

VAST's Vision:

Excellence in Science Education Through Innovation

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VAST.Org

Check the web for news, conference updates, registration, and forms.

The Science Educator

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2023 PROFESSIONAL DEVELOPMENT INSTITUTE



"Science Teachers Leading from the Classroom"

November 16, 17, 18

Hotel Roanoke and Conference Center

General Session Speakers



Laura Akesson founded Science Overdrive, a Virginia nonprofit aimed at inspiring, providing equipment for, and collaborating with kindergarten. She has taught Physics, Math, and Biomedical Engineering/Design for the past 22 years.



Dr. Bethany Brookshire is an award-winning freelance science journalist and author of the critically acclaimed 2022 book *Pests: How Humans Create Animal Villains.* Her work has appeared in *Science News, Science News for Students, The Washington Post, The New York Times, Slate, The Guardian, The Atlantic* and other outlets.



Joshua Whitlinger, the 2023 Virginia Beach Public Schools Teacher of the Year. A National Geographic Certified Educator, he teaches Earth Science and Physical Science to the gifted and talented.

PDI Registration is Open

Register

Register now for the November PDI. Apply early for financial support. Encourage colleagues to go and to share transportation and lodging. For the best conference experience plan to stay at the Hotel Roanoke to be in the center of the action to maximize your networking opportunities.

Present

VAST invites all educators to share their expertise by presenting at the PDI. Consider doing either a presentation as a single presenter or teaming up with a colleague or two. The online concurrent session presenter proposal form is open from March 1 until June 15.

From the Executive Director

Punctuality



Susan Booth

When I read the article by Douglas Fry on "Punctuality", I had to see if all teachers feel the same way. I have watched education encourage punctuality, but now think it's just being appreciative of people showing up. Sad but true.

As we start our teaching day, we hope everyone comes ready to learn. What we see are late, unprepared students walk into the class who try to pick up where others already are. The expectation for a teacher is to stop and get the student caught up, but is that fair to the students who were on time and may now have to wait?

Students are dependent on others to deliver them on time. What can be done? Should the teacher make phone calls to address this lack of understanding? Here we begin the second level that is not fair to the teacher who must take time out to communicate the need to be in class on time to parents. Punctuality is something no one should take for granted. Why?

"Punctual person characteristics are self-confidence, honesty, discipline, humbleness and respect for others."

This simplification of one's life to be punctual "is a key ingredient in one's formula for success."

Susan Booth, Ed.S., VAST, Executive Director Fellow, Virginia Academy of Science

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President's Page

Lead from the Classroom

On January 28, 2023, I held my first General Board meeting as the President of the Virginia Association of Science Teachers (VAST). Before the meeting started, I was on Facebook and came across this surprising memory post. This post is a picture of me attending my first VAST General Board meeting, as the newly appointed chemistry content chair. I found it amazing to see that exactly six years later I was the President of VAST. I remember feeling nervous, excited, and honored to have been asked to serve in this position. When I accepted this position, in 2017, being the President of VAST was not on my radar. Although I did not see myself in this current role, I am glad others saw the potential in me.

This picture also reminds me of the power in "The Ask". I was Asked to take on the chemistry content chair position and I was Asked to consider running for President Elect for VAST. The ability and skills were already inside of me, but it was not until I was Asked to take on these positions did, I really start to tap into and improve these skills.

As a member of the VAST Board, I was surrounded by other leaders who mentored my growth and shared my passion for science education. Being a part of the VAST Board helped to increase my confidence as a leader and opened doors for me to take on more leadership roles. I now look for opportunities to Ask other teachers to accept and realize their own leadership potentials. It is not enough for me to grow as a leader, but I must also help others to grow as well.

This memory also serves as a representation of my theme for this year's Professional Development Institute (PDI). My PDI theme is "Science Teachers Leading from the Classroom". It is my mission to inspire classroom teachers to continue their pursuit or to start pursuing their place as a science education leader. Please know VAST is willing to assist you whether you are just beginning your leadership journey or whether you are already serving in a leadership role.

For my current leaders, I would like to **Ask** each leader, to join me in **Asking** teachers to accept their place as science education leaders. Some might turn you down, others might be hesitant. But do not give up with **Asking** just once. Continue to encourage them and when they do accept, be ready to mentor and guide them. As a matter of fact, here are some opportunities for classroom teachers to begin or continue growing as a leader with VAST. Please feel free to reach out to me to get more information about any of these positions.



As of February 2023, the following General Board positions are vacant.

Committee Chairpersons (voting)

- K 2 Elementary
- Informal Learning
- Policy

Invited Representatives (voice, no vote)

- PAEMST
- Pre- Service
- VESTA
- Virginia STEM

Also, there are opportunities to run for one of the elected positions on the Board. You can use this link to access the 2023 VAST Nomination form - Link.

