Finger Lakes STEM Hub

The Catalyst for STEM Collaborations in the Finger Lakes



Monthly Roundtable Bulletin

The Clearinghouse for STEM Resources, News,
Events, and Collaborations
September 2022

Our Roundtable of Network Members allows participants to stay abreast of STEM activities, share presentations, engage in discussions, provide links to resources, and collaborate on various Hub and non-Hub directed activities. It typically meets the second Friday of each month. STEM resources, events, collaborations, and links to them are identified and distributed to the entire Hub network through this bulletin. *

Interested in learning more about the network? Please see the About Us page on our website.

If you are interested in joining our network, please contact Executive Director, Joseph Marinelli at flxstem.director@gmail.com or 585-704-4659.

The Finger Lakes STEM Hub is supported by the following partners:



Learn more about Partnership levels and opportunities on the Hub's website.

*The Finger Lakes STEM Hub is sending this bulletin to fulfill its mission to make its members aware of resources and programs that promote or support STEM education. The Finger Lakes STEM Hub has not vetted, nor does it endorse, any particular product or service mentioned.

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AUGUST 2022 ROUNDTABLE BULLETIN

1. WELCOME AND INTRODUCTIONS

- a. Present: Joe Marinelli (FLX STEM Hub), Tammy Bonisteel (FLX STEM Hub), Angela Olkey (GST BOCES), Ashley Simmons (RIT), Betsy Ukeritis (NYS DEC), Carla Stough-Huffman (GRASSA), Dan Schneiderman (RMSC Solar Eclipse, Rochester Maker Faire), Gene Gordon (NASA), Gretchen Anthony (Teaching Artists ROC), Harold Clark (Terra Fairs), Jim VanKouwenberg (Optimax), Kaeti Stoss (RIT), Kellie Gauvin (FLCC), Leigh Pitifer (FLCC), Marion French (WXXI), Marv Sachs (Brighton CSD), Michael DuPre (Science Exploration Days), Mike Wischnowski (St. John Fisher), Pete Maslyn (Ontario County Farm Bureau), Sharon Sweeney (C&S Companies), Steven Montemarano (BOCES 4 Science), Terry Hopkins (C&S Companies), Sheila Brady-Root (St. John Fisher College)
- b. Reminder to complete Hub Network Resource Directory information
 - i. Link to add yourself to directory
 - ii. Link to view Directory Members
 - iii. This directory is for Hub network member use only.

2. DIRECTOR'S REPORT

- a. Hub as a Network of Networks Survey Results
 - Survey results show many Hub network members are sharing our resource information with their networks, groups, or specific individuals.
 - We would like to encourage sharing far and wide where appropriate to further the Hub's reach and connect others in the STEM community.
 - Suggestion to look at metrics that can be obtained from most listservs. Currently we are using Google Groups instead of a listserve, limited data available on that platform to determine reach.

b. Hub's Roundtable Bulletin

- Looking for feedback on the new format of our monthly bulletin with updates, and STEM news.
- If you have any feedback, please send to Joe

• Please feel free to share the monthly bulletin outside of our network to anyone in our region that may be interested.

c. Hub's Revised Partnership Opportunities

- Partnership Opportunities brochure for donations to the Hub has been updated to reflect current STEM Hub programming and information sharing. Several programs have changed due to the pandemic.
- The updated file can be found on the About Us Page of our website.
- Direct link to the brochure

d. Future Presentations

- Looking to have former students convene at the October Roundtable with us to discuss what led them to go into a STEM field, what were any barriers they encountered, what were the incentives, etc.
- Student experience has implications for the STEM talent pipeline and may shape what we focus on moving forward.
- If you have presented in the past, you can present again if you have new programming or significant updates that may be of interest to network members.
- If you have other ideas please submit to Joe

e. Network Mixers

- Had a successful network mixer before the pandemic began. We would like to plan another one. This would be primarily a social event, a chance for people to network.
- Suggested venue: Viticulture Center at FLCC in Geneva, MCC Forward center.
- Any other suggestions, please send to Joe.

f. Hub's Strategic Planning

- Current plan goes through 2022. We would like to update this plan to shape what we do over the next 5 years.
- If you are interested in helping with this process, please connect with Joe. Meetings would primarily be done virtually.

g. STEM Hub Executive AdvisoryCommittee

• Questions came up about the structure

- Executive committee members have 3-year staggered terms and represent our broad diverse ecosystem constituents.
- Committee members are appointed by the Executive Director to provide advice and counsel
- List of Executive Committee members is available upon request.

