

Technologize

a newsletter for
“Today, tomorrow and beyond”

Upcoming Events

Regional Spring Fair: March 7th

Blue Ridge Region: James Madison MS
South Central Region: Highland Springs HS
Southwestern Region: Lebanon HS
Tidewater Region: Jamestown HS
Valley Region: Turner Ashby

Regional Spring Fair: March 14th

Northern Region: Mountain View HS

FIRST Robotics-NASA VCU Regional March 19th-21st

Richmond, VA: Siegler Center

National – April 16-18 Atlanta, GA: Georgia Dome

ITEA Annual Conference: March 26th - 28th

Louisville, Kentucky

Technosphere Registration Deadline: April 3rd

Statewide

State Officer Candidate Application Due: April 3rd

Statewide

VTEA.org

Technologize

1

Winter 2009

Pinching Classroom Pennies

Every teacher is faced with the challenge of budgeting classroom funds while still providing the best opportunities for their students. Below are some ideas for saving money in the classroom and fundraising for the future.

In House Production

Teachers, if your Technology Education department has a Communications Lab with print media equipment you can screen-print items to raise money. If you have a heat transfer press, you can produce full color ink jet and laser color transfers. Similarly be sure to take advantage of prototyping labs that offer carpentry or machining equipment by creating original items for sale. With the help of mills, lathes and some elbow grease students can quickly produce custom items for purchase by other organizations or parents and staff. You can open these labs after school for production when you have large orders. A district wide memo can be sent out explaining what you offer as a printing service.

Reduce, Reuse, Recycle

This saying can save you piles of classroom funds if you just stay committed to it. Here are a few ideas for the three R's.

1. Use old T-Shirts as rags and in place of costly paper towels.
2. Save all of your paper scraps and do a unit on papermaking or donate them to the Art department.
3. Turn off the lights when you step out for a few minutes.



Web Design

If you have access to web design software you can charge a small fee to each club or organization to build them a webpage. This is a great way to get students involved in real world activities and still raise money for your lab.

Community Carnival

If your school has a community carnival or similar event, have your TSA members participate. If your school does not host an event like this, have your chapter organize one. Purchase or make fun prizes and give something to everyone that plays the games. Ask other groups to participate in the carnival to benefit everyone. Some events you might consider for this event can include the following: Xbox 360 game tournaments for Madden 2009; Halo 3 and other popular multiplayer games; Fun carnival games that younger kids will enjoy and; Jeopardy or trivia game show games that adults will play.

Chili Cook Off!

Get a hold of a few parents and the Principal of your school and host a chili cook off! Host the event during school and collect a small donation per bowl. Local firefighters can judge the chili!

TSA Regional Competition

Preparing to Win!

STEAM Team: Change the World Around You!

When a member of my school's TSA chapter has a desire to make the world a better place and shows particular promise in at least one area of skill, they are invited to be on the STEAM team. The STEAM team is a club for a variety of competitors with the understanding that every competition we enter, we must be able to understand the interconnections of Science – Technology – Engineering – the Arts (including social, fine, language and physical) and Mathematics. We don't just 'build stuff.' We receive criteria for each competition, decide as a team if we wish to attempt that challenge or not, do research on the history of that field and previous similar solutions to similar problems then we plan, create prototypes, decide on the best concept and work on improving the details right up to deadlines, in order to enter the best product we can. The team travels to TSA competitions, and also has the option to enter any other competition that we hear about and have the capabilities to enter. It is my job to provide everything I can to promote the student's educational background through offering experiences with tools, processes, materials and understanding of the research and paperwork involved with each challenge. I have been proud of my team in that all of them began this adventure feeling timid about participating, but quickly become excited to do as much as possible. It may be a challenging addition to an already challenging job, but the reward of knowing that your encouraging students to have unnumeral ripple effects on improving the world defines the essence of teaching.