In others word, if you want to learn how to lead from the classroom, then you need VAST. If you already know how to lead from the classroom, then VAST needs you.

Stephanie Harry, VAST President 2023

Adjunct Professor, Virginia Peninsula Community College, Program Coordinator, ACS Hach Mentoring Program Chemistry Teacher, Tabb, Yorktown, VA

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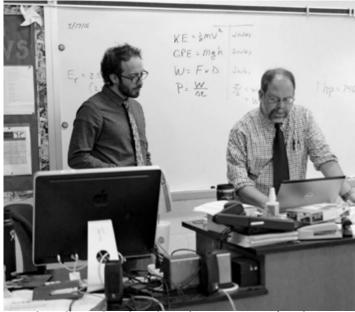
Mentorship - the Tool You May Not Know You Need

Andrew S. Jackson, Harrisonburg City Public Schools, retired Physics Teacher, Engineering Teacher, Secondary Science Cooordinator, Co-Director Governor's STEM Academy

I retired at the end of last school year after teaching for thirty-five years. The process of retiring caused a lot of opportunity to reflect. One of the many things I pondered was mentorship and professional development. No, I'm not normal, but hear me out. Those two terms are incredibly important to my career as a teacher and a teacher/administrator. But those two terms, like many, gathered up debris and trash as they rolled through the years of use and abuse. And because of that, they cause some people to turn up their noses and turn away. But wait, I'm not talking about a label of mentorship or PD applied by someone else to an activity. I'm talking about the real thing, but you have to create for yourself. In this essay, I will address mentorship. Next time, I'll address PD.

When I was hired, I don't think I was assigned a mentor. During the latter half of my career, as a Science Coordinator, when we hired teachers, we assigned them a mentor within a formalized program. That's a good thing, however, when I have talked with teachers in training, I tell them how important it is for THEM to find their mentor regardless of who has been assigned to them. I was blessed to begin my career with several wonderful mentors (though I didn't really think of them with that term - I was just trying to survive and grow). I was hired to teach physics and allow the man who had been teaching it to return to his first passion, chemistry. Our classrooms were connected by the prep room filled with equipment he had purchased, built, and maintained. Eric Dalton was the mentor for me, every new science teacher should have. He was always there with the answers to the questions I asked and advice when I needed it. He also had the grace and knowledge to allow me to try, fail, and grow with my own ideas. I also had an assistant principal assigned to me who was instrumental in my growth. His observations of me were fair, accurate, and helpful. As I grew, he would ask me what I wanted him to look for. This was an effect of the peer coaching training we had entered as a school. What I most remember from him were the very timely articles that would show up in my mailbox (no email yet!). Lynn Ward had a knack for knowing when to feed me information needed for my growth.

Without knowing it, I also cultivated other mentors in the building. George Murphy was talented with teaching gifted students. I tried to pick up some of his skills. I watched from some distance and awe as veterans in the building built their professional presence; Dick Rose, Delores Dunn,



Erich Sneller and Andy Jackson discuss aspects of teaching. Photo by Cara Walton, <u>carawaltonphotography.com</u>

Carol Tomlinson, Ben McCartney, and Bobby Jacobs to name a few. These teachers were in a variety of disciplines, not just science. Eric Dalton was my constant touchstone and my true mentor, but I was aware and watching what others were doing and picking things up.

Now, I ask you - who are your mentors? If you don't know or don't have any, then I can give you a very big tip on becoming a better and more satisfied teacher: find some people you admire and talk to them about their practices. Watch and listen to them. If you are assigned a mentor, they may or may not be THE mentor you need. Different people have different strengths. No time for any of this? Then I'm afraid you are missing out on one of the key things that allowed me to survive and thrive in education for 35 years. As I grew in experience and age, and changed schools, I kept finding new and different mentors. Those mentorship relationships changed as I had my own expertise to offer. They became a partnering-mentor relationship. It is what allowed me and colleagues to build an excellent science and STEM program at Harrisonburg High School. I count Joe Glick, Myron Blosser, Ryan Sensenig, Suzie Smith, Erich Sneller, Seth Shantz, Seth Berkeley, and Geoff Estes among those teachers that I worked with and leaned on as my mentors as we grew together. I hope I served them as mentor as I also learned from them. It is true, I was assigned some supervisors and principals who did not help me grow. When that was the case, I looked for the

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professional support I needed elsewhere. And I always found it.

