

UPCOMING EVENTS

- 9/10 Dr. Mather guest lecture
- 9/12 New student-mentor mixer
- 9/25 All day elective
- 9/26 Interim 1



RVGS Newsletter

Issue 1 August 31, 2018

Counselor's Corner

Autumn officially begins this month, and our students have really started settling down. I have already presented classroom lessons on time management, note taking skills and general study skills to the first year physics classes and I will begin meeting individually with all first year students in the near future. If you feel your student needs more individual assistance, please do not hesitate to contact me.

I am also meeting with seniors individually by request to go over the college application process and to answer their individual questions. Any seniors who did not request a meeting are welcome to schedule one now or in the future as needed.

Many 10th and 11th graders will be taking the PSAT at their home schools on Wednesday, October 10th or Saturday, October 13th. The PSAT is a great practice test to help students prepare for the SAT they will take later in their junior year.

All 11th graders are encouraged to take the PSAT even if they took it as a 10th grader. Taking the test as an 11th grader makes the student eligible for National Merit Scholars. Please check with your child's home school for more information and to register.

I will be holding a meeting before school on Thursday, October 11th at 8:05 in the Lecture hall to discuss college planning with all interested 10th and 11th graders. This is a great opportunity to get an overview of the process and to ask questions. The information I go over that morning will also be available on the guidance web page.

As always, if you have any questions or concerns, please do not hesitate to contact me.

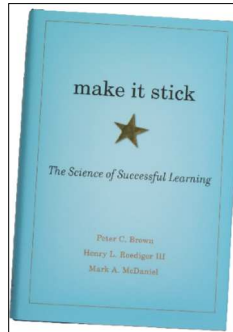
Enriching Instruction at RVGS: Researching the Learning Process and Focusing on Applications

Before classes began, our teachers were already busy deepening the learning experience at RVGS. Over the summer the teachers read *"Make It Stick: The Science of Successful Learning"* by authors Peter C. Brown, Henry L. Roediger III and Mark A. Daniel. During back-to-school faculty meetings, the teachers presented and discussed each chapter, looking for ways to support students. The book focuses on the learning process and will assist our teachers in constructing lessons that help 'make it stick'!

Additionally, the staff is placing extra focus this year on employing real-world applications to provide a deeper understanding of the material. RVGS teachers have implemented some creative ways of applying real life applications in the classroom:

Matthew Browning: In AP Statistics, students will be asked to predict elections in "Battleground" states or research public policy issues using data from reputable sources. Students will then use Minitab (statistics software) to

analyze their data. Lastly, students will give a presentation to the class about their findings.



Melissa Fisher, Brandon Taylor & Doug Divers are collaborating to bring real life applications to help students see continuity in content of medicine. The students will see how application of limit and continuity can be utilized in the field of medicine. They will understand why a certain medical dosage is suggested by physicians and why it is important to take the dosage as prescribed. They will look at the problem mathematically and determine why the medicine may not go away but becomes untraceable.

Melissa Fisher—students will calculate the speed of their fastball by using derivatives—Called Calculus of Free Ball Projection.

Message from the Director

Welcome to the start of another adventurous and exciting school year. We are thrilled to have the students return to school, and I've already heard many positive comments from teachers on the students' enthusiasm and effort!

At the beginning of the year, we stay watchful for the need to help support students having trouble in their new classes. All students encounter the challenge of transitions with new courses, be they are a first year student or a seasoned veteran. Please be sure to reach out to the teachers, Mrs. Sebolt, or me for assistance if you are having a difficult time. I remind students and parents that it is always easier to stay ahead than play catch up. Be sure to seek out help from your teachers proactively, rather than as a last resort.

We are continuing to build on our efforts last year with the RVGS Determined program. As a reminder, RVGS Determined is intended to help give students tools to drive themselves toward continual growth and personal improvement. While rigorous instruction in STEM courses will always be at the center of our work at RVGS, we choose to also dedicate effort toward helping our students develop skills for life-long success, such as goal-setting and reflection.

As always, don't hesitate to contact me if you have any questions, comments, or concerns.

Cindy Bohland demonstrating the new Cellink Bioprinter with Laura Roark



The Cellink Bioprinter allows students to print with biomaterials in 3D. With the bioprinter, students can create scaffolds made of materials such as collagen or alginate and embed cells within the scaffold. Students can also experiment with creating their own bioinks, materials that can be used to create structures with the bioprinter.

Highlights on Students' Summer STEM Activities

Fady Abdelmalak (10th SHS)

Volunteered in two church camps: St Mary Coptic Orthodox Church
Christ Lutheran Church

Valerie Ballard (12th SHS)

attended MST Summer Gov School at the Univ of Lynchburg & took an anatomy class. Worked in the Fox Lab at VTCRI in August & learned about *Toxoplasma gondii* & synaptogenesis in the mammalian Brain

Tate Berenbaum (10th SHS)

Wrote a crowdfunding platform/website with his dad. <https://www.funfund.co>

Martha Chen (11th PHHS)

Did research at Pan Lab at VTCRI

Anias Clark (10th PHHS)

Worked in a lab with her cousin at Duke for ground water remediation

Shayom Debopadhaya (12th SHS)

Participated in Neuron SURF: hypothesis-drive, independent research project at VTCRI. Specifically investigated therapeutic targets of synaptic basal Lauina to eventually reverse neurodegenerative diseases.

