
Engineering and Science University Magnet

Principal's Report

September 2016

Going for the Gold

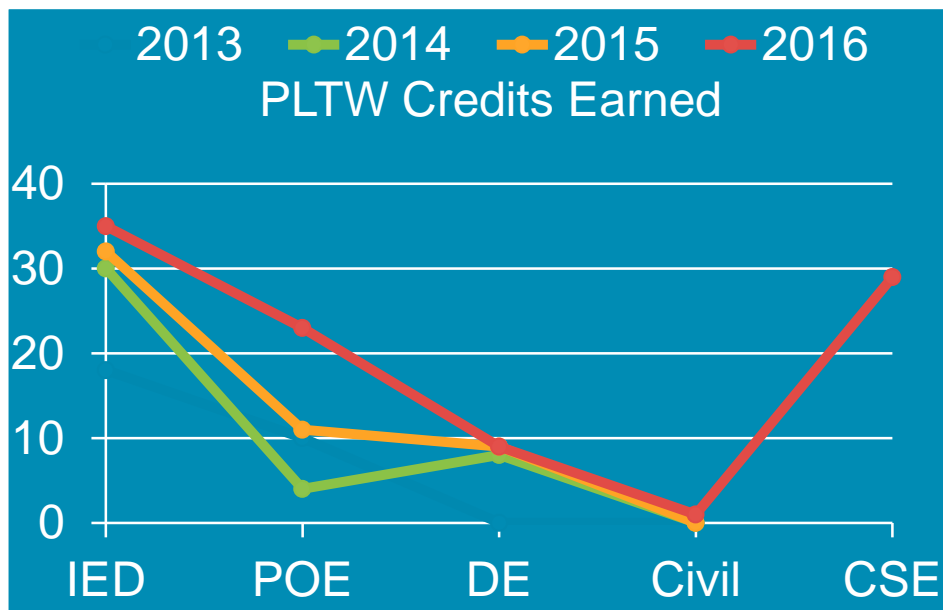
The 2016-2017 school year's theme is "Going for the Gold" inspired by the 2016 Summer Olympics. Like Olympians, ESUMS staff and students will *build on our skills for success; leverage our strengths; assess our performance and build on it for the future* and we will do this at a united team. During the hiring season we were chosen by top candidates as the school at which they will extend their expertise to help our students achieve ESUMS's mission to "gain entry in to demanding STEM programs at the collegiate level." Inside this report you will read about the new hires; early college credit; college matriculation; performance on state assessments and teacher specialized training. Also highlighted are celebrations in our community. It is my wish that all stakeholders will support us in achieving a *golden standard* when it comes to innovative, engaging public education and will have fun and celebrate with us along the way.

College Matriculation Class of 2016

Columbia University	Northeastern University	University of Rochester
Cornell University	Wesleyan University	Dickenson University
University of Connecticut, Storrs	(9) Syracuse University	Simmons College
Quinnipiac University	Howard University	University of New Haven (2)
North Carolina Central Univ	Sacred Heart University	University of Hartford
Southern Connecticut State University (3)	Gateway Community College (5)	

College Matriculation Class of 2015

Albertus Magnus College	Central CT State University	Dean College
Gateway Community College (4)	Howard University (2)	Limestone College
Long Island University	Naugatuck Valley Community College	Roger Williams Univ
Pennsylvania State	Savannah College Art & Design	University of Connecticut
Quinnipiac University	University of New Haven	University of Bridgeport
University of Hartford		



Worcester Polytechnic Institute Yale University (2)

97 UNH Engineering College Credits Earned

Project Lead the Way (PLTW) exams are graded on a 9 point scale, 1-9. A score of 1-3 is basic, 4-6 is proficient, and 7-9 is advanced. A score of 6 or better and a final grade of C or better is required for gaining UNH credit. In 2016 more students earned college credit by earning a 6 or above on the PLTW end of year exam. The results follow:

Introduction to Engineering Design (IED) 35 students earned college credit. This is an increase in students earning UNH college credit when compared to 2013 (18 students earned credit); 2014 (30 students earned credit) and 2015 (32 students earned credit).

Principles of Engineering (POE) 23 students earned credit. This is an increase when compared to 2013 (10 students earned credit); 2014 (4 students earned credit); and 2015 (11 students earned credit).

Digital Electronics (DE) 9 students earned college credit. This is an increase from 2014 (8 students earned credit). In 2015 9 students earned credit.

Civil Engineering (CE) 1 student earned college credit in 2016.

