Principal’s Corner

Happy Spring! I hope everyone is starting to enjoy the warm weather and able to get outside for fresh air. The STEM Academy has been going nonstop since the beginning of the year. Our students are continuing to grow, develop professional skills and make their mark on the Corning Community College campus. It is motivating and inspiring to watch our students embark on something so innovative and exciting.

This spring is packed with bringing in prospective students, field trips, a Chapter 2 Commitment Ceremony and so much more. We have school districts coming to visit to have their staff members learn about our innovative teaching methods. It is extremely exciting to be instructional leaders in our region.

We are planning many more unique experiences for each STEM Academy chapter. This includes shadowing opportunities, Lunch and Learns, career panelists, guest speakers, future internships and so much more. We always try to provide our students with new experiences through our Career Program Specialist, Mrs. Jay.

Please look for information coming home with your student and via mail about finals, Regents and summer course work. Please contact us with any questions. It is a busy rest of the school year!

Have a great spring and please do not hesitate to contact me at any time.

Rob Sherburne

Upcoming Events

March
29 Chapter 1 – NYC Field Trip

April
2 Addison District Visit
4 Broadway Elementary Science Night
5 End of Marking Period 3
9 Chapter 2 Museum Exhibit, 6-7 p.m.
11 PTO Meeting, 6 p.m. @STEM Academy
15-19 Spring Break
23 Corning IDM Machine Tool Technology Challenge
26 Chapter 2 at Corning Community College

May
9 PTO Meeting, 6 p.m. @STEM Academy
27 Holiday

June
3 Global History and Geography II Regents
13 PTO Meeting, 6 p.m. @STEM Academy
18 US History and Government Regents
Living Environment Regents
19 English Regents
Algebra I Regents
20 CCC Chapter 2 Commitment Ceremony, 6 p.m. @Corning Community College
21 Geometry Regents
25 Chemistry Regents
Main Office News

Once your student receives his or her driver’s license, please have him or her stop in the main office at the STEM Academy to get the permission form for driving on campus.

Please note: During school hours, student drivers are not allowed to transport other students between CCC and the STEM Academy. Once they arrive on the STEM Academy property, they are not allowed to leave until dismissal at 2:20. Therefore, please know that we cannot let students leave to pick up lunch and return. This is a safety issue as we do not have an open lunch. Upon dismissal, students are allowed to leave together with parent permission.

If you are picking up or dropping off your child during regular school hours, know that you must come into the school to sign your child in/out. Since attendance is taken every period throughout the day, this helps inform teachers when a student will not be in their class. It is important that a written note explaining the absence accompanies your child.

Please continue to call when you know your child is going to be absent. If we have not received notice and they are recorded as absent, there is a policy that we contact home to be sure you are aware your student is not in school.

If you have changes in address, phone or emergency contacts, please be sure to send an update to the main office. We rely on demographic information when calling home.

As always, any questions you may have, you are wel-

PTO Corner

Please join our PTO! We’ve recently donated money to the Yearbook and NYC trip. It is a great way to stay connected with school leadership and fellow parents.

PTO Meetings:
STEM Academy @ 6 p.m.
Thursdays April 11, May 9 & June 13

Students of the Month

Left: January –
Gavin Morse, Horseheads

Right: February –
Karen Quintanilla, Waverly

Left: January –
Roy Miller,
Spencer-Van Etten
**Nurse’s Corner**

**Parents:** All students entering grades 9, 10 and 12 must have received the meningococcal vaccine. Without it, they cannot attend school. All students attending six credit hours of classes at CCC also must have received the vaccine within the last five years (or a parent/guardian must sign a medical waiver). If a record is not on file, a student will not be able to register for classes.

**About the vaccine:**
- It is not a new vaccine. It’s been recommended for a decade.
- Most parents already choose to vaccinate their children.
- The meningococcal vaccine has been required for school entry since September 1, 2016.

**About Meningococcal disease:**
- It causes bacterial meningitis and other serious diseases.
- Teens and young adults are at greater risk.
- It comes on quickly and without warning.
- Early symptoms are similar to the flu.
- Every case of this disease can result in death or long-term disability.

Check with your doctor. Even children who have had a shot before may need a booster to start school. (For more information, go to www.health.ny.gov/publications/2168). Feel free to contact the Health Office with any questions or to determine if your student needs an additional vaccine.

*Lisa Mascherino, RN*
(607) 739-3581 x1492
fax (607) 654-2294

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**School Counselor’s Corner**

**Prospective Student Shadows and Interviews**

In March, STEM Academy students hosted/mentored 89 eighth-graders who are interested in attending the STEM Academy in September 2019. We appreciate all of the student mentors who are stepping up to make a good impression for future STEM Academy students.

**Chapter 2**

Chapter 2 students should take full advantage of career panels and job shadows to confirm which pathway they plan to commit to in June. Our Commitment Ceremony at CCC will take place the evening of Thursday, June 20. Chapter 2 families are invited to come and support students as they commit to the Associate’s degree program they will pursue through Corning Community College.

