

# The Element

FOR MSTC, BY MSTC | October, 2016

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## Director's Corner

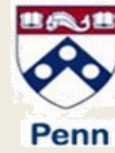
MRS. YOUNG

Welcome to the first issue of *The Element*, a monthly MSTC Newsletter. The Element started with a conversation between Amy Wang and David Ma at last year's INTEL, and it is now a way for the MSTC community to share news about us, hence, our slogan, "For MSTC, By MSTC." We hope to highlight things of interest to MSTC students, teachers, and parents. If you would like to be a part of The Element staff or have an idea to include for an upcoming issue, please let us know. I am always amazed by the ideas and accomplishments of students in the MSTC program and am excited that we now have a venue to share them with you. You will receive a monthly copy via email but each copy will be accessible on our MSTC webpage from [www.pld.fcps.net](http://www.pld.fcps.net). I will have a section (Director's Corner) in each newsletter where I will pass along important MSTC information.

This month the focus is the PSAT. All freshmen and sophomores automatically take the PSAT at Dunbar the morning of October 19. The PSAT serves as a practice test for the SAT, a nationwide assessment used by many colleges and universities to determine acceptance. Scores on the PSAT will help students and their families have a better understanding of their strengths and weaknesses so that they can prepare for the actual SAT exam. Juniors may also take the PSAT but will need to register on the PLD website and pay a \$25 fee. While the PSAT is not required of juniors, it is highly recommended since it determines eligibility for the National Merit Scholarship. The National Merit Scholarship is a highly coveted scholarship that, depending on the student's choice of college, can be quite substantial. This year, we had 19 MSTC students named as National Merit Semifinalists (see "MSTC Student Accomplishments" section.)

# Counselor's Corner

MS. STUDLE



Exploring College Options is a recruitment program sponsored by Duke University, Georgetown University, Harvard University, the University of Pennsylvania and Stanford University. Undergraduate admissions representatives from each university travel across the country to provide information about their respective institution and allow counselors to ask questions about the admissions process. I attended a breakfast sponsored by Exploring College Options, so below you will find a summary of the Q&A session and two common themes I identified.

## Q&A Session (All questions and answers are paraphrased.)

**Q:** How many people review each application?

**A:** On average, two people (likely a regional admissions director and an appointed reader) will read each application. Once all applications from a region are reviewed, a number of applications advance for further review at the university level.

**Q:** Our school recently stopped providing class rank. Is this detrimental to students?

**A:** A message to take back to your students is that most schools are dropping class rank. We are looking for compelling applications instead of competitive applications.

**Q:** How many times would you suggest each student take the ACT/SAT?

**A:** We suggest 2-3 times. Statistically there is little improvement after this number of attempts. If a student takes the ACT/SAT many times (more than 5), it could be concerning.

## Common Themes

### ***Interdisciplinary Studies***

Many of the representatives spoke of school initiatives to provide opportunities for students to explore several fields of study. As one representative noted, "We realize we are preparing our students for careers that haven't been created yet." // Counselor Tip: If you are interested in studying multiple disciplines, express this during interviews and in essays. Finding connections among your passions, experiences, and your college experience will show flexibility and a love of learning.

### ***You are Human***

Heads were nodding when a regional admissions representative for Harvard University mentioned compelling applications versus competitive applications. It was obvious that she in addition to her colleagues wanted to see the human side of your student experience. Counselor Tip: Let your personality shine in your application. Are you the class clown? Include a humorous anecdote of how you dressed up for a class presentation in interviews. Do you love service? Highlight meaningful experiences in your essays. Come see your counselor or brainstorm ideas with those who know you best.

For more information, visit <http://www.exploringcollegeoptions.org/>.

# Teacher Spotlight: Mr. Young

## **How was your summer and did you do anything special?**

Summertime for a teacher is always great; I went to Florida for a week and the beach was fun.

## **What excites you the most about teaching the MSTC Algebra 2 class?**

MSTC Algebra 2 is exciting, because they are all very intelligent and mostly very motivated. It is fun to work with students who love to learn, want to learn more, want to be excellent in class, and are young enough to still think it's cool to be a strong student. Intelligence is a cool thing that isn't always appreciated in high-school.

