Greetings HSTA Family

On behalf of all of the Joint & Community Governing Board members, and everyone on the HSTA staff we want to welcome you to our new electronic newsletter.

HSTA is wrapping up the 2013 year and just so excited about continuing into the 2014 HSTA year and the wonderful opportunities yet to come. Students, teachers, and CRAs are working hard on community issues and preparing research plans for annual projects. Plans have begun for Capitol Day February 5th, two symposia in May, as well as Summer Institutes. This newsletter will help keep everyone abreast of changes and opportunities as well as highlight people and events across the HSTA regions. It is for you and by you. So send us your latest news and photos to share. Again, welcome to the newsletter!!

HSTA: 20 Years and Going Strong

Upcoming articles on HSTA and its 20 year journey will feature testimonials from HSTA alumni HSTA staff, volunteers, current students and parents. To start off here are some successes of the program to date:

- 1,883 Successful HSTA alumni are currently attending or have attended college or professional school.
- 99% of the graduating HSTA students go to college vs. 58% of WV students.
- 91% of HSTA graduates remain in WV.
- 90% of the HSTA students are successful in college.
- As of August 2013 HSTA had graduated 55 Associate Degrees, 624 Bachelors, 90 Masters, 43 Doctorates including: 11 MD, 9 PharmD, 2 Audiology, 1 Psych, 6 PT, 5 Law, 1 Optometry, 1 DVM, and 2 DO.

Help us remember this year and those in the past, Tweet your favorite HSTA moments #HSTA20years.

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Summer Camp 2013

Fun with Science
Earlier this summer The State Journal published a newspaper article where they quote David Cartwright, Director of Fun with Science HSTA Camp:

"We are going to expose rising ninth-graders to the activities and things that not only science has to offer but Marshall University has to offer," ...."Hopefully, the 'Fun with Science' institute will help convince many of these students to choose science as a career."

Biomed Camp at WVU
HSTA teamed up with the WVU Pharmacy Lab to make lip balm and talk about pharmacy school and careers. The Davis College also joined the camp to give students a first hand experience with eating healthy.

Forensic Camp at WV State
Student Quotes from camp:
“The chance to see how a murder is actually solved up close.”

“I liked how friendly the mentors were, and I liked how they challenged us.”

“I liked when we got to analyze fake blood for the crime simulation we worked on the whole week.”

“Testing blood and getting the DNA from a strawberry.”

Senior Camp at WVU
HSTA seniors enjoyed a three week camp at WVU where they had the chance to earn college credit in one of the following: math, chemistry, and statistics. This was a great opportunity to experience college life on campus first hand. A huge thanks to Carlyon Penn and the Senior Camp Mentors for making this camp one of the best! Make sure to talk with a HSTA senior that attended the camp and learn more about their great experience! Hope to see lots of juniors join the Senior Camp Team in 2014.

Forensic Camp at Glenville State College
Students participating in a finger print lab to solve the camp murder.

HSTA fearless Field Sites!
Thanks for the great week!

Hope you to see you at Summer Camp 2014!
Big thanks for all the colleges that hosted a summer camp!
HSTA Waiver Information

The HSTA waiver is just what is says—it is a waiver, not a check, not cash, simply a waiver. Your college tuition at participating WV public colleges is waived. This doesn’t include fees, books, or room and board—just TUITION.

Make sure to visit wv-hsta.org for more information on the waiver:

1. Under Graduates
   - HSTA Waiver Contacts

2. HSTA Waiver Quick Guide
3. HSTA Waiver Application (Seniors this is DUE Jan 31st to Field Site Coordinator)
4. Other information about college, scholarship information, list of public college schools in WV, ETC

To get the most out of your HSTA waiver be proactive and ask questions. Talk to the HSTA representative at the college. Don’t wait until your final semester in HSTA! Ask early and get familiar with the HSTA waiver and other college financial aid opportunities.