Two very important places I found mentorship WITH professional development were in VAST and VIP (Virginia Instructors of Physics). When I was first attending VAST PDIs I was in awe. It amazed me that my coworkers actually KNEW the icons running these amazing conferences. I'm sure I stood there in awkward silence as I was introduced to them. Awkward silence, that's my go-to-mode. Eventually, I started connecting with more folks. Seek out the speakers you want to hear. Meet for coffee with presenters you want to learn more from. If your neighbor at a session and you find common ground, schedule a time to meet to talk more and cultivate that relationship. It is all at your fingertips at the VAST PDI and even more so with the advent of the technologies embraced by us all during the Pandemic. Watch the VERSE grow with VAST for even more opportunities. As I grew in leadership, VAST provided me with mentorship in those capacities. Susan Booth, Don Foss, and Maria Cooper saw potential in me for leadership within the organization and provided the support and opportunity I needed to grow and serve in VAST where I continue to encounter people to learn from, like President Stephanie Harry!

VIP was formed out of the very need to have face to face contact with like-minded colleagues. Many physics teachers teach in isolation within their building. VIP was the way a handful of us created to get together and share strategies and mentor each other. This introduced me to new mentors outside of my building. Tony Wayne and Ron Revere served as sources of, or inspirations for, many of my favorite lessons in my physics class over the years. They were not down the hall, but as email became a thing along with the internet, they were available on my keyboard and at our spring meeting and at VAST in the fall. VIP members were among the first teachers in the state to get official @k12. va.us email addresses at one of our spring meetings.

It was these people and more than I could list that gave me the tools and the perseverance to make teaching and being a combination teacher/administrator for 35 years a joyful and fulfilling possibility. Teaching is way too difficult and rewarding to try to do it on your own. Wherever you are in your journey - year one or forty-one, find those people to have genuine conversations with and inspiration from. A mentor relationship is the tool needed for professional fulfillment you may not have known you were missing.

2023 PDI RegistrationRegistration Opens March 1

Presenter: \$155

Attendee:

\$195 Earlybird

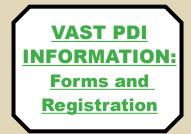
\$240 Regular Registration

\$115 Full Time Student Earlybird

\$145 Full Time Student

\$185 Lifetime VAST Members





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The Donna Sterling Institute Problem-Based Learning November 16th, Thursday at the PDI Save the Date



Donna Sterling

Donna Sterling's vision of problem-based learning (PBL) as a means of teaching and integrating science with math, engineering, technology, and language arts is timeless. She was committed to meeting the diverse needs of our students through culturally responsive and equitable practices. Her legacy lives on in the Sterling Institute which supports teachers in developing and enacting PBL units in their instruction through a 7-hour professional development experience.

Here is your chance to learn how to implement this powerful teaching strategy!

Please watch for details on the <u>VAST website</u> and in future VAST e-notes.



VAST Coffee Talk with the Content Chairs.
VAST wants you to remember you are not in this alone.

Coffee Talk Dates:

April 1, 2023, 10:00 AM Theme: "Favorite Teaching Strategies and Tools"

September 23, 2023, 10:00 AM Theme: "Back-To School"

Register in advance for the April 1 Coffee Talk: **Register**

After registering, you will receive a confirmation email containing information about joining the meeting.

Questions? Contact meeting host Dave Matchen, <u>matchendl1966@gmail.com</u>

Coffee Talks are held on Saturdays and there is no cost to register.

Watch for future dates and times.

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2023 PDI will be Held at the Hotel Roanoke

The Hotel Roanoke & Conference Center 110 Shenandoah Avenue, Roanoke, VA 24016 November 16-18 2023 at the Hotel Roanoke

The VAST reservation website: https://book.passkey.com/event/50478556/owner/9515698/home The guest room rate is \$139.00 plus 13.3% tax per night. With taxes, the rate is \$157.49 per night. If you are an overnight guest, wireless internet is complimentary throughout the hotel and conference center. The username and password is the guests last name and room number.

For guests who are not overnight guests who are just coming in for the day, there is a \$9.95 per day charge...these guests can pay for the internet through our splash page when they try to access the internet.

We do have options for free internet for the day guests. In the main lobby, we do have free wireless internet access. We also have two business center locations that have computers for people to use.

Valet Parking - \$21.00 Self-Parking - \$15.00

Sponsor Opportunities at the 2023 Professional Development Institute

\$1000 Level Sponsor

- -rotating banner ad on the PDI app
- -digital program listing (name, logo, link)
- -1/4 page ad in newsletter, blurb-280 characters
- -10% discount on VAST 2022 PDI Exhibitor booths

\$2500 Level Sponsor

- -rotating banner ad on the PDI app
- -digital program listing (name, logo, link)
- -1/2 page ad, blurb-300 characters
- -eblast ad distributed to all VAST members
- -15% discount on VAST 2022 PDI Exhibitor booths

\$5000 Level Sponsor

- -rotating banner ad on the PDI app
- -digital program listing (name, logo, link)
- -FULL page ad in newsletter
- -eblast ad distributed to all VAST members
- -25% discount on VAST 2022 PDI Exhibitor booths

Many thanks. We look forward to seeing you in November.