Chapter 2 students will tour CCC on April 26. During this day they will see the STEM hub, get their CCC student IDs, see presentations from professors and eat lunch at the campus dining hall. This will help prepare them to transition to being on the CCC campus for most of their classes during their Chapter 3 year.

*Melissa Woodward, School Counselor*

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**Student Council**

Student Council would like to thank STEM students and families for a fantastic cookie dough sale! Profits from 850 tubs of cookie dough will be applied to Student Council-funded field trips. Members organized a holiday-themed spirit week this winter and are planning another for spring.

*Emily Melenbacher, Advisor*
PE/Health Update

When you speak to someone about Physical Education, most think of having to pass some fitness test, play games you may or may not really like or simply just being physically active. We will do some fitness testing (for growth), we will play games to experience different things and we definitely want to be physically active at the STEM Academy.

However, these last few weeks we have spent time on our Wellness or Health Triangle. Being a healthy person requires us to lead a balanced life and spend time on three aspects of our personal health – physical, social and mental health. Adults and children alike often find themselves struggling with one or more of these things in their lives and it throws them off center. Our students have set up three SMART goals (Specific, Measurable, Achievable, Relevant and Time-bound) to help balance their triangle and to use their energy and time more efficiently. Our goal is to work on a couple of aspects of our health that we can control for all three sides to work together to make us a healthier person. As adults, we can take a moment to set some goals in these areas to work out a plan to achieve our goals. “A goal without a plan is just a wish.”

Keep moving!

*Coach Schmitt*

Career Connections

STEM Academy students have many opportunities to learn about the world of work through field trips, classroom speakers, shadows and career panels. In 2019, 66 students attended career panels to learn about engineering, psychology and social work, conservation and forensic careers.

A speaker from Siemens spoke about sustainable building practices and speakers from Corning spoke about time management and manufacturing engineering careers. Field trips included Corning Incorporated Archives and Mercury Corporations.

All Chapter 3 students participated in a LEAN Manufacturing training with Hilliard including a tour and discussion of applications of LEAN principles to work and everyday life.

- Chapter 1 students toured Depuy Synthes and are preparing for a workplace challenge to tackle talent acquisition for manufacturing and engineering careers.
- Chapter 3 students participated in mock interviews with business partners from Hunt Engineering, Pathways, Cameron Manufacturing, Hardinge, Guthrie and Corning Incorporated.
- Seven chapter 3 students shadowed professionals from Cornell, Corning and Boss Security. Many of these shadows lasted several days. Students interested in shadowing must be in good academic standing and prepare for the experience by researching the company and career.
- One Chapter 3 student has an ongoing internship with Hardinge Incorporated in the IT department. The STEM Academy is honored to have such dedicated business partners investing in the lives of our students.

*Deb Jay, Career Development Council*
Professional Skills Update

Students in Professional Skills class have been exploring different elements of Habits of Mind and other professional processes each month. Along with reflecting on these themes within their daily class activities, they have gained direct experience with the application of these themes through Adventure-Based Learning. These experiential learning activities are critical to students developing interpersonal skills that are essential for 21st Century workplace success.

October’s theme was “empathy” and students had to depend on their listening and interpreting body language to meet the challenges. Students connected their adventure-based learning challenges with a design activity that challenged them to center their design ideas around empathy for the end user.

November’s Adventure-Based Learning theme was “the design process,” where students more deeply engaged as a team in the steps of design thinking. This spring, students will apply these skills to robotics in the classroom.

College Liaison Update

Important updates for Chapter 3 STEM Academy students taking classes on CCC campus:
- CCC has spring break April 1-5. Students should continue to report to CCC for their high school courses.
- The STEM Academy has spring break April 15-19. Since CCC is still in session, students will need to find their own transportation to their college courses during that week.
- Members from ServU Credit Union and Cornell Cooperative Extension have been sharing their expertise on financial literacy with our Chapter 3 students throughout the spring semester. They are covering topics from credit reports to cyber security.

Holly McNelis, College Liaison

DDP (Drawing and Design for Production)

Students are working on researching the eight CCC college pathways that the STEM program offers in preparation for choosing a path next year. Professors from Corning Community College present information about a pathway and talk with the students about their program.

After the presentation, students determine what high school credits they need to earn, as well as the college credits needed for the program. They research what type of jobs are available in that field, what level of pay can be expected and which benefits are offered from different companies.

We will discuss the cost of a college education, as well as the options to pay for it. One option is to get a job after receiving an associate degree. Some companies may even pay for further education. Another option to consider is to go directly into a four-year college or higher education. Those who are interested in this path evaluate how much college will cost for the two or more years they would be attending and whether the salary they earn with the advanced degree off-sets the expense.

After all the research is completed, the students will present their findings to the class.

Steve Smith, DDP Instructor
Work Place Challenge—DePuy Synthes

Students in ELA 9 are participating in a work place challenge with one of our business partners, DePuy Synthes. The challenge for students was to investigate whether this manufacturer is a great place to work. This company is currently facing a change in ownership from Johnson and Johnson to Jabil. DePuy Synthes looked for an outside perspective in our students to see if their plant was indeed a great place to work.

The students were tasked with writing an argument. Their first piece of evidence was a visit to the plant itself, to investigate and tour the facility. Many students were changed by this visit and intrigued with the products and atmosphere that the plant provided.