When to Use the HSTA Waiver and When to Use Promise

The word on the collegiate street is that the estimated tuition waiver is higher at certain institutions than Promise has been capped at $4,750. In the past we had recommended students use Promise first, but that was when they were worth the same amount. Students may want to look at the tuition amounts at their school and if tuition (without fees) is higher than $4750 they may want to consider if they want to use HSTA instead. There are several factors that could influence this decision; whether or not they may need an extra semester, and Promise can be delayed one year only and you must maintain that 3.0 during that time are some things to think about. HSTA won’t cover any fees, but to the best of my knowledge Promise will cover up to $4,750 of tuition and fees. For example at one school last year fees were about $700, and at another school they were over $1,000 but the tuition was much lower than the first. In this case it may be better to use Promise because it would cover some of those fees. It will vary from school to school and even major to major. Here’s another example: School A has tuition $3,000 and fees $1500. Using your Promise would be the better deal because it would pay $4500 as opposed to HSTA $3000. School B has tuition $5250 and fees $700, here HSTA is better because it would pay $5250 vs Promise $4750.

We know this is complex and everyone just wants a number but there is no real number to give that is general to all.

Tips for Getting the most for your Buck:

- Ask Questions
- Understand the HSTA Waiver
- Talk to your college’s financial aid department
- Start planning early!!!!
- Contact your Field Site Coordinator with Questions and/or contact Kas Kasten (Transitions and Records Coordinator) at 304-293-0769 or email kkasten@hscllc.edu
Raleigh and Cabell Counties’ HSTA Programs partner with WVU PR Students

The Health Sciences and Technology Academy and Raleigh and Cabell County schools partnered with a team of West Virginia University students to raise awareness of the HSTA program.

Ten public relations seniors in the P.I. Reed School of Journalism at West Virginia University, under the direction of Dr. Rita Colistra, collaborated with HSTA in order to raise awareness of the technology and engineering aspects of the program.

Last spring, HSTA partnered with WVU students and focused primarily on the health and sciences aspects of the program in Braxton and Marshall Counties. This year, the group chose to highlight the technology and engineering sides of the program to get students interested in these growing fields.

Raleigh County was the first county in the state of West Virginia to implement iPads into its classrooms, which made it an ideal location for part of the campaign.

“The introduction of iPads into Raleigh County provides advanced technological education for the students of Raleigh County,” said Carolyn Penn, Field Site Coordinator for Raleigh County HSTA. “Ultimately it provides an opportunity for [...] students of Raleigh County HSTA to reach beyond their socio-economic world to fulfill their dreams of attaining a college degree.”

Cabell County schools have been rapidly advancing in technology and have recently become paperless, making them a perfect fit for the campaign.

“Cabell county students will find, after successfully completing the HSTA program, that they will be ahead of the game for employability after college graduation due to their advanced work in the STEM fields during HSTA,” said Kelli Templeton, a Field Site Coordinator for Cabell County. “Most of these students have an easier time in college classes due to their HSTA experiences and familiarity with higher educational institutions.”

“Both counties’ dedication to bringing up-to-date technology to their schools made them the ideal fit for this semester’s campaign,” said Colistra, assistant professor and instructor for the public relations capstone course. “We’re hoping to bring awareness to the technology and engineering sides of HSTA to get students and their families interested in the program, which greatly benefits West Virginia’s youth. The team is planning some fun activities to get the students and the community involved.”

Below WVU Student Campaign Team
Top row: Lexie Bramer, Lindsey Doebler, Micah Truex, Rachel Sleighter, Dari Lewis
Bottom row: Chris Linkous, Elayna Conard, Becca Mullin, Rachel Duryea, Andrew Jerome

Raleigh Technology and Engineering Expo

On the Left: Raleigh County HSTA students marching in the Christmas Parade telling people about the event.

On the Right: Students from Woodrow and Independence High School try determine the best way to untangle.

On the Left: Joint Governing Board Member Mr. Manns talks to the local radio station.

On the Right: Students from Independence High School show off their mouse trap car.