## **How did you get started teaching in the MSTC Program and what is your favorite thing about it?**

I got started about 9-10 years ago when a teacher didn't want to teach zero hour anymore and I volunteered to do it because I knew I enjoyed working with the higher-level students. My favorite part is watching the students I have as freshman progress and watching them get into amazing schools their senior year. Having a little part of that is very exciting to me, even if it's just when they're freshmen.

## **How do you think your students would describe you?**

I hope they would describe me as difficult, but fair. I hope they appreciate that I am trying to challenge them and they're not going to grow if they're not pushed and challenged. I hope they see me as someone they can approach and get help from.

## **What advice can you offer to students struggling in their respective math class?**

Don't be afraid to tell the teacher you need help. Don't wait until test day or after the test to express that you didn't know what you were doing. If you don't know how to study math, get more and more practice problems. Study math by doing practice and by confirming you can do the problem correctly on your own.

## **What inspired you to become a math teacher?**

I was going to be an engineer and I was almost through with mechanical engineering and then I figured out that engineers have to work all year and math teachers have a 10 week vacation...but seriously, I was co-oping at Toyota, working in a cubicle in an office and hated every second of it. I went down to UK and said 'What do I need to do to be a math teacher?' I encourage you smart people to consider teaching, because you won't regret it.

## **What were you like as a Dunbar high-school student?**

I was a good student and made all A's in high-school (hats off to you, Mr. Young). I had a handful of good friends but I wouldn't have considered myself popular. I wish that I had learned to appreciate academics and being a good-student before I did.

## **On a scale of 1 to 10, how proud are you of being the Lettuce Club teacher sponsor?**

I am 10 proud to be the Lettuce Club Sponsor. I never thought it would come to life, but it got approved and about 10 kids showed up to eat a head of lettuce.

## **Is it true that you really do have the quadratic formula tattooed?**

I never lie about the quadratic formula and I never lie about tattoos.

Mr. Young's Advice to Seniors: I would say if you are choosing between staying close to home or going somewhere else, take a risk. You're only going to be 18 once. Move away and take a risk. Don't be scared, you can live in Lexington the rest of your life. Do something crazy or crazy while you're 18, because you can't when you're 36.



## MSTC Student Accomplishments

- We had 19 students named as National Merit Semifinalists: Sameer Ahmed, Andrew Albrecht, Jan Balk, Spandan Buch, Eric Cao, Thomas Cheal, Annie Griffith, Sarah Han, Matthew Haywood, CJ Labianca, Emily Liu, Amit Lohe, Francesca Macchiavello Cauvi, Ananth Miller-Murthy, Nisarg Patil, Matthew Pitts, Zachary Powell, Thirushan Wignakumar, and Benjamin Xie. Congratulations! They will now be applying to be named as finalists. Wish them luck!
- Senior Murphy Powell has verbally committed to Emory University for volleyball.
- Juniors Akhil Kesaraju, Rohith Kesaraju, David Ma, and Julia Radhakrishnan were selected to participate in the Leadership Lexington Youth Program.
- Junior Cici Mao was invited and participated in the annual MIT Math Prize for Girls. She qualified through the American Mathematics Competition (AMC) test this past February.
- Dunbar's Varsity and Junior Varsity Quiz Bowl have qualified three teams to Nationals this past weekend by placing 1st, 2nd, and 3rd at the Charleston Fall Kickoff.



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](mailto:dear.mrs_element@yahoo.com)

## Clubs to Join

- Dunbar Cultural Society teaches cultural awareness through monthly meetings on the culture of the world. Each meeting includes a presentation with food, crafts, and a dance. Members also run the Culture Fair, an school-wide end-of-the-year event showcasing international cultures. For more information, contact Mrs. Williams ([michelle.williams@fayette.kyschools.us](mailto:michelle.williams@fayette.kyschools.us).)
- Dunbar Girls in STEM meets on the 3rd Thursday of each month in room 601, for girls interested in Science, Technology, Engineering, or Math! There will be guest speakers, and field trips. For questions, contact Mrs. Newsome ([keia.scott-newsome@fayette.kyschools.us](mailto:keia.scott-newsome@fayette.kyschools.us).)
- Environmental Awareness Troop focuses on helping the environment through volunteering, research, hikes, and much more. EAT meets every other week in room 502. Meetings are tons of fun and usually have food! For more information, contact [eat.dunbar@gmail.com](mailto:eat.dunbar@gmail.com).
- Recycling Club meets every Thursday to empty recycling bins throughout the school. Attendance counts for Beta Club and community service hours. Have fun while doing fulfilling work! Contact Amit Lohe ([amit.lohe@stu.fayette.kyschools.us](mailto:amit.lohe@stu.fayette.kyschools.us)) for details.