*-Georgette Yakman: I-STEM Education PhD Student
Pulaski High School Technology Education Teacher*

Tri-County Competition

On January 24, 2009, Lord Botetourt High School in Daleville, VA, hosted the Third Annual Tri-County TSA Competition. This invitational event has been used for the past three years to prepare High School Students in the Roanoke and surrounding areas before the Blue Ridge Regional TSA competition usually held in March. Schools participating this year included: Liberty High School, Staunton River High School, Pulaski County High School, and Lord Botetourt High School. Competitions were limited to the following six categories this year: Structural Engineering, 3D CAD Engineering, Dragster Design, Problem Solving, Technical Sketching, and Manufacturing Prototype. A great time was had by Students and Advisors alike. Results will be posted on the Lord Botetourt HS web page lb.bcps.k12.va.us/departments.cfm?subpage=592354

*-Victor Terry
Lord Botetourt High School*

TSA Regional Competition Checklist

- Affiliate my schools TSA Chapter*
- Register my student competitors*
- Prepare my students to compete*





PROGRAM OF AWARDS

Each year, VTEA recognizes those individuals who have a service record or have performed extraordinary service to sustain, promote, or expand Technology Education in Virginia. Of these awards, three are submitted by the VTEA membership. Below are descriptions of these awards or certificates of recognition. Please read these, think about people you know that either fit or exemplify the award and, using the form on the reverse side, submit a nomination by May 1, 2009. You may submit more than one nominee.

1. Award: Retired Personnel

Recognition given to technology education personnel (teachers, supervisors, and teacher educators) upon their year of retirement. Award to be presented at the annual Summer Conference following the person's retirement.

Form of award – Framed certificate and complimentary ticket to Summer Conference banquet/breakfast.

2. Award: John Monroe Service Award

Recognition for extraordinary service to the profession and to the VTEA by members of VTEA. The intent of this award is to honor those members who have given service above and beyond that normally expected. Awarded to VTEA members only. Limited to no more than two per year. (Named in honor of John Monroe 3/1/1997).

Form of award – plaque

3. Award: VTEA Achievement Award(s)

Awarded to VTEA members who have done exemplary work in one of several selected areas: (1) work with TSA, (2) publishing, (3) non-degree research, (4) public relations activities, and (5) encouraging students to become technology education teachers.

Form of award – framed certificate

VTEA AWARD NOMINATION FORM

- DUE DATE MAY 1, 2009

In the spaces below, please write your name and contact information (mailing address, email, and phone number) and the name and contact information of the person you are nominating. Please provide your reasons for nominating this person and other pertinent information as to why this person should receive this award of recognition.

Person Nominating
NAME _____

CONTACT
INFORMATION _____

Person Nominated
NAME _____

CONTACT
INFORMATION _____

AWARD (circle): Retiree John Monroe Service Award VTEA Achievement Award

REASON FOR AWARD AND OTHER EVIDENCE OF EXCELLENCE

Complete this form and return to:

Jesse W. White
VTEA Immediate Past President
Hampton City Schools
One Franklin Street
Hampton, VA 23669-3570
(757) 727-2466
jeswhite@sbo.hampton.k12.va.us

Recent Elections!

Georgette Yakman - President Elect
Dawn Rountree - Vice President
Elizabeth Jowett - Secretary

What if...?

In research and experimental design, we are challenged to identify a hypothesis. That is, what if something were true? Then, we restate that as a null hypothesis as in what if it isn't true? One way to view a null hypothesis is to imagine that something did not happen (as in I did not teach plastics). What would be the impact? Another way to rephrase this is to ask "What If" questions as in "What If I did this" or "What If I did not do that?"

Technology Education is important to us, so how do we emphasize that importance to our students? One way to think of your individual lesson plans is to ask some "What ifs?" For example, let's say I was teaching wing design and lift and the students were supposed to build planes to fly. Some of the "What ifs" could be: What if students changed camber? How would that affect the flight? Or what if we changed aspect ratio, will the plane fly higher? Faster? These questions should be part of the internal dialogue of engaged students in your classroom.

There are other "What ifs!" What if students do not learn about lift? What if students read about lift, but never built a plane? What if my students built a plane, but never flew against a different wing design? What if my students never go to TSA events?