On the Right: A HSTA senior from Shady Spring High School talks about her experience in HSTA and what the program means to her.
Cabell Technology and Engineering Expo

WVU Tech has HSTA students all tangled up!

WVU School of Engineering taking a picture of Cathy’s iris!

Marshall Computer Science Group talking with bystanders about their computer program.

Marshall Society of Physic Students talking with HSTA students about their projects.

Marshall School of Engineering showcasing some of their work with a Lincoln HSTA Students.

Mount West Community College talks with event participants about their 3D printer.
2013-2014 Research Partnerships

*HSTA has on going partnerships with the following researchers*

- Dr. Schmidt from WVU is working to measure the albumin levels and diet among WV residents.
- Sara Hanks from WVU is implementing a physical activity intervention where HSTA students are health coaches improving health among their own families.
- Dr. Belay, an INBRE scientist, from Bluefield State College is working with Bluefield High School and germs.
- Dr. Lewis from WVU is researching the effects a compassion mediation using an android app on perceived stress levels.
- Dr. Branch from Pitt is studying WV life styles through SEPA DOC and Bodymedia bands.
- West Virginia Mountain Institute is teaming up with Huntington HSTA to do water samples in their local creeks.
- Donald Reed, 4H extension agent, from McDowell County is working with HSTA students and a new cyber bullying curriculum.
- NIOSH from CDC in Morgantown is teaming up with students to study ATV safety, concussions, and the effects of dog therapy in nursing homes.

2014 District Symposia

*Southern Symposium*
May 3rd
Athens, WV

*Regions:*
Boone McDowell
Cabell/Lincoln Mercer
Greenbrier/Fayette Kanawha
Mingo/Logan Raleigh

*Northern Symposium*
May 10th
Morgantown, WV

*Regions:*
Eastern Panhandle
Ohio/Marshall
Monongalia/Marion
Braxton/Webster
Mountain HSTA
Roane/Calhoun
HSTA Updates

Donation Button

HSTA has a donation button on the website. Tell your family & friends about this great opportunity to support HSTA, Sara Spencer Award Winners, ACT/SAT student reimbursements, and student field trips!

Congratulations Dr. Morton-McSwain

Cathy Morton-McSwain has completed her Ed.D. from WVU. Dr. Morton-McSwain started with HSTA as a HSTA teacher at Webster High School and is currently the Assistant Director of HSTA. Congratulations Cathy!! We are so proud of you!!

The HSTA Website is being moved to a new server! Check it out and let us know what you think about the website! If you have any suggestions or questions about the website please feel to email Mary Cottrell mcottrell@hsc.wvu.edu.
Welcome to the Family Freshman

Dear HSTA Freshmen,

As a senior at Woodrow Wilson High School, the stresses of the upcoming year to apply and enroll in college is beyond overwhelming, especially when juggling the classes you’re currently enrolled in. Choices, essays, but most of all, money are among the obstacles you must overcome to reach the next step of college. Luckily, one of those obstacles are taken away for you, money! As a freshman, I had never heard of HSTA. My mom pushed me to do it, claiming I’d thank her later when it came time for college. Like a normal teenager, I ignored her. As a senior, I would like to thank her. HSTA taught me how to present an informative presentation and how to make an intelligent and useful project come to life. I learned that you can have fun and learn at the same time during the summer camps I was asked to attend. I've made friends and memories that I will never forget from just one week out of my summer. I get free college for four years, sometimes even up to 10, and all they ask of me is one project every year, two summer camps, and community service hours. Why not take this opportunity to get help accomplishing your dreams? I won't lie, sometimes I want to scream over developing my project and complications that arise, but a few days of stress compared to years of financial debt don't begin to compare. I've learned so much from my HSTA group. I feel being apart of this group has set me apart from other high school students and has increased my future chances of when competing for a spot in a class or program.