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Help Recruit VAST Members

Mini-grants • Social Media • Professional Development • Awards • E-notes • Networking

VAST membership gives you many benefits and we want to make sure that you know what they are and take full advantage of them.

The Virginia Enrichment Repository for Science Educators, VERSE, is available to all members. It is being updated and 'tagged' with content and grade level identifiers to help target both your interest and learning. It is still draft and a work in progress. It includes content from VAST's The Science Educator Newsletter, the Journal of Virginia Science Education, and sessions from the 2020-2022 VAST Professional Development Institutes.

Journal of Virginia Science Education, JVSE,

is a peer-reviewed professional journal produced by VAST. The principal criterion for the acceptance of a manuscript is that it contributes to strengthening the teaching and learning of science. Teachers-to-be, educators of all levels, school administrators, and informal science educators are invited to submit manuscripts to be considered for publication in JVSE.

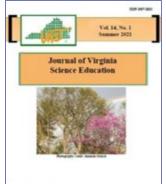
The Science Educator is full of information on national science education news; Virginia Department of Education happenings; announcements from partnering organizations; news from VAST regions; innovative science teaching strategies; grant information; professional development opportunities, workshops, and courses; and award information and applications. It is published five times each year. All members should receive a link to the current issue in January, March, May, July, and October in an email.

The VAST website, VAST.org contains the most recent news and updates. When VAST members login to the website they have

access to VERSE and archives of Journal and Newsletter. There you may renew your VAST membership; check your membership status; and update your membership

information.





Peer Reviewed Journal





Recognition In Science Education (RISE) Awards are presented to spotlight the excellent work done by science educators across the Commonwealth. They recognize service to science education in the individual's school, school system, and the VAST district in which they work. The awards are grouped in to twelve distinct categories.

Donna Sterling Exemplary Science Teaching Award - Donna Sterling was a visionary science educator with a passion for working with science teachers and developing habits of inquiry-based teaching. Most recently, her leadership in the Virginia Initiative for Science Teaching and Achievement (VISTA) focused on teacher professional development. In 2023, the award will be given to both an exemplary elementary teacher and exemplary secondary teacher. See more information on the Sterling Award and other awards on the VAST web site.

VAST Mini-grant program provides seed money for innovative curriculum activities which expand learning opportunities for science students. Team or individual applications are welcome.

Your membership in VAST is your portal to resources, discounted conference rates, and

connections to other science teachers in Virginia. Be sure to renew your membership so that you do not miss out on all the resources that VAST has to offer. YOU are important the VAST Science Community! Encourage your colleagues to join. Why not gift a new colleague or your student teacher? Memberships

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Journal of Virginia Science Education Update - March 2023

Dr. Angela Webb & Dr. Joi Merritt, JVSE Co-Editors

We are excited to dive into the articles submitted for the summer issue of the **Journal of Virginia Science Education** (**JVSE**). Between the receipt of submissions and the publication of the journal twice a year, peer reviewers play a vital role in ensuring the quality and relevance of JVSE. We thank each of you who has served as a reviewer!

We invite all VAST members to volunteer to review submitted manuscripts. This opportunity is a service you can include on your resume and is a great way to get ideas for your own publications. If you're interested in serving as a JVSE reviewer, please scan the QR code and respond to a brief set of questions to (a) indicate your interest in reviewing 1-2 manuscripts this year, (b) update your contact information, and (c) share your areas of expertise and your professional interests.

We also encourage VAST members to consider submitting an article for our winter issue. The theme is *Science education for our current times: Connecting science to issues in the public sphere and students' curiosities and questions* (submissions due July 31; published December 15). Manuscripts that address this theme may include innovative lessons/activities that address community science concerns and/or students' pressing questions about science phenomenon; research on connections between school science and the public's perceptions of science and/or understandings of nature of science; ways to address challenges that may arise when addressing pressing, relevant science ideas (e.g., COVID/pandemic, climate science, environmental justice, etc.) in our science classrooms (PreK through post-secondary); etc.



Please visit the journal webpage to read current and past issues of JVSE, learn more about the issue themes for 2023, and review guidelines for manuscript authors and reviewers.

In Partnership with Virginia's Transportation Construction Alliance and Friends of Mineralogy Virginia Chapter VAST Announces Summer 2023, 2nd Annual Rockin' PD

Save the Dates:

Tentative Dates for Tours of Operating Quarries

June 23, 2023 – E. Dillon & Co. – Swords Creek, VA (SW VA) Appalachian Plateau)

June 30, 2023 – C.W. Barger & Son – Lexington, VA (Valley & Ridge)

July 21, 2023 - Vulcan - Dale Quarry - Chester, VA (Piedmont)

July 28, 2023 – Luck Stone – Bull Run Quarry – Chantilly, VA (Nova Triassic Basins)

The second annual Rockin' PD will be held this summer. These unique experiences are free of charge to VAST Members and open to educators of all grade levels. Earn professional development hours, if approved by your school evaluators!

