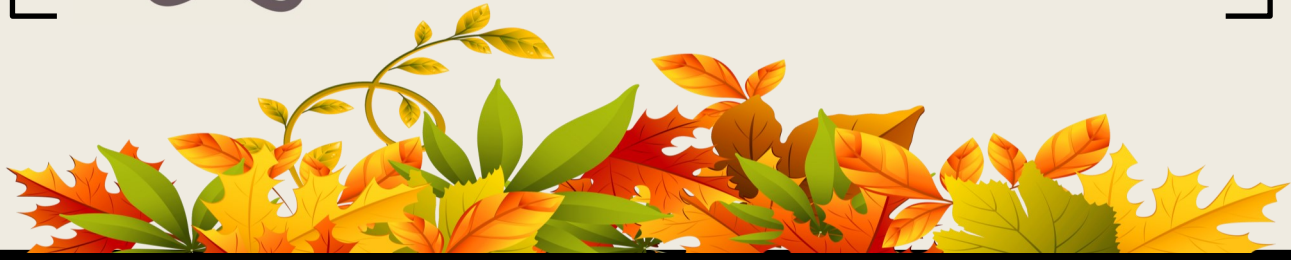


The Element

FOR MSTC, BY MSTC | November, 2016



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Director's Corner

MRS. YOUNG

If you are a senior and it is fall, you are in the midst of college applications. While it is an exciting time, it also comes with stress. In addition to filling out the various application forms, writing the "perfect essay," and asking teachers to write letters of recommendation, there is the inherent uncertainty that comes with choosing your future college. How does the decision work? How can we, as parents, help our student make this important decision? While there is no "one size fits all" answer, I can tell you as a parent who has guided two sons through the process that there are a few things you can do to help.

First, stay involved. This is not the time to step back. Help your student stay on top of deadlines and requirements. Especially if applying to multiple schools, there is a lot to keep track of and you want to make sure that nothing gets overlooked.

Second, be sure to ask questions. Be a sounding board for your student. Find out what they are looking for in a college in terms of academics, extracurricular activities, the location, and the opportunities that they hope their school will provide. Encourage them to dream, but also have a realistic conversation in terms of finances. Are they planning on graduate school? How will that consideration play into the willingness to take out student loans and incur debt? Will the location of the school require expensive travel considerations?

Third, be a good listener. As the offers arrive and it comes time to make a decision, many students find themselves faced with the fear of making the "wrong choice." Encourage your student to talk through their questions and ideas. Talk to current alumni, and schedule a visit (or another visit) if needed. Some students can make their decision quickly, while others will take longer to decide.

Fourth, once your student has made their choice, take time to celebrate and enjoy this major milestone. Believe me, they will be leaving for college much sooner than you think!

PS – Even if you are not the parent of a senior, it is not too early to start the college conversation and making college visits. Watch for the MSTC College Night coming up in the spring to learn more about the college application process.

WHICH SHOULD I TAKE?



Take a practice exam for each to see which suits your strengths.



ACT

SAT

SECTIONS

READING	52 Questions/65 Min	40 Questions/35 Min
ENGLISH	44 Questions/35 Min	75 Questions/45 Min
MATH (Calculator)	38 Questions/55 Min	60 Questions/60 Min
MATH (No Calculator)	20 Questions/35 Min	N/A
SCIENCE	N/A	40 Questions/35 Min
ESSAY	OPTIONAL/50 Min	OPTIONAL/40 Min

SCORING

SAT
1600

SUM OF 2 SECTIONS

.....

ACT
36

AVG. OF 4 SECTIONS

.....

Should I guess?

YES

THERE IS NO PENALTY FOR WRONG ANSWERS

ACT

3 hours (or)
180 minutes

SAT

2 hours 55 min
(or) 175 minutes

TIME



MATH TOPICS

ACT

35%
ALGEBRA

10%
TRIG

35%
GEOMETRY

20%
PRE-ALGEBRA

SAT

35%
ALGEBRA

28%
DATA
ANALYSIS

27%
ADVANCED
MATH

Students in Action: Battle for the Bluegrass

On October 29, Dunbar's Robotics Team traveled to Corbin, Kentucky to compete in the 2016 Battle for the Bluegrass. The off-season competition used the structure and theme from the 2016 FIRST Robotics Competition, "FIRST Stronghold." The competition lasted from 7am to 4:30pm. The day included many exciting activities, and the team was able to further improve their robotics skills through the competition.

Earlier this year, the team attended and excelled at the 2016 FIRST Robotics Competition in Knoxville, TN. Therefore, they brought the robot they spent months crafting during the 2016 build season to Battle for the Bluegrass. The team advanced to the finals, and performed extremely well.