Students incorporated their writing skills from ELA into a real-world, professional skills experience. They practiced their professional e-mail writing, questioning techniques, note-taking, argumentative writing, evidence collections, source assessment and presentation skills.

The students and our business partner, DePuy Synthes had much to gain from this experience.

Melissa Houck, ELA Instructor

Chapter 2 Students Prepare for Robotics Competition

Chapter 2 students in the Professional Skills classes have started their preparation for a robotics competition. The students began exploring robotics by building a VEX Clawbot and then practiced coding their robot in “Robot Virtual Worlds.” Students are now testing their code on the physical robot and experiencing the engineering process firsthand.

Students have completed challenges that include having the robot move through a maze, as well as simulating industry environments where robots execute tasks in warehouses and manufacturing environments. In the months leading up to this, students have prepared as team members and leaders through instruction from Adventure-Based Learning. Each month has had a theme to give students critical foundational skills for working as a team and persevering through challenges together. These themes have included problem solving, flexible thinking and empathy.

March’s theme focus is “striving for accuracy,” which will help students to develop the attention to detail needed to successfully work with robotics and coding and to prepare for the competition.
**STEM Academy Math**

At this point in the year, the high school routine at the STEM Academy has been established. The Algebra and Geometry classes are designed to prepare students to develop skills with the content, and also develop critical study skills for their success in college math classes. Algebra and Geometry can be challenging courses, so here are some resources to help the students be successful:

- Most lessons that we teach have a video available on YouTube and can be accessed for Algebra through https://www.emathinstruction.com/courses/common-core-algebra-i/ and for Geometry at https://www.emathinstruction.com/common-core-geometry/.
- Another resource available is the Khan Academy website. There are videos, practice for the skills needed to be successful, and immediate feedback in many mathematics courses. It is free to register and the link is: https://www.khanacademy.org/.

Your student has the ability to be successful in Algebra or Geometry and we hope this has been some help to you.

*Cindy Jenkins, Math Instructor*

**History Headlines**

Chapter 1 students have studied through the 1600s in Global History, most recently completing a unit of study on the Crusades and the Middle Ages in Europe. They are gaining a deep understanding of how empires gain, consolidate, maintain and lose power.

Chapter 2 and 3 students have recently completed multiple units of study on The World Wars, The Cold War and Post WWII Colonization. Students viewed the 1982 film *Gandhi* and completed a case study of the Indian Independence Movement. They are making deep connections between historical events and international current events.

In coming months we will be studying the 1990s to the present. Please share with your students your memories of the historical events of this era.

*Emily Mehlenbacher, Global History Instructor*

**STEM Learning Center**

At the STEM Academy, our STEM Learning Center (SLC) is growing more every day and expanding to include multiple things to help our students get ready for college and maintain in high school.

In the SLC, we provide a learning/studying environment that best fits each student. We have been incorporating visuals that remind, encourage and inspire the students about soft skills, organizational skills and study skills like The 10 Habits of Successful Students.

The expectations we have in place will help the students be ready to utilize their down time at Corning Community College. Many of the initiatives we are incorporating in the SLC are inspired and based off of various college learning centers that include peer to peer tutoring, helping students prioritize and organize assignments, review games and help from a staff member.

We look forward to implementing more student resources as we continue to grow.

*Heather Kraus and Anthony Serdula, Teaching Assistants*

**Living Environment**

We just finished a unit on evolution and are now working on asexual and sexual reproduction, learning about cell division, mitosis and miosis with plants and animals.

Students individually work through a packet to get started with the general information and vocabulary for the unit. Then, groups of three or four students work together on a specific a topic in the unit and present their findings to the rest of the class.

For example, one group will be researching binary fission and budding with bacteria and protists, another group is creating a Jeopardy game with its research findings and another group is creating presentations to share findings with the class.

*Steve Smith, Living Environment Instructor*
Community Events

There are some exciting opportunities this spring to participate in mental health awareness in our community. Please consider participating to support local prevention efforts and engage in discussions on suicide, underage drinking and drug use.

Walk a Mile in my Shoes (free event)
Saturday, May 4, 2019
Eldridge Park, Elmira
11:00 a.m. Walk starts

The 14th annual Walk a Mile in My Shoes, a community-wide suicide prevention and awareness event is taking place on May 4. Pre-registration will open in March. On-the-spot registration also is available the day of the walk starting at 9:00 a.m. T-shirts and lunch tickets will be available for a $15 donation. You do not have to make a donation. Simply join in to support our local suicide prevention efforts. There will be music and raffle prizes.

Visit www.walkamile.net to register or for more information.

Yearbook

Yearbook Club is up and running. Members have met three times this fall and are busy documenting all of our memories at STEM.

This month we are focusing on lighting, editing and storing and deciding on a theme for the 2018-19 yearbook.

Students are still encouraged to join Yearbook Club if they are interested in adding a fun and rewarding extracurricular activity. All STEM students will receive a yearbook free of charge. However, Yearbook Club is always accepting donations to make this a reality for our students.

Emily Mehlenbacher, Advisor