For more information, check the VAST Web site and future newsletters for updated information. Attend one or all four drive-in field trips at four unique Virginia locations.

Questions? Email us! friendsofminerology.virginia@gmail.com

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Exhibit at the VAST PDI 2025 REMINDERS



VAST PDI 2023 will be held on **Nov. 16-18** in Roanoke at the Hotel Roanoke. VAST celebrates our **71°Anniversary 2023**. The theme this year is "**Science Teachers Leading from the Classroom**".

- Register to exhibit and present at the VAST Professional Development Institute. As space is limited, register early.
 - 2023 Online Registration & Fees for PDI attendees, presenters, and exhibitors opens on March 1.
- Submit your presentation proposal(s).
 - The online presenter proposal form will be open from March 1 to June 15. All presentations must be submitted by June 15.

 Link
 - Commercial presenters are required to exhibit.
 - Commercial exhibitors who complete the online exhibitor registration and submit an online presenter proposal form by **May 31** will receive one free presentation slot.
 - Additional presentation slots can be purchased for \$150.00 per presentation.

All registration materials and the presenter proposal form can be found on the Annual PDI page at VAST.org.

Link

Exhibitor Registration Link

Commercial Exhibitor Booth (by October 5) \$660 per booth Not-for-Profit Exhibitor Booth (by October 5) \$370 per booth

Exhibitors are asked to provide two door prizes...one for a giveaway on Saturday at your booth and then one to donate to VAST for the Final General Session. Please label prizes Elem, MS, HS or all of the above.

Advertise in the VAST Newsletter, "The Science Educator"

In case you would like to advertise with us the form for advertising is <u>linked</u> here. You will be able to target science educators from teachers to administrators, pre-K to college and university professors and preservice teachers. Go to Link to see past issues of our newsletter, The Science Educator and for other advertising opportunities.

The next digital newsletter submission to the editor is May 1.

Book your hotel room

Be sure to reserve your hotel room at VAST's per diem rate to help defray costs at the hotel, Hotel Roanoke in Roanoke.

Link

For more details go to the VAST website.

We look forward to seeing you in November.

Susan Booth, VAST Executive Director email: executive.director@vast.org

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VAST Needs YOU!

It's time to step into your leadership role with VAST. Nominate someone, or yourself, for one of our open positions.

Annually, VAST elects a group of individuals according to our current bylaw requirements.

Consider nominating someone who you think would serve well in 2024 as:

President-elect: The President-elect shall serve as the co-Chairperson of the standing Professional Development Institute (PDI) of the year in which they will serve as President.

Treasurer: The Treasurer shall be responsible for the collection and recording of membership dues, receive all monies due to VAST, pay all bills legally incurred by VAST (including approved PDI expenses), and arrange for the yearly audit of the financial records (when authorized by the Board of Directors). With input from the President, Board, and PDI Committee, the Treasurer shall prepare a budget for the current year for approval at the first Board of Directors meeting of the year. The Treasurer shall prepare a report for all meetings of the Board of Directors and for the annual meeting. In addition, the Treasurer will be responsible for the timely preparation of IRS reports, including the filing of taxes and the renewal of tax-exempt status. The Treasurer shall be elected to a term of three years.

Regional Director (Regions 1, 3, 5, and 7 are up for 2024!) Regional Directors shall be elected from each of the eight (8) Department of Education regions. Directors shall be elected by the membership to serve a two-year term and may serve more than one term. Directors from even-numbered regions will be elected on even years, and those from odd-numbered regions will be elected on odd years. Directors will, within their region, promote VAST membership, regional professional development activities, and the VAST Professional Development Institute (PDI). Directors will serve as the coordinator of science leaders within their region and encourage an active and viable network within their region. Directors are expected to attend VAST Board meetings and provide a report on activities within their region. Directors shall actively participate as VAST leaders including contributing to publications, awards nominations, and the solicitation of presenters for the VAST conference.

Nominees may fill out this <u>electronic form</u>, or complete the file attached to the newsletter and email to Becky Schnekser <u>expeditionschnekser@gmail.com</u>.

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Materials Camp for Teachers

We are very pleased to announce the ASM Materials Camp for Teachers in the State of Virginia will be at the Advanced Technology Center (ATC) in Virginia Beach, VA this July 10-14, 2023.

FREE STEM PROFESSIONAL DEVELOPMENT FOR TEACHERS

OUR PROGRAM

ASM Materials Camp®-Teachers is a free, week-long, idea-generating workshop introducing teachers to methods that make math and core science principles more enticing and relevant to their middle and high school students. Materials topics are great motivators in any engineering, technology or science course as students learn concepts that are reflected in their everyday lives.