MSTC students Jan Balk (team captain), Nathan Rukavina, Ben Xie, Paul McIntyre, and Blake Jaeger represented the team at the competition. Teacher Mr. Cox (Robotics Team sponsor) and MSTC parents attended to support the team.

Bulldog Tournament

Every year, the Dunbar Academic Team runs a state-wide academic team tournament, coined the "Bulldog Tournament." Middle school and high school Junior Varsity (tenth graders and below) academic teams from all over Kentucky join us at Dunbar to compete in rounds from 8am to 4pm, using questions from the National Academic Quiz Tournaments Organization. The tournament was on November 5th.

This year, academic team captains Thirushan Wignakumar (Tournament Director), Ananth Miller-Murthy (Volunteer Coordinator), and Amy Wang organized the tournament and invited volunteers. Students from academic team, Beta Club, MSTC, and more, volunteered: some as moderators and others as scorekeepers. A huge thank you to all students who took time out of their busy schedules to help successfully run the tournament!

The tournament involved rounds in the morning, a lunch break, and rounds in the afternoon. Teams were put into competition brackets in the morning, but were reorganized after a morning of competition. Academic Team members Zsombor Gal, John Adkins, and David Ma watched over the statistics of the teams' performance in order to create the afternoon bracket.

Meyzeek received first place for the middle school division. Johnson Central received first place for the Junior Varsity division.

MSTC Student Accomplishments

- Sophomore Andy Du was a winner in the Central Kentucky Youth Orchestra Borchardt Concerto Competition. He will be performing a solo with the Symphony Orchestra next year. He also won runner-up in the Music Teachers National Association (MTNA) Senior Piano Competition.
- Junior David Ma will serve as the state representative for the MTNA Violin Senior Competition.
- Senior Spandan Buch, member of Dunbar Boys' Varsity Soccer Team defeated Woodford County 1-0 for the 11th Region soccer tournament.
- Junior Sahar Mohammadzadeh has been named to the Commissioner's Student Advisory Council. The council provides input to Kentucky education chief Stephen Pruitt. She and 15 others newly chosen members will join seven returning council members this fall.
- Senior Amy Wang has been named Distinguished Young Woman of Fayette County after competing in the At-Large program. She will move on to the state scholarship program to compete for the title of Distinguished Young Woman of Kentucky.

Have old test prep book? Need tutoring? Want to advertise an event?

Contact *The Element* to place a free ad in the classifieds section!

Mrs. Young has several pieces of MSTC apparel from previous years, that will be sold at discounted prices. Contact her if interested!

Dear Mrs. Element: send questions about academics, social life, or more to: dear.mrs_element@yahoo.com

Clubs to Join

- **Robotics** teaches and fosters engineering principles to students interested in STEM. Robotics meets every other Monday in room 508 during first semester, but goes through an intensive build season of daily meetings second semester at school and at Newton's Attic. First semester includes safety training, machining training, fundraising, community events, and more. Second semester is dedicated towards annual FIRST Robotics Competitions, so students will use the training they received first semester to build a competition robot. Students work on four specialized sub-teams: Programming, Mechanical, Electrical, and Marketing. Each sub-team has a leader that will help students learn more about their team, so students do not need prior experience to join. Robotics is an extremely engaging, fun, and comprehensive activity, ranging from engineering work to corporate outreach! For more information, contact Mr. Cox (fred.cox@fayette.kyschools.us)
- **Beta Club** meets once every month in the cafeteria for students to enhance their volunteering experiences. Students learn about service opportunities and are encouraged to volunteer at a variety of events. Students keep track of "point cards" every semester and earn "points" for volunteering—the more they volunteer, the more points they can earn! For questions, contact Ms. Durham (pld.betaclub@fayette.kyschools.us)

MSTC Students Spotted



Alumni Chronicles: Thomas Huang

College may seem far away, but senior year flies by. Between school work, friends, and college apps, your last year in high school will feel too short. So here's some advice for you to make the best out of your time:

- **Be nice to your parents.** They have helped get you where you are now, and although they seem naggy, it's because they want the best for you. You're also going to miss them like no other.
- **Stay positive.** Some people in your class may get accepted to their dream schools right away, and good for them. Most people won't. Many will receive deferral after deferral, or even rejection. Remember to stay positive and confident in yourself. Don't take college admission decisions personally—just think of it as an incorrect fit, a decision for the better.
- **Don't slump off.** Sure, you can take the occasional break from all the stress and hang out with your friends, but remember that the strong work ethic you develop in MSTC will be key to success in college.
- **Treat the classes you are in seriously.** It's easy to get consumed by the idea that you are taking classes for the A to show colleges, but you are also taking these classes to actually learn. Woah, I know right. The breadth of material covered in several classes will be useful to build off of in college. Most college courses are graded on a curve, so being good doesn't matter as much as being better than the people in your class. The advanced courses of MSTC will help you build a good basis to expand from.