Although you can find me complaining about school almost every day, the stress of money being lifted off my shoulders so I can focus on achieving my goal and getting my degree is worth the stress. I hope you have an amazing experience in this program and take my experiences and advice to better your four years in high school. Some people could not even go to college without this opportunity. I hope you take full advantage of the chance you have been given. Enjoy your high school years and thank your HSTA teachers!

Sincerely,
Cayla Rotenberry
Senior at Woodrow Wilson in Raleigh County, WV

College Tips for High School Freshman

1. Take courses that will give you a strong base to build upon in the next three years.
2. Take your grades seriously.
3. Keep your attendance record up and your behavior record clean.
4. Test out volunteer/community service opportunities - helps to build your resume.
5. Get involved in extra curricular activities. Begin to think about picking one or two that you plan to continue for four years and maybe in college.
6. Start thinking about who you are and what you like. What subjects do you like? What areas of study might you like to explore more? What outside activities do you enjoy?
7. It is not too early to think about what kind of college you would like to attend. Visit college campuses, talk to adults and older students about their choices.
8. Browse some college websites to get an idea about what they offer.
9. Parents and students should begin having open and honest discussions about college and finances.
10. Meet with your high school counselor to be sure that you are on the track.
11. Make sure you understand the HSTA waiver and how to successfully complete the program.

Source: http://www.selectingcolleges.com/home/col/page_164/college_tips_for_high_school_freshmen.html
**Logan Freeman From Greenbrier East**

Meet 14 year old Logan Freeman, Greenbrier East High School’s newest freshman member in HSTA. Logan heard an announcement one day over the intercom at school and knew right away he wanted to be a part of this organization. Logan looks up to his big brother who is currently pursuing a medical career, so at the young age of 5 Logan knew healthcare was going to be the right path to take. His favorite subject is science and his current ambition is to attend Marshall University and have a successful career in the veterinary medicine field. Through HSTA, Logan has made new friends and has attended his first camp…ever! He states “Fun with Science was such a great opportunity, I was nervous being away from home at first but got to meet so many new people and had so much fun dissecting animal parts.” He also later noted he looks forward to the camp this coming summer.

Logan’s HSTA project this year is how disk golf affects your heart rate; he was interested in this because he loves sports. When not in class, Logan is a very dedicated football and baseball member. He also stated an interesting fact he only wears NIKES. Don’t think Logan is just a sports junkie though; he also enjoys reading and takes his academics very seriously. As a new freshman Logan said, “I thought High school was going to be very intimidating and expected it to be a lot bigger, surprisingly it’s not, you just have to take school very seriously if you want to succeed.”

**Greenbrier East Welcomes Jeremey Keeney**

Freshman Jeremey Keeney is settling right in with his HSTA club at Greenbrier East. First impressions for our new HSTA member were good; he says that he really enjoys coming to learn through the hands-on activities and working on his research project. When asked how he heard about HTSA, he said that his middle school counselor introduced him the idea after she had helped him with a few things he faced. After some reluctance, Jeremey filled out an application and here he is! With a busy schedule packed with band practices and performances where he plays alto saxophone, he still makes time to focus on academics. Jeremey says that his goal for freshman year is to maintain a 3.5 or better GPA. Throughout his high school career Jeremey has set several goals including: maintaining a 3.5 GPA, getting into his college of choice, and scoring a 30 on the ACT. After high school, he plans to attend Marshall University and receive his master’s degree in Radiology. Look for Jeremey at science symposium with his project Greener Cleaners which focuses on making household cleaners without all of the carcinogens!

By Josie Hanna

By Krystal & Josie
Several Cabell and Lincoln county students attended a water sampling event at Spruce Knob with the folks from the Mountain Institute. Mr. Sharpe, teacher at Huntington high, attended a summer program there which afforded his students 25 spots. The group spent two days at the highest point in WV taking in the pristine conditions and collecting data for their projects. Below are pictures from their field trip, including sampling and hiking pictures. The Mountain Institute Staff plan to come down to Huntington and help students collect additional data from their local creek, Four Pole Creek. Students will present their findings and final presentations at the Southern Science Symposium! Be looking for us! --submitted by K Templeton, FSC

Cabell Lincoln students to go to The Mountain Institute

Math Challenge

Copy this chart and see if you can fill in the missing numbers.