Ashley Dillon (12th FCHS)

She went to a summer coding academy at Harvard University with about 30 students. The class was about how to code with Python and lasted five days.

Logan Dunkenberg (12th GHS)

Went to an LSU School of Medicine Neurovirology lab to learn tissue sectioning & confocal microscopy

Uyen Tran (10th WFHS)

Worked and helped conduct research at Virginia Tech in Dr. Westwood's PPWS (Plant, Pathology, Physiology, Weed Science) Lab. Visited the Johnson Space Center in Houston, Tx

Shannon Filer (10th JRHS)

Participated in Summer Regional Governor's School at DSLCC field ecology camp surveying salamanders and their habitats. The data we collected was sent to VA Tech to evaluate the environmental conditions of the salamanders' habitats

Mary Grace Giles (11th PHHS)

Participated in Summer Governor's School for Medicine & Health Science. She was at VCU for the month of July working in their labs. She shadowed under doctors in areas like psychiatry and Trauma. Each week students would be divided into groups to run tests on diagnoses and treat a mock patient. Some diagnoses were anaplasmosis, gaucher disease and tuberculosis meningitis.

Allison Henion (12th CSHS)

Participated in a 50-hour mentor ship program at Norozymes

Henry Holbrook (11th PHHS)

He attended the Virginia Space Coast Scholars Summer Academy at NASA Wallops Flight Facility. He also participated in the Smarter Roads Hackathon with Charlie Murphy and they placed 1st at the event with their app, EZSpeed

Abigail Ingram (12th WBHS)

Worked at VTCRI in Dr Chappell's Lab.

Murphy Johnson (11th PHHS)

He and his partner, Jack Shepherd, worked with Dr. Frazier at Jefferson College on their upcoming Project Forum Project.

Anthony LaConte (12th PHHS)

Worked with IT at VTCRI.

London Paige (10th WFHS)

Attended Nano camp at VT and a STEM workshop at VT. She also toured the Univ of TN

Nathalie Lemon (11th PHHS)

Did a Civil Engineering Program at Stanford Pre-Collegiate Summer Institute which was a 3 week program which included a final project of a Rube Goldberg Project

Haley McAden (12th PHHS)

Volunteered at VTCRI in Gourdie Labs imaging collagen samples at different angles and aligning grid angles on MATLAB

Owen McKenna (10th PHHS)

Worked a technology job reimagining computers at Ruftner

Caleb McMurtry (12th PHHS)

Worked a job reimagine & fixing school computers

Charlie Murphy (11th PHHS)

Participated in SRGS internship at NASA Langley. Worked on SPARCAL designing construction and programming robots for camera calibration. Won 1st Place (with Henry Holbrook) at the Roanoke Smarter Roads Hackathon. Built an Android app to give audio warning of speed limits.

Claire Nichols (11th HVHS)

Participated in an engineering internship at Valcom

Carson Pugh (12th SHS)

Worked closely with Valcom's electrical engineers on a design team - they made the design, he assembled the prototype.

Erik Scarlatescu (11th HVHS)

Internship at VTCRI IN LaConte Lab. Worked on optimizing software solutions; attended deep learning conference; completed Nano Camp at VA Tech

Jack Shepherd (11th PHHS)

He and his partner, Murphy Johnson, worked with Dr. Frazier at Jefferson College on their upcoming Project Forum Project.

Kevin Sheng (11th CSHS)

Conducted research with Dr Robin Varghese at VT and under Dr Samy Lamouille at VTCRI

Liala Sofi (10th HVHS)

Participated in CTY- Center for talented youth - intro to biomed science

Kameron Washington-Brown (11th WFHS)

Va Tech Health Professions Camp—in residence. Some activities included DNA extraction, diagnosing a patient and creating a presentation about the diagnosis. They also took a tour of the school of Veterinary Medicine

Erin Wienke (11th WBHS)

Went to a biotech camp at American University; researched in Dr Deluca's Lab at VTCRI with a grad student

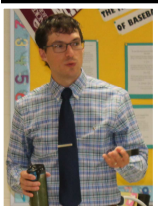


L to R: London Paige (WF), Uyen Tran (WF), Charles Murphy (PH), Murphy Johnson (PH), Anias Clark (PH), Henry Holbrook (PH), Mary Grace Giles (PH), Nathalie Lemon (PH) and Martha Chen (PH)



L to R Front: Haley McAden (PH), Ashley Dillon (FC), Shayom Debopadhaya (SH), Shannon Filer (JR) & Kameron Washington-Brown (WF)
L to R Back: Carson Pugh (SH), Erin Wienke (WB), Caleb McMurtry (PH), Valerie Ballard (SH) and Allison Henion (CS)

RVGS Teachers Summer STEM



Matthew Browning attended an AP Statistics Summer Institute at the College of William & Mary to ensure that students are well prepared for their AP Exam in May. The sessions included course content information and rubrics review that were used to score Free-Response Questions.