And finally, some advice for college:

- **Try to wash your hands and continue being clean and healthy in general.** It sucks to be sick the first week or weekend of college. While you're huddling in a fetal position in your dorm, the world is still happening outside and the beginning of college is an eventful time you don't want to miss out on.
- **Try to meet as many people as you can once you arrive.** Don't be afraid to walk up to random people and say hi. After the first few weeks, people find their group and it's a bit more difficult to introduce yourself.
- **Work hard, play hard.**
- **Get to know upperclassmen.** It may seem intimidating to talk to those guys but people who have been there for a while will know the best places to eat, the fun places to go, and have great advice on classes as well.
- **USE RATEMYPROFESSOR.COM WHEN SCHEDULING,** or if you know someone at the college you plan on attending, ask them for advice on the best professors.
- **Picking the early classes is actually not as bad as it sounds.** Most of you guys should be used to waking up early because of zero-hour, and early classes jump-start your day so you don't waste away most of it sleeping.
- Most classes in freshman year will take place in large lecture halls, where getting the professor's attention may be difficult. **Taking advantage of office hours** is key to understanding the material better and getting to know your teacher as well. Professors love to find young talent and students who are genuinely interested.

Senior year of high school was one crazy ride, one that started with a major downhill and took a big twist in the middle. I started off with three deferrals, which was not a good start to my year. For a good half of my senior year I was extremely stressed because all my friends were getting accepted to their top schools and I was still here holding onto nothing. By the time March rolled around, I had been accepted to a couple decent, mid-range schools and one reach school, but I was still looking for that right fit. I still remember that day vividly, when I arrived home to a Tulane University black leather envelope sitting on the kitchen counter. So now I'm here at Tulane University, the Mardi Gras school, and the only thing it's ranked #1 in is partying.

The summer after my senior year was one I'll never forget. As the summer rolled along, our group of friends counted down the days until we would separate from each other forever. Every single one of us was going somewhere over the summer, some earlier in the break and some later and not even coming back from vacation. A couple of us were moving away from Lexington permanently, to Cincinnati and Tennessee, and all of us would be spread out over the U.S. in just a couple months. The last day where all of us would be in town at the same time was a bittersweet moment. We promised each other we would stay in contact, and went our separate ways.

I was one of the first of the group to depart, leaving by myself to visit my relatives and work in China for the better part of my summer. I worked as a counselor at a Chinese cultural exchange camp, herding around groups of tiny 13 year olds in heritage sites. The camp was tiring but fruitful, as I met many other people in the exact same situation as me, with the same cultural background as me. It gave me a great opportunity to grow and discover myself, as cheesy as that sounds.

Dear Mrs. Element

“Dear Mrs. Element,

High school is the prime time for developing friendships and relationships. What are some tips to maintain healthy friendships and relationships, on top of all the other responsibilities I have to keep up?”

From when you're in day care to when you have a career, there's one thing that will always be by your side: friends. Friendship will always be a tough concept to understand, no matter what stage we are in our lives, but it can be especially difficult as high schoolers maintaining rigorous course loads and extracurricular activities. Here are some tips that will hopefully help!

- **Never be scared to confront your friend if they've done something to upset you, no matter how hard it may seem!** Keeping your feelings bottled up not only adds to your own discomfort, but your friend may never know how to fix the situation for you, and your friendship may either weaken or completely break. If you have trouble confronting your friend, then you should ask a mutual friend or a trusted adult to help you more easily approach your friend. Communication really is key.
- **Value your friends.** Of course, don't let your friends consume your entire life—you are still an individual. Make sure to stay focused on your top priorities. But, your friends are there to support you in the present and in the future, as are you to them. Your friends are there to help you on your other priorities. If you don't care about or cherish them, then it's unlikely that they will do the same for you. Remember to establish the balance between your friends and the rest of your responsibilities; work hard, play hard.
- **Invite your friends to things!** Whether it be volunteering or attending a local festival, you can always ask your friends to join. This will help develop lasting memories that ultimately lead to stronger friendships!
- **Be willing to help your friends.** As mentioned earlier, your friends will be there whenever you need their help. Therefore, keep an open mind and, if your friends need help, do everything you can to help them.
- **Kill two birds with one stone: study and hang out through study dates!** Studying can be strenuous, but it's inevitable. So, why not make learning more fun with friends? Schedule study dates at the library, Panera, Starbucks, each others' houses, etc.