Rules:
1. Use the numbers 1 through 9 to complete the equations.
2. Each number is only used once.
3. Each row is a math equation. Work from left to right.
4. Each column is a math equation. Work from top to bottom.
Greenbrier East HSTA Club

On Thursday, October 17, three members of the Greenbrier East HSTA club traveled to the Capital City’s Appalachian Power Part to test their engineering and creative design skills. Alexandra Boone, Josie Hanna, and Madison Withrow designed and constructed a container hoping to protect an eight inch pumpkin in a 60 foot drop from the top of an AEP bucket truck. HSTA member Krystal Hughes also helped with the design, but was unable to make the trip. The team tried to engineer their design to maximize environmental sustainability as well as survive the plunge. The container featured an internal cardboard box with a pantyhose sling as well as biodegradable bubble wrap. This was all packaged inside a larger box with used water bottles glued to the base and reinforced cardboard corners. Although the design survived the 30 foot test drop at the school contest on October 15, the pumpkin was damaged in the 60 foot free fall in Charleston. The team also entered the poster contest and claimed second prize for their informative and eye-catching display board. This marks the second year Greenbrier East HSTA has participated in this 15 year tradition to promote engineering and math skills.

Alexandra Boone, Josie Hanna and Madison Withrow with the $75 check for winning 2nd place in the poster contest.

Braxton/Webster County Field Trip

HSTA students had a great time at NASA, Middletown Animal Clinic, and Trans-Allegheny Lunatic Asylum located in Weston, WV. Special thanks to Natalie Jane Fraley, a HSTA alumni from Webster, for opening her entire state of the art clinic to our students.
Community Service Spotlight

Oak Hill and Shady Spring HSTA

Oak Hill and Shady Spring HSTA teamed up during a football game to have a PINK OUT! Both schools participated in this Breast Cancer Awareness Fundraiser raising over $700.00 dollars for the Raleigh County American Cancer Society. Football players, cheerleaders, band members, dance team members, coaches, families and students were all dressed in pink to support this cause.

Stay Active through the Winter

It can take a little extra effort to stay active when it’s cold outside, but it’s worth it. The benefits of physical activity are many:

• Strengthens your immune system.
• Reduces depression, anxiety and stress.
• Improves sleep
• Increases successful weight loss and helps maintain a healthy weight.

Walking
A 30-minute walk will help you feel more energized, refreshed and is a great way to fit physical activity into your day.

• Walk by yourself if you need alone time or with a friend to make it a social event.
• If you don’t have 30-minute block of time, it’s okay to “break it up.” Find three different times in the day to walk 10 minutes.

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<th>Winter Outdoor Activities</th>
<th>Winter Indoor Activities</th>
<th>Winter Indoor Activities</th>
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<tr>
<td>Shovel</td>
<td>Local indoor pool</td>
<td>Local indoor pool</td>
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<tr>
<td>Ice skate</td>
<td>Dance Party</td>
<td>Dance Party</td>
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<tr>
<td>Sledding</td>
<td>Walk the mall</td>
<td>Walk the mall</td>
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<tr>
<td>Build a snow man</td>
<td>During TV commercials</td>
<td>During TV commercials</td>
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<tr>
<td>Walk</td>
<td>breaks get active do sit-ups,</td>
<td>breaks get active do sit-ups,</td>
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<tr>
<td>Snowboard/Ski</td>
<td>jog in place, push ups, ETC.</td>
<td>jog in place, push ups, ETC.</td>
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<tr>
<td>Play tag</td>
<td>Do the laundry</td>
<td>Do the laundry</td>
</tr>
<tr>
<td>Chop wood</td>
<td>Vacuum</td>
<td>Vacuum</td>
</tr>
<tr>
<td>Look for animal tracks in the snow</td>
<td>Clean house</td>
<td>Clean house</td>
</tr>
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Stay Warm and Safe