WHAT MAKES US DIFFERENT

Teachers leave our camps able to engage students using simple, low-cost experiments that integrate into existing lesson plans.

Participants are eligible to receive four (4) Continuing Education Units (CEUs) and can opt for two (2) graduate level credits.

REGISTER TODAY

Ouestions? Contact:

Jeane Deatherage, 440.671.3831 | jeane.deatherage@asminternational.org



STEM Technical Exchange Heather Overkamp, Region II Director



Heather OverKamp speaking at the STEM Technical Exchange

Heather Overkamp represented Region II at the STEM Technical Exchange, hosted by DOD STEM (Department of Defense, DOD) in Washington DC on February 23 and 24. She spoke to an audience of 500 about being a STEM teacher and a DOD STEM Ambassador.

Pictures can be found on social media by following DOD STEM. Here is the link to the conference: https://www.dodstem.us. Anyone interested in finding out about this program and/or the sponsors, Heather Overkamp would be happy to provide more information. Region II has also formed its own STEM Ecosystem, which provides a lot of benefits to the community as a result of these partnerships.

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SCIENCE FOR ALL George Dewey

Commitment - A Way of Life or a Pastime?

Make a commitment the way the sun commits itself to sky and mist does to the eye and fish to silence.

Make a promise the way wind whispers to fields, lightning to forest, and the soul speaks in dreams.

Decide to belong as the candle does to light, the tear to gravity, and melody to song.

Make a commitment and your wandering will cease, indecision will end, and your road toward home will find peace.

Kohar Kasbarian
 Translated from the
 Armenian by Diana
 Der-Hovanessian

It seemed such an ordinary request, a student absence form Valeria had handed me to sign that April morning. All year she had shown me her own interest and ability in being her own person, becoming an early leader in her lab team of four, and active participant in class and lab discussions. As I signed off, noticing Hilton Head as the destination, I quipped, "So, a little R&R at the beach?" "Oh, no," she corrected me, "It's a tennis tournament!"

An ordinary request for an extraordinary event. Thus began my lesson in expanding my own horizons. "We have special chairs and special racquets," Valeria explained. Shortly thereafter she sent me several photos and invited me to watch her doubles matches on our school's courts. Later in May as students shared their special physics projects, Valeria illustrated hers with a powerful lob off our laboratory wall. Heads turned, hands clapped, "Nice one!"



Valeria Reyes-Chian in action

As a freshman in a spring interview with a *Washington Post* reporter¹, Valeria Reyes-Chian commented, "Before I started tennis, I thought I'd never do anything in my life and I would just be there sitting and doing nothing...But when I started tennis, I was like, I'm going to get good at this. I'm going to keep on doing it and getting better!" And so she did. Practicing with a Maryland wheelchair tennis player and instructor on weekends, she competed on our High School varsity team, plus about five tournaments each summer. The byline of the Post article read "...Reyes-Chian plays on high school team despite being in a wheelchair." With her commitment, could it not better have read: "because of being in a wheelchair"?

As an infant, her family had moved to the United States from Peru seeking better medical treatment for her spina bifida condition. Now, fluent in two languages, Ms. Reyes-Chian has been serving for the past year and a half as an instructional assistant in a Fairfax County elementary school while also enrolled in a master's program in educational psychology at George Mason University. As she shares our teachers' frustration that students may hear you, but are not listening to you, she also feels strongly "we should be able to grow our kids." And she already has discovered that reciprocal relationship between teaching and learning: "I learn something every day as a teacher," as she puts it.

Ms. Reyes-Chian travels among different classrooms of special education students as she serves a variety of children: ELL, cerebral palsy, those with wheelchairs and walkers. As one is never too old to learn, so might it be said that one is never too young to teach — she is learning French from one of her 4th graders. She knows from her

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own experiences with physical and mental health issues just what her kids are experiencing, and they are *listening* to her.

The Outward Bound organization, a 60-year-old challenging outdoor experiential program for middle schoolers, high schoolers, and adults, states as part of its mission statement: "to change lives through challenge and discovery" where "racial, economic or religious... differences are celebrated, appreciated and valued...on the belief that we seek, embrace, and value...the lifelong adventures of learning." One of their aphorisms states: "Your disability is your opportunity." As a person and as a young teacher, Ms. Reyes-Chian personifies this truth as the poet would put it, by making a commitment.

Commitment can be an elusive quality that both enables and expresses our persistence, determination, and resilience. It can create the ability to build and grow a life whose outcomes may be born and borne in the fruits of determination, resilience, or resolve. Dictionary definitions may emphasize "something pledged, state of being obligated," or resilience as understood in terms of "recovery from misfortune." But should we not rather try to see something like the motivation and celestial guidance behind a ship's navigating uncharted waters, rather than the storms encountered along the way?