Good luck! —From, Mrs. Element

Freshman Interview: Sydney Sun

Is MSTC different from what you expected? If so, then how?

MSTC is much different from what I had expected. It feels like I'm part of a community of friends. You get to know about everyone, and from there, you can depend on them. At first, I was nervous about joining MSTC. I was worried that I would not be able to catch up. However, it turns out that MSTC is a much friendlier and more enjoyable environment than I had imagined.

What is your favorite thing about MSTC so far?

In MSTC, there are more opportunities to show off your academic skills early on, because there are more advanced classes available for us. But my favorite part about MSTC is the fact that there is a group of people that you can always connect and refer to. It's nice to be able to know so many people who will be going through high school with you for four years.

What is your least favorite thing about MSTC so far?

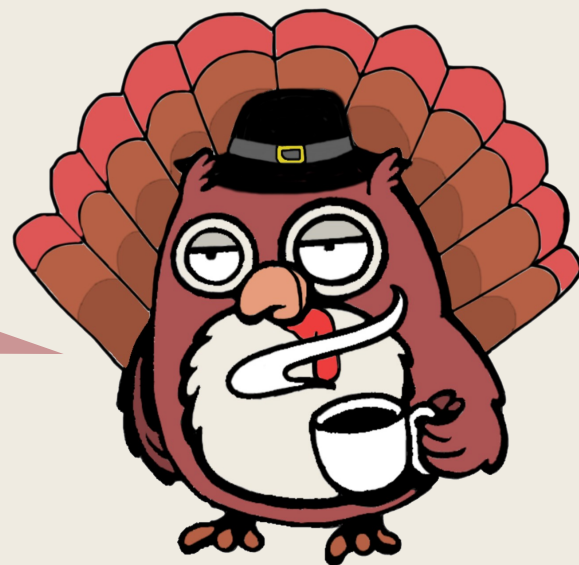
My least favorite part, which I'm pretty sure those other lazy people out there would agree with, is the fact that zero hour starts at 7:25 in the morning! It was really hard for me to get used to. But of course, it just gets me working harder and learning more, faster.

Did MSTC 'live up' to your expectations or are you unimpressed with it? Why?

MSTC did live up to my expectations. It actually drives me keep growing mentally and academically. It pushes me and I am able to learn so many new things about all subjects and explore new pathways to help me later in college and get a successful career. My main goal in school is to learn, prepare myself for a bright future, make friends, and have fun, so MSTC has definitely reached my expectations.

Q: Why can you never trust atoms?

A: They make up everything!



Sponsor: Mrs. Young

Managers: Amy Wang and David Ma

Graphics and Design: Hannah Wang

Authors and Editors:

Adarsh Chithrala

Akhil Kesaraju

Amit Lohe

Amy Zhang

Ashley Liu

Aurian Vaez

Ben Xie

Bobby Bose

Divya Sunderam

Eleanor Liu

Ellora Kamineni

Emily Liu

Erin Markel

Francesca Macchiavello

Gloria Ming

Hemanth Sontenam

James Brandewie

Joseph Brandewie

Jan Balk

Jonathan Browning

Kelly Chen

Kelly Kral

Max Qiu

Murphy Powell

Radhika Sharma

Rohith Kesaraju

Ronit Kar

Sameer Ahmed

Sarah Han

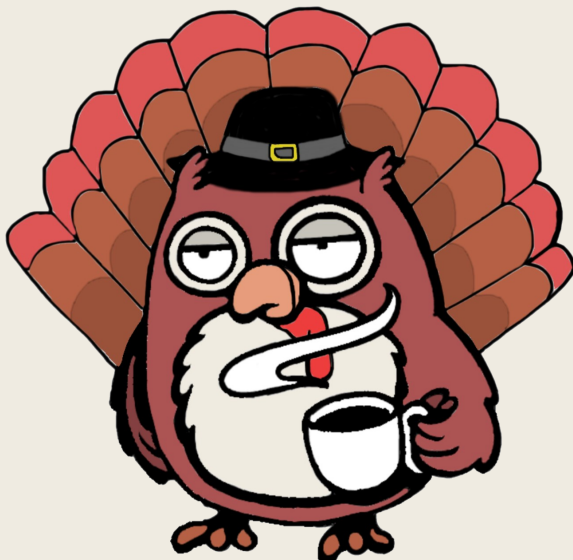
Shelby McCubbin

Sukruthi Yerramreddy

Spandan Buch

Sunny Ghuneim

Yoon Cho



Thank you!

-The Element Staff