Joanne Villers attended the first annual Nanoscience workshop at Virginia Tech in June. It was a three day workshop where they had lectures from various Tech professors, performed some demos, and toured the NCFL (Nanoscale Characterization and Fabrication Lab). She also helped to grade over 120,000 AP Environmental Science Free Response questions in Cincinnati, Ohio.

Joanne Villers, Cindy Bohland and **Steve Smith** worked with Kendra Sewall as part of her RET (Research Experience for Teachers) program. **Mrs. Villers** participated with research students mist netting, specifically catching song sparrows. They took measurements and tagged the birds for future study, and wrote a case study about the legacy mercury pollution in the South River near Waynesboro, VA. **Mr. Levy's** AP Environmental Science students will participate as well. In early April, **Mrs. Villers** will have two guest speakers, as well as Dr. Sewall's lab coming to help the class mist net. Calvin Jordan, DEQ mercury scientist, will join the class to talk about what happened and is happening in the South River and federal and state regulations. Dan Cristol, biology professor at William and Mary will Skype in to share his data on how the spill has affected birds. In

addition, **Mrs. Villers** attended an Ecology workshop, Critical Thinking Activities for Teaching Ecology, in Asheville, NC in August. She spent a week in the Pisgah National Forest learning various activities she will introduce to RVGS students. Because of the great ideas she received, Mrs. Villers is looking forward to sharing with AP Environmental Science students as well as her Environmental Research students.



Cindy Bohland taught Biology 101 at Virginia Western. Mrs. Bohland also worked with Kendra Sewell at Virginia Tech on creating a lesson related to her research with birds. This lesson will be implemented in all the biology classes at the end of November.



Steve Smith attended the 2018 Biennial Conference on Chemical Education (BCCE) at the University of Notre Dame in South Bend, IN. It was five days of workshops, talks, demonstrations, labs – anything and everything having to do with teaching chemistry, both at the high school and college levels. Mr. Smith worked with Dr. Kendra Sewell, a professor at Virginia Tech, on developing curriculum for chemistry classrooms (mainly laboratory activities) that can introduce the concepts of solution concentration and molarity.

New Staff Spotlight on Siclinda Canty-Elliott



Welcome to the new RVGS Community Outreach Coordinator, Siclinda Canty-Elliott! Mrs. Canty-Elliott is no stranger to the Governor's School or working with elementary, middle and high school students. She had two sons that graduated from PH and the Governor's school. While they were attending RVGS, she was active in the PTA and started the first silent auction under Dr. Glazer.

Mrs. Canty-Elliott has worked in higher education for over twenty-five years administrating and directing programs and services for students at various colleges and universities. She has held the positions of Dean and Vice President of Student Affairs. As an educator, Siclinda has planned college visits for high school students, conducted staff training and diversity workshops, and held individual sessions with parents and students on college admissions, and financial aid/scholarships.

While at Florida Atlantic University and Grinnell College, she recruited high school students. Most recently, she was an adjunct Instructor at Virginia Western Community College, where she taught SDV classes for first year students.

Mrs. Canty-Elliott is a community advocate, and a community volunteer. She was elected Treasurer for the Roanoke Alumnae Chapter of Delta Sigma Theta Sorority, Inc for two consecutive 2-year terms. Because of her strong sense of giving back to the community, she taught classes for Junior Achievement SW VA, started the Delta Sigma Theta G.E.M.S. and the Precious Pearls educational programs at PH and Forest Park Elementary (now moved to Lincoln Terrace) respectively. In addition, Siclinda volunteers at the Jefferson Center, AARP SW, and has volunteered with the Roanoke Symphony.

Married to John Elliott for almost 33 years, they have two sons, John III (JJ) and Ajalon (Ajee). Traveling and cooking are two ways of relaxing. She has lived in and/or traveled to 39 states and hopes to finish her visits to the remaining states in the next 5 years.

In 2016 and 2017, she won a Chef Bake Off contest for her apple pie. One of the highlights of her life is attending game 2 of NBA Finals in San Francisco—Warriors vs. Cavaliers last year.

Mrs. Canty-Elliott is enthused about working with the students, staff and parents at RVGS, and looks forward to meeting more students and alum.

She encourages teachers, students, and alumni to call or email with any news, updates or accomplishments. Please give her a call or send her an email at:

scantyell@gmail.com
or 540-819-1412.

Siclinda & her husband, John at the NBA Finals in San Francisco 2017