Computer Science Engineering was a new course offered in 2016. 29 students earned college credit in this course.

In 2016, ESUMS students earned 97 credits after taking the PLTW exams. In 2015, 52 students earned college credit. In 2014, 42 students earned credit and in 2013, 28 students earned credit. We are proud of our students and of our continued growth in this area.

Teacher Training

Project SING - Year 2 (Heather Toothaker and Jeremiah Davila)

Project SING is the product of a Teacher Quality Partnership grant awarded by the Connecticut State Department of Education – Office of Higher Education. Hosted by Quinnipiac University, the Bristol-Myer Squibb Center for Science Teaching and Learning at Quinnipiac, and the University of New Haven, Project SING brings the Next Generation Science Standards into focus for beginning teachers, mentors, and administrators.

NAATE - Carolyn Streets, Fellow and Heather Toothaker, Advisor

NAATE's mission is to develop, leverage, and retain our nation's top-tier educators for improved student and school performance through an intense, advanced program of study that balances instructional mastery and leadership. NAATE was founded on the notion that teachers are the single most important resource in the whole equation. NAATE believes it is strategic to invest in top tier teachers, nurture them, deepen their classroom practice, and develop their skills to support and lead peers. By making such investments in teachers, school leadership and teacher leadership are advantaged with high performance in teaching as well as improve recruitment, onboarding, training, coaching, mentoring, and professional development.

Jeremiah Davila and Melissa Manzione participated in **Education Connection Summer Trainings, 2016 Learn21 in Litchfield, CT**. The theme was on Understand, Appreciate, & Implement the 2017 Challenge Project including Updated Theme & Judging Criteria; Walking through the new and more defined Expo Fest Challenge Categories; Using Skills21 Platforms to their highest potential including Launchpad Courses, Episodes, Resources, and Challenge Hub; Setting and Clarifying Expectations for Experiential Events.

Leon Tynes became a **Certified Microsoft Innovative Educator**, joining a group of the most passionate educators from around the world, teachers who embrace innovation and new ideas in education. He also was selected as a member of the **Microsoft Innovative Educator Expert (MIE Expert) Program** for 2016-2017! This is a group of thousands of incredible educators from over 100 countries around the globe. Mr. Tynes attended the **2016 PBS Digital Innovators Summit** in Denver, Colorado.

Michael Petrescu attended the **PLTW Flight and Space**, University of New Haven training at UNH. He also completed a fellowship with **Yale New Haven Teachers Institute (YNHTI)**, Yale University and developed a Thermodynamics Unit for High School Chemistry students. Lastly, he completed a **Federal Aviation Administration (FAA) - Advanced Avionics** course.

D. Scott Stewart was awarded a \$5000 grant by Funds for Teachers and spent 17 days in Paris, France over the summer. He studied the music of Gabriel Faure and the music and culture of early 20th century Paris. Mr. Stewart completed his Yale-New Haven Teacher's Institute fellowship and was also hired by Eastern Connecticut State University as an adjunct professor conducting the Eastern Community Band.

Science Department's Mrs. Toothaker attended **State Curriculum Writer Days for 6th Grade NGSS** June 22nd-26th.

Project Lead the Way training was held at the University of New Haven during the month of July. **Mr. Pinsker** attended training.

Marta Soto-Johnson attended a 2-week PLTW training and is now certified to teach Principles of Engineering (POE).

Advanced Placement Training: The following teachers: **Tina Roberts** (Psychology), **Michael Naples** (US History), **Emily Wasley** (English Language), **Didacus Oparaocha** (Computer Science), **Leon Tynes** (Computer Science) and **Richard Cuminale** (English Literature) participated in AP training. ESUMS continues to expand our AP course offerings and we are committed to having all teachers participate in AP training to enhance their instructional practice.

Staffing Updates

Saying Goodbye

Mr. Kenneth Rice, High School Engineering and Math Teacher leaves ESUMS after completing his first year teaching for opportunity to teach Engineering and PLTW in North Branford, closer to his home. We wish him much success in his new school.

Mrs. Karen Robinson, 10th Grade English Teacher, leaves her five year mark on ESUMS by way of Cross High School, and will bring this varied experience to the Hill Regional Career Magnet School. Best wishes to Mrs. Robinson!

Mr. Phillip McCardle, High School Science Teacher, leaves ESUMS after completing his first year of teaching to teach closer to home in the Coventry area. Good luck Mr. McCardle.