• Dress in layers that you can remove as soon as you start to sweat and then put back on as needed. Avoid cotton, which stays wet next to your skin.
• Try wearing a thin pair of gloves under a pair of heavier gloves or mittens lined with wool or fleece.
• Don’t forget a hat or headband — 30 to 40 percent of your body heat is lost through your head.
• Wear a helmet for ice hockey, skiing, snowboarding, and snowmobiling.
• Drink water before, during and after your workout — even if you’re not thirsty. You can become just as dehydrated in cold weather as in the heat.
• Remember to use sunscreen. It’s just as easy to get sunburned in the winter as in the summer.
• If it’s dark out, wear reflective clothing and carry a flashlight.
Hands-on-Activities in the HSTA Clubs

Cabell Midland students making slime for Halloween.

Seniors in Preston County getting ready to do an experiment!

Newsletter Information

Newsletter Name
Nerd Alert is looking for a new name! If you have any ideas please email them to your Field Site Coordinator, Teacher and/or CRA by January 17th. The Joint Governing Board will vote on January 20th.

Newsletter Mascot
Design a Mascot for the newsletter - be creative give your character a name, a story, friends, ETC. Email your ideas to your Field Site Coordinator, Teacher and/or CRA by January 17th. The Joint Governing Board will vote on January 20th.

Newsletter Sections
Have a really cool idea about a section in the newsletter? Something that HSTA family members can submit to every publication? For example: Community Service Spotlight, College Tips, Guest Speakers, Sneak Peak of Research Results ETC. Submit your ideas!

Announcements for February Publication

- Next Publication is February 2014. If you want to submit anything all material is due January 27th. Email to your Field Site Coordinator, teacher and/or CRA.
- Oh sophomores! Back Again... Looking for articles highlighting sophomores.
- Tell us about their projects, community service, interests, submit pictures ETC.
- Feel free to submit other materials for review: Articles about projects, pictures of club activities, ETC. We want to hear from you!
The Health Sciences and Technology Academy (HSTA) reaches out to 9th-12th grade under-represented students and follows them to college and towards professional school to help them prepare for health care careers. The goal is to nurture the ambitions of talented students who, for economic or other reasons, might not ordinarily achieve these career goals. Under the direction of a community based state governing board, HSTA is a partnership among the numerous units of West Virginia University, West Virginia State University, Marshall University, West Virginia Rural Health Education Partnership, West Virginia Area Health Education Centers and many Appalachian communities. The program brings minority and disadvantaged students and their teachers to campus each summer for laboratory, and classroom training and enrichment activities; then provides the infrastructure and support for community-based science projects mentored by teachers, scientists, health professions students and volunteer community leaders during the school year. HSTA aims to share the resources and talent of the partnership, to encourage public school teachers' and community leaders' mentoring of students. The ultimate goal is to increase the college-going rate among under-represented students in the Appalachian region, to improve science and math education, to empower communities through leadership development of their youth, and, ultimately, to increase the number of health care providers in West Virginia's currently under-served rural communities.

“The future belongs to those who believe in the beauty of their dreams.”

Sara Spencer Essay

Write a 500 word essay and get a chance to win $500.00.

- Write a 500 word essay describing what HSTA means to you (Use originality, good spelling, grammar, and style.)

- Every HSTA Senior can submit an essay but only one will be selected by your local Governing Board to compete statewide.

- Submit all essays to your HSTA Field Site Coordinator before your club’s deadline. Check with your HSTA Field Site Coordinator and Teacher for local deadlines.

- Regional winners are announced by your HSTA Field Site Coordinator, regional winners go onto the state level to compete for the $500.00.

- Four winners from statewide entries will be determined by the Sara Spencer Award Committee of the HSTA Joint Governing Board.

- The four state winners will each be given a check for $500.00 that they can use for college expenses. These winners will be announced at the Science Symposium.