The poet, Kohar Kasbarian, reminds us of the promise and the sense of belonging which nourishes commitment, a matter of mind and heart and soul rather than body, the foundation upon which lives are built and lived out. Something like the combination of genetic code and demanding environment which may guide a bristle-cone pine to grow for over 4800 years as the oldest non-clonal living organism on earth. That's commitment! One cannot teach commitment, but can nurture and reward it from infancy through adulthood. To look at commitment as something quantifiable would be to neglect its paradoxical fragility and tenacity. A few examples may suffice to show there are no set ways to measure either its presence or its variance.

Over 190 years ago, Abraham Lincoln wrestled with bouts of depression. He eschewed the popular remedies of the day for easing the tension and stress of such a condition, things like hypnotism, opium, or water treatments. Instead, he turned to humor and poetry choosing to engage rather than evade the sources of his stress, as one recent author (Parker J. Palmer) expressed it. One of Lincoln's biographers, Joshua Shenk, put it this way, "Evasion would have diverted him from his desire to do something meaningful with his life, draining him of energy for the pursuit." This pursuit would enable Lincoln to meet the demons of wartime head-on,

and dare to evolve in his own thinking toward the twin dilemmas of slavery and the Union. Something about commitment demands our full attentiveness to the worlds both outside and within.

Currently, Anthony Vargas, Manassas City Schools' Supervisor of Gifted and Talented and Advanced Programs, shows a lifelong commitment to education beginning with his own experience as a Black impoverished fifth-grader in an otherwise affluent community in Chester, Pennsylvania. Having a Black teacher for the first time showed him "that something like becoming an educator was accessible to me...I had great connections with teachers. I love that I can see myself in my students," he commented³ as he has successfully worked to redefine the concepts of "giftedness" for the school system, and expanded the GT program from 240 to 334 students over four years as rigor remains the hallmark of his program. Vargas explains, "My thing is: kids are gifted all day, every day. We need to make sure they're getting what they need and deserve in their regular environment...When a teacher believes in you as a student, you can take over the world." How many of us have felt that way when a teacher has believed in us?

With that proverbial 20-20 hindsight, it seems such a turning point must have come for me as a college student. I'd spent hours mesmerized at the microscope watching the cytoplasmic streaming behavior of the acellular slime mold, *Physarum polycephalum*. At the bottom of my lab report, which included a detailed drawing of what I'd observed, the professor commented, "Creative science lies in that hinterland where reason is the servant and not the master." It is with such insightful comments that commitment can be nourished and grown.

Can a quadriplegic person create and perform music? The affirmative reply comes from Spanish musician and computer scientist, Zacharias Vamvakonsis, in Barcelona who has invented EyeHarp⁴, a gaze-activated digital instrument which anyone lacking speech or controlled hand/arm motions can use. A 14-year-old with cerebral palsy has been able to perform with others on stage; as his mother once exclaimed, "When EyeHarp appeared, we felt...if we can do this, we can do anything." Her son aspires to one day become a soccer coach. As the inventor points out, "playing music can build social connections and build self-esteem while experiencing reason and comprehension."

Echoing Valeria Reyes-Chian's commitment, "I'm going to keep on doing it and getting better," a blind Nigerian immigrant wrote an article, "An Imagination to Succeed" in which he describes his refusal to use a cane to navigate, rather "creating and memorizing my mental map as I

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encounter a new landscape...I was determined to succeed. I nurtured my ardor. I looked for ways to put my resolve into action." Today with three academic degrees, Ibrahim Onafeko is a published journalist and audio-producer. Another example of how commitment can be born in restraint, yet die in freedom.

Indeed, once one's inner eye is opened, it is surprising how much commitment refuses to reside only in dreams of the soul, but reaches out to join hands with those around us. In the Ukrainian cities of Dnipro, Lyman, and Izium over 100,000 children have been orphaned or forced to leave their *internat* boarding schools.⁶ As the war deaths and damage have increased, the commitment of medics, volunteers, and displaced civilians has resulted in courageous forays to retrieve family possessions, take in children, and retrieve local children from Russian-run local camps and schools where they had voluntarily enrolled back in June.