Mrs. Megan Laney, Middle School Arabic Teacher, leaves ESUMS after her first year of teaching to pursue her teaching career closer to home in Fairfield County. We wish her well.

Dr. Cheryl Kerison, Magnet Resource Teacher, leaves her 2 year mark on ESUMS by way of Betsy Ross, and will now merge MRT coaching experiences with experiences of being a middle school STEM teacher in her new role as Barnard Magnet School Math Coach. We wish her much success at Barnard.

Dr. Bob Margolies (part-time school psychologist), **Mr. Haywood Johnson** (part-time Math), **Renee Francis** (part-time cafeteria support), **Elicia Young** (Vista fellow), **Mr. James Beller** and **Ms. Patricia Mc Kernan** (UNH Interns) will no longer be with us. These staff members are onward bound and we send best wishes to them.

Welcoming

Christopher Aranci is the newest high school science teacher. He holds certification in biology and chemistry. Mr. Aranci brings teaching experience from Hamden Middle School, Lyman Hall High School in Wallingford, and Beecher Museum School. He also led a team of gardeners at Gard Entice. He is currently completing his Master's in science education at SCSU. He is excited to be teaching at ESUMS. He has always been curious about the world and his surroundings. He looks forward to fostering that same curiosity in students and believes his passion for science and nature will lend itself well to ESUMS. We are excited that he will begin his teaching career with us.

Fred Borne fills a new position, HS math and technology teacher. In Indiana, where he was born and raised, Mr. Borne developed interests in building with Lego blocks and became a life-long learner. He has lived and worked from coast to coast since graduating from Manchester University in 1993. He earned a Masters in Educational Leadership from University of New England and is certified to teach mathematics 7-12 in Connecticut and Nevada. Mr. Borne also holds AP and PLTW certifications. He has taught computer science, engineering and technology and is bringing nearly 20 years of teaching experience in traditional and non-traditional settings. He is happy to be a member of TEAM ESUMS!

Alice Coleman is our new Magnet Resource Teacher and joins ESUMS with 10 years teaching experience in the area of business education. While most of her professional experience in education was spent at Stratford's Bunnell High School, as a career changer 10 years ago it is New Haven where her career in education began... and she's happy to be back! Prior to education, Mrs. Coleman held various positions in television advertising sales ranging from intern to Vice President. With a BA in Mass Media Arts from Hampton University and an MBA in Marketing from City University of New York, Mrs. Coleman holds teaching certifications in Business Education and Marketing. She is currently completing her 092 administrator's certification at the University of Bridgeport. Mrs. Coleman is MEGA excited to get to work and help make ESUMS grow to new heights!

James DeMorro, School Psychologist, is returning to the ESUMS family after spending the last few years At Wilbur Cross High School. He attended The University of Hartford where he graduated with undergraduate and graduate degrees with a focus in Psychology, School Psychology, and Clinical Child Counseling. He believes adamantly in the building and development of positive relationships through collaboration and teamwork. Mr. DeMorro has several interests apart from advocating for strong community partnerships. He enjoys exercise, participating in basketball leagues, spending time outdoors, home renovations, quality time with family and friends, and overall new life experiences.

Zahra El Yahyaoui is the new Arabic teacher for grades 6-8. She hails from Morocco and is a newly certified World Language teacher, having recently completed the Alternate Route to Certification (ARC) Program for K-12 (Arabic-French). She earned a Bachelor's of Economic Sciences from University Sidi Med Ben Abdellah in Fez, Morocco, and worked as translator over ten years before coming to the United States. Prior to joining ESUMS, she taught French at *King Robinson* and at *Ross Woodward Magnet Schools*. She looks forward to collaborating with everyone at ESUMS to give our students the best education.

Ashley Ferrandiz joins the ESUMS high school math department after having completed 3 years at NHPS's Truman School. In 2012, she graduated from the University of New Haven with a Bachelors degree in Mathematics and 2013 she earned her Masters degree in Education at UNH. With certification to teach 7-12 Math, she will teach foundation courses Algebra 1 and 2. Ms. Ferrandiz believes that *all boats rise with high tide*, and for her this means "that when provided with high expectations, all students will strive to meet those expectations." She feels that "students who face challenges, not with silence, but with curiosity, will not only achieve in Math but also in life." Ms. Ferrandiz is excited to join our team and brings to ESUMS a whirlwind of positive energy and a work ethic of going above and beyond for NHPS's students.