# Unique Careers in STEM: Forensic Accounting

**What:** Forensic accountants combine knowledge of financial and legal matters into one profession with an emphasis on accounting, and investigative skills. Responsibilities held by forensic accountants include handling examination of a company's financial statements, analysis of litigation, antitrust, fraud, forensic accounting, and damages.

**Employment:** They are employed by insurance companies, banks, and the police, and earn between \$30,000-\$60,000 per year.

**How:** To become a forensic accountant, one must first have at least one to three years of accounting experience. College education required for forensic accounting includes a bachelor's or master's in accounting, finances, and other related fields. Once a college education has been obtained, other qualifications include the CFF (Certified in Financial Forensics) and CFE (Certified Fraud Examiners).

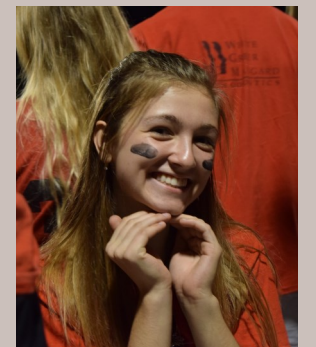
Overall, forensic accounting is an interesting occupation that many people are not aware of. You may be interested in if you enjoy courses like AP Statistics or AP Government!

Did you hear about the man who reached absolute zero?

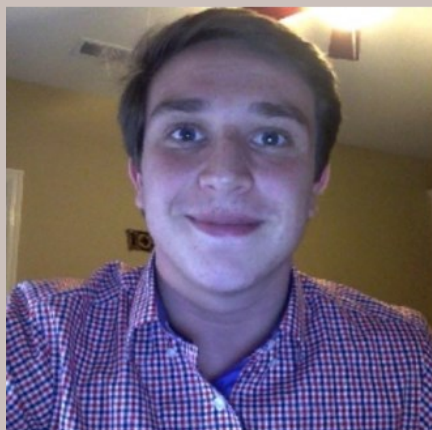
He's OK now.



## MSTC Students Spotted



## Words of Wisdom From MSTC Alumni



“Don't think of graduating as an end goal but rather as a door which leads to a time of intellectual exploration and endless possibilities...”

Take advantage of high school to build a foundation of knowledge, social interaction, and passion; you'll want to expand upon all of these frontiers in college. Take classes you're interested in taking, meet new people, and take initiative.”

-Theo Livas, MSTC Class of 2016

“College is definitely not what I expected, but in a good way. People in general are much more excited, and everyone is involved in something around campus. In college, it can be easy to do the bare minimum and chill in your room as your parents are no longer there to push you to do things, but help yourself by going out as much as possible and discovering the place you'll be living and growing in for the next four years.”

-Thomas Huang, MSTC Class of 2016



## Senior Spotlight: Ronit Kar

*Ronit Kar is the founder of Dunbar's first Physics Olympiad team; he is an avid programmer and has created the latest version of the MSTC website. In the past year, Ronit won first place in the physics category at the Regional and State science fairs. Throughout high school, he has been a violinist in PLD Orchestra and excelled on the Robotics team.*

**Do you have any advice for underclassmen who are balancing MSTC with a lot of extracurriculars such as athletics or other clubs?**

It's definitely possible. A lot of people think you can't do all the different things at once. Now, I'm not saying you should spread yourself too thin- you can't do everything at once. You have to find out what you like do, what makes you happy, and prioritize among those things. My personal recommendation is that grades should be a top priority. Make sure you maintain those. Freshman year, explore different things. It's okay to try everything at once, but once you find out what you like, just go into those things. If you like doing it, there's nothing that can stop you.



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*Thank you!*

*-The Element Staff*