Finally, resilience, as one of commitment's offspring, can be seen as the consequence of many traumatic events. Whether 9/11 disasters, West Coast forest fires, flooding of streams or rivers, hurricane Ida in 2021, or Ian in 2022, what rises phoenix-like from the ashes is the commitment to basic humanity regardless of nationality, economic, or social status, or party. The 9/11 passengers of United Airlines Flight 93 brought the plane down in a western Pennsylvania field instead of the presumptive DC Capitol, a Palestinian man saved a drowning Israeli child, and inner city teen jumped into flood waters to rescue an 82-year-old and a dog trapped inside a sinking car. A commitment to sustainability in creating natural drainage systems around a development 20 miles inland from Ft. Meyers gave protection to local Florida residents there from flooded residences and contaminated drinking water as hurricane Ian ravaged their coast. The New Orleans area lost 1800 people to Hurricane Katrina, but only around 30 when Ida struck 16 years later due to both the individual and collective learning about levee design, housing construction, and flood control. As commentary writer, Marshall Ingwerson, pointed out [The Christian Science Monitor, Vol. 113, Issue 46, 4 October 2021.], "...it is collective learning, what we achieve together, that holds real power. In fact, civilization itself could be defined as collective learning." This type of deep learning is another of commitment's cherished offspring.

In January, as tribute to both Martin Luther King, Jr. and his wife, Coretta Scott King, a new statue called The Embrace was unveiled in Boston, an abstract design which, in the artist's words shows both Kings as "monumental examples of the capacity of love to shape society." At the time of

MLK's assassination, their 12-year-old, Yolanda, asked her mother, "Mommy, should I hate the man who killed my daddy?" "No, darling," she replied, "Your daddy wouldn't want you to do that." [The Christian Science Monitor, Vol. 115, Issue 9, 16 January 2023.]

Learning and embracing our humanity is what commitment is all about: making a disability or a disaster an opportunity, whether as wheelchair-bound teacher listening to her special education students, a school system supervisor expanding gifted programs for all students, or a member of an earthquake rescue team. In all these cases, the poet's words ring true:

Decide to belong / as the candle does / to light, the tear / to gravity, and melody / to song...and your road / toward home will find / peace.

Is commitment a way of life, or a pastime?

George

A VAST Life Member, George Dewey is a former VAST President, former NSTA District VIII Director, Presidential Awardee, and Albert Einstein Distinguished Educator. He taught physics in Fairfax County, NBCT since 1999. He can be reached at: gtdewey3@outlook.com

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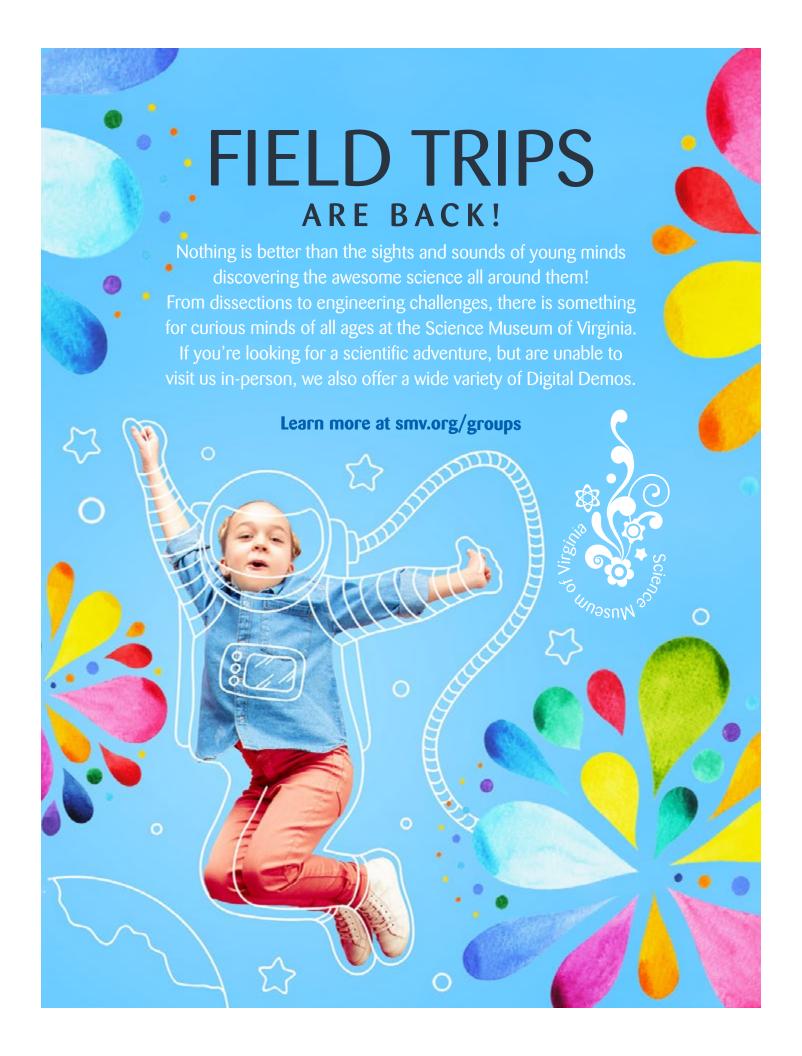
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