Allen Futrell is a veteran math teacher who will teach in the high school. He has experience in both middle and high school and brings 16 years of experience to the department. Previously, he has worked at NHPS's Career Regional High School and Roberto Clemente Leadership Academy. He also worked in the New Britain Public School District. Mr. Futrell is a New Haven native and graduate of NHPS. He completed his undergraduate studies at Moorehouse College, graduating with a BA in Mathematics and MS in Math Education from Walden University. Mr. Futrell was lured back to the district to teach at ESUMS and is glad to finally be a part of TEAM ESUMS!

Jackie Hennessey will be teaching 10th grade English, 9th grade English Lab and AP Language and Composition. She says of her career path, "I am very lucky to have had two careers that I've loved – as a high school English teacher at Trumbull High School, and as a journalist, writing for *The New York Times* and many other newspapers and magazines." For the last four years, she's been writing stories for university websites and publications, most frequently for the University of New Haven. She received her Bachelor's degree in English from the University of Connecticut and her Master's in secondary education from Southern Connecticut State University. She is happy to be working with students to help them continue to grow as readers, writers, critical thinkers and creators.

Rob Orciuch joins ESUMS as a certified part-time teacher. He will be teaching Math Grade 8 and will support the department in making gains in both the middle and high school. Mr. Orciuch is a retired teacher who taught at Hillhouse High School, under the leadership of Red Verderame. He has taught mainly math at the secondary level, including Advanced Placement Courses. He is an adjunct professor at Southern Connecticut State University and knows what high school students need to master in order to be successful in college level math.

Nia Rokas is a new part-time certified 7-12 English Teacher. She received her BA cum laude in English from Amherst College, and studied for a PhD in medieval literature and modern literary theory at the University of Iowa. She has taught English at the Oakwood Friends School, Freshman Composition at SUNY, Rhetoric at the University of Iowa, Literacy Intervention at the Hamden High School, and slam poetry writing in New Haven. She has been active in local diversity training and activism. She writes, designs gardens, and works in ceramics. Her experience teaching in both public and private schools and these experiences lend themselves to helping the English Department achieve its goals and live up to our school mission.

Maya Severson will be the UNH-ESUMS VISTA Liaison for the 2016-2017 school year. A Minnesota native who completed her undergraduate degree in Psychology from California State University, Chico in 2014, Ms. Severson is pleased to now experience the East Coast. From January-November 2015 she served with AmeriCorps NCCC. After completing her first term of service with AmeriCorps, she moved to New Haven, CT to continue her service with AmeriCorps and provide services to both UNH and ESUMS.

Maegan Musanti joins the special education department splitting the high school assignments with Mrs. Oliver-Miccio. She obtained her bachelors degree in Interpersonal and Relational Communication from SCSU and attended CCSU for her K-12 Special Education certification. She brings to ESUMS experience as a West Hartford Teaching Assistant and experience serving on leadership staff at a YMCA summer day camp. She strongly believes in the social and emotional learning aspect of education and loves the James Comer quote, "No significant learning can occur without a significant relationship." Ms. Musanti maintains she will meet students where they enter, strive to build meaningful relationships, and invest fully in their academic and personal growth.

Welcome to the World

The stork has delivered:

Jeremiah Davila and wife Ashley became parents to baby Noah who was born 7/22/16.

Ricardo Erazo and wife Isleny welcomed baby Ricardo Kalel into the world on 7/25/16.

Congratulations

Mike Naples was married this summer in a beautiful riverside ceremony supported by friends and family. The honeymooners vacationed in the US Virgin Islands.

Joseph Romanelli celebrated a wedding engagement.

Medria Blue-Ellis was featured in the EthnicOnline Magazine for her work with ESUMS and as an educator.

Data

SMARTER BALANCE ASSESSMENT: ESUMS IS ABOVE STATE AVERAGE IN READING AND MEETS AVERAGE IN MATH

	Reading	Math
State	55.7	44
New Haven	32	18.5
ESUMS	57.4	43.8
Amistad	54.5	47.5
Elm City	57.7	45
Hamden	50.9	38.3
Hamden MS	46.4	31.4
Carrigan MS	48.3	29.6
Highville	33.3	19.9
Aerospace & Engineering	54.4	35.3
University of Hartford Mag	59.2	49.7
Wintergreen	44.7	20.2
East Haven	44.7	17.8
Derby	31.2	15.9
West Haven	46.8	36.9
Dag	58.8	42
Moran	54.8	42.9
Capitol Prep	32.6	18
Madison	69.9	54
BrownPolson	64.7	58.6