Hopefully, this discussion reveals ways to increase rigor in what we teach students. In truth, strong Technology Education programs create innovators who learn to rely on math and science and other core subjects to be effective. The chance to attempt "What If?" is more present in Technology Education classrooms. What if you tried "What Ifs" in your classroom?

- Jesse White: Curriculum Leader CTE
Hampton City Schools

Save The Date!

VTEA Summer Conference

Richmond, August 4th - 7th, 2009

"Technology Education --- Developing a Bright Future."

This theme should bring thoughts of change---What is new? How can I better teach my students? How can I connect with other teachers to make teaching more effective? Remember, "Do not confine your children to your own learning for they were born in another time." Come ready to give help and seek help with your competencies, teaching methods, and classroom/lab management techniques. The 2009 Summer conference will be held in Richmond, VA at the Westin Richmond from August 4th-7th, 2009. The conference planning team is eager to meet your professional needs and provide you with networking opportunities and a variety of workshops in technology education.

Workshops are organized by middle and high school, with topics from Engineering by Design to mechatronics, TSA, and Biotech Made Easy. We have asked for hands-on presentations to energize school year. Bring a USB drive with your best lessons, activities, projects, and assessments to share. All presenters have been asked to identify the competencies their presentations address and to supply their materials in a digital format. Come to share what works for you and to ask others how they teach the competencies.

Do your part by sharing what you have perfected and what works with your students!

Please take the time to visit the web address below and review the conference highlights. I look forward to seeing you at this summer's conference.

Sincerely yours, Rick Dyer, VTEA President

<http://vtea.org/conference/annual.html>

TEACHER TRIVIA CHALLENGE!

ASTRONOMY AND TIMEKEEPING ARE CLOSELY RELATED. WHEN IT WAS DISCOVERED THAT THE EARTH DOES NOT MOVE AT A CONSTANT RATE OF ROTATION, WHAT TYPE OF CLOCK WAS INVENTED WHERE ONE SECOND IS DEFINED AS 9,192,631,770 TRANSITIONS OF CESIUM 133? WHAT RELATIVELY NEW TECHNOLOGY REQUIRES TIME TO BE MEASURED IN SUCH TINY INCREMENTS? WHY WAS CESIUM 133 USED? WHAT INSTITUTION IS RESPONSIBLE FOR MEASURING AND DISTRIBUTING TIME IN THE UNITED STATES?

PRIZE: \$25.00 VISA GIFT CARD

**SEND YOUR ANSWER TO JESSE WHITE AT
JESWHITE@SBO.HAMPTON.K12.VA.US
BY APRIL 1ST AT 5:00 PM**

The most complete and earliest answer submitted to Jesse by 5:00pm March 24th will be considered the winner. All submissions are final and BOD members are not eligible. Please allow two weeks after the deadline to receive your prize.

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In this Issue
pp. 1 Pinching Pennies
pp. 2 TSA Regional Competition
pp. 3 VTEA Summer Conf.
pp. 4 Teacher Trivia Challenge

Bridging the Gap

I was out at NASA Langley Research Center in December and got to see, first hand, that NASA needs our students. NASA LaRC and other NASA facilities need our students to study design, materials, precision, and a host of other skills. They have a great need for Technologists, Technicians and Engineers. Technology Educators, like you and me, are an excellent source of future innovators. Whether it is manufacturing, space travel, electronics, communications, graphics, transportation, or construction, our

economy depends on technology. In Portsmouth and Suffolk, we are seeing Norfolk Southern build a new track and straighten their old one to Chicago. The result? Freight can come into Southeast Virginia and make it Chicago two hours faster than freight through New York. The technology? Transportation, warehousing, distribution, modeling and simulation, material movement and so on. Stay in touch with the industry in your area. Make the connections for your students and bridge the gap. Virginia needs innovators and you are the teachers of innovation!

- *Jesse White: Curriculum Leader CTE
Hampton City Schools*