ESUMS continues to rank highest among magnet schools with grades 6, 7, 8. ESUMS is the 2nd highest scoring school in the district in math and reading. ESUMS scores similarly to Achievement First, New Haven and outperforms its Bridgeport and Hartford Schools. ESUMS outperforms most of its feeder district middle schools. Comparisons to some of the most lauded charter/magnet schools are included in this chart for comparison. ESUMS will continue to implement best practices in reading and math. Additionally, CSDE Commissioner Wentzell brought together educators, industry and business leaders, and experts in math and STEM instruction on a Commissioner’s Council on Mathematics. This group spent the last year researching best practices, both in Connecticut and across the nation, and exploring innovative strategies in the areas of math instruction. That council will release its final report and recommendations in the fall. ESUMS math department eagerly awaits this final report.

Advanced Placement

	ESUMS 2015	New Haven 2015	ESUMS 2016
Calc AB	1 of 17 (6%)	12/129 (9%)	5/24 (21%)
Statistics	5/14 (36%)	16/111 (14%)	3/11 (27%)
Chemistry	8 of 12 (67%)	28/54 (52%)	2/4 (50%)
Physics	3 of 7 (19%)	3/7 (19%)	8/10 (80%)
Literature	6 of 20 (30%)	60/267 (23%)	7/19 (37%)
Language	3 of 16 (19%)	65/269 (30%)	8/16 (50%)
US History	0 of 8 (0%)	21/78 (27%)	0%

*Data for New Haven 2016 Not Available

ESUMS’ AP pass rate of a 3 or higher has increased in Calculus, Physics, Literature, and Language. Performance in Statistics and Chemistry either passed or came close to the 2015 district average of passing.

Scholastic Aptitude Test (SAT)

ESUMS continues to lead district schools in SAT performance. A focus point for this school year is to increase in math performance. One strategy to meet goals in this area is to reduce class sizes in math. In addition, math teachers will require independent study using Khan Academy. Parent support in this area is requested. Khan Academy can also be used to practice for the ELA section of the test as well. In addition students are encouraged to use Membean to build vocabulary. Both programs are individualized to students’ needs. Below is a comparison of NHPS’ highest performing high schools.

SAT English Language Arts District Comparison 2016

School	Not Met	Approaching	Met	Exceed	Met & Exceed
ESUMS	11	17.1	55.7	11.4	67.1
Sound	16.7	22.2	50	11.1	61.1
Coop	23.9	21.3	49.7	5.2	54.8
Career	33.6	0	33.3	0	0

Chart shows the percentage of students who met college readiness standards.

SAT Math District Comparison

School	Not Met	Approaching	Met	Exceed	Met & Exceed
ESUMS	9	52.9	22.9	11.4	34.3
Sound	29.2	40.3	0	0	0
Coop	42.6	47.7	0	0	0
Career	36.4	46.9	0	0	0

Chart shows the percentage of students who met college readiness standards.
Zero indicates too few students passed to provide data.

Grants and Awards

In the category of “**BEST MAGNET SCHOOL**” ESUMS was nominated as WINNER in the 4th Annual “BEST OF” New Haven Living Reader’s Poll!

Robert Pinsker was selected as a Finalist to receive a \$2,000 grant from the 2016 Voya Unsung Heroes Awards Program, sponsored by Voya Financial, Inc. for the project entitled, “MakeHerSpace” Lowes Tool Box (\$4500.)

ESUMS Summer Program 2016

This summer, 80 ESUMS students participated in our summer enrichment program. The students ranged from grades 6-10. We had several ESUMS teachers participate in the program including: Tricia Neary (ELA), Lori Capone (Technology), Robert Pinsker (Educational Technology), Chris Scionti (Engineering), Amy Ear (Mathematics), Melissa Manzione (Digital Media/2 weeks), Kim Moore (Counselor), Adam Donroe (Social Worker), Shawna Johnson (Instructional Coach) and Amy Migliore was the Building Leader for the 4-week program. Students took two field trips during the program. The first was to address their social/emotional/physical needs to Your Community Yoga Studio on Putnam Avenue. Over 20 students participated in a beginner yoga class. The second was to Energize CT in North Haven, where students did hands-on energy based activities and snap circuits. We had a successful summer and students showed gains in all subject areas and new students were socially/academically acclimated to their new school environment!

Next Issue:

- Recruitment
- UNH Partnership
- New Building
- Back to School Events
- Teacher & Student Awards
- Fundraising