3. STEM RELATED TOPIC PRESENTATION/DISCUSSION

Finger Lakes Community College STEAM Camps for Middle School Aged Youth Kellie Gauvin, Professor of Biology and Assessment Coach and Leigh Pitifor, campus director

4. ROUNDTABLE PARTICIPANTS' ANNOUNCEMENTS AND UPDATES

a. Gene Gordon (NASA)

- NASA has had students around the country doing projects for real problems that astronauts have in space and in space exploration.
- Future plans include expanding programming down to elementary level.
- In Niagara Falls they have a soft goods program started with sown items for the international space station.
- Kicked off design and prototype projects around the country, 14 projects that high school students are going to try to solve for the Artemis Mission, which is the Moon base, and for the Mars Mission.
- Another project]they have for youth this year is trying to come up with a way to roll dice in space. Games can help with mental health and trying to roll dice in space is a challenge.

b. Steven Montemarano (BOCES 4 Science)

- BOCES 4 Science is a collaborative between Monroe 1, Monroe 2/ Orleans/ Genesee Valley and Wayne Finger Lakes, designed to bring elementary science curriculum and supporting resources across New York State.
- Current focus is getting ready for the new school year and science kits out so that students can really engage in amazing science.
- Consolidating production facilities over the course of the next couple of months, which will be a big focus.

- c. Michael DuPre (Science Exploration Days)
 - SED committee has met to look at the continuation of Science Exploration Days
 - Key concerns for future planning: Will SJF be able to host and will districts allow students to come. It looks like at most they would have a 30-50% return of students and school districts.
 - Formal announcement that they are stopping the annual Science Exploration Days.
 - SJF and the committee will be contacting speakers, exhibitors and school districts to let them know there's a possibility of a continuation of the concept with groups that are interested, but in a different format.
 - Michael will stay on as Chairman of the SED committee to follow through to its next iteration.

d. Marion French (WXXI)

- Green It Up from Cyberchase has a nice fit for GRASSA groups for sites and for families to send home. Activity sets.
- WXXI has finished off large kit development which is for out of school programs, and families of young children, so a little bit different from the BOCES Kits that go to schools. These were given out during the summer through Summer Leap and also a number of other partner organizations as part of the ready to learn network
- Very busy right now with a couple of grants that are more related history, and will be creating some video segments that will go into PBS Learning Media.
- 2 documentaries coming out, one on <u>Frederick Douglas</u> and the other one on <u>Harriet Tubman</u>. Local contacts have been made with direct line descendants of both people and they have obtained some stories that they don't necessarily teach in school and some expansion of the knowledge of those people that have made important contributions to upstate New York.
- Another grant for the next 9 months for a <u>Ken Burns series</u> about the US and the Holocaust, and what was known at the time, and some of the

- myths about what we did and what we didn't do and how it connects to some of the issues we face today.
- This is not directly science but is using a lot of the technology and communications and media literacy, so it has connections to science in that realm. Partnering with the Jewish Federation of Rochester and MCC on these projects.

e. Jim VanKouwenberg (Optimax)

- Working on a project with Finger Lakes Community College for the last year and a half or so called the <u>BRIDGES Program</u> (Building Rural Innovation, Designing Educational Strategies), which is a national project that is being done by the Education design lab.
- The goal is to help rural community colleges become economic drivers for their region.
- One of the programs that came out of this project is called <u>Grit</u>, and it is a program to make college or post-secondary education more accessible in the community. They ran the first program last semester with 2 centers that they set up and this semester they have 6 centers that they've created that they're using some of the campus centers and other sites as well. It makes the learning more accessible to people that may not have internet, computer access or transportation.
- This project removes barriers for people who want to continue education
- They are offering computer literacy courses and a foundations in advanced manufacturing program. Optimax has created a space for this program, and is going to have some of their employees participate in some of these courses.
- Email came out this week from the Chamber of Commerce. It has a
 program called <u>WORK Together ROC</u> which is focused on
 strengthening the local talent pipeline.
- They are looking at creating kind of a clearinghouse for ongoing initiatives that are workforce pipeline related.

f. Terry Hopkins (C&S Companies)

- C&S does planning, engineering, construction management and architecture.
- Ramping up school year programming and making plans to get students in the buildings.
- Girls Inc. did a visit recently. Girls explored the many opportunities that are available to them and learned about opportunities that they may not have even known were available.
- Partnering with a nature center and preserve to bring nature to the city. They will go into the city school districts and talk to them about nature.

g. Kaeti Stoss (RIT)

- Ramping up for the new school year.
- Working with Carla and will be presenting the out of school time plastics curriculum, and learn about plastic pollution
- Working on a **NOAA** grant with RIT
- Trying to evaluate the plastic pollution in our area. so they can come up with solutions that are more targeted.
- Data is being collected. It's been really interesting to see what they are finding at the collection sites.

h. Mike Wischnowski (St. John Fisher)

- Working with a NOYCE Scholarship grant which is through the Science Foundation.
- Hoping to get a student who will participate as a panel member so we can learn more about their experiences.

i. Carla Stough-Huffman (GRASSA)

• Working with a funder, and will be collecting input from STEM educators to see who has the qualifications and the time to go out into programs that are already running in after school programs.

- Looking more for elementary through late middle school grades, since there aren't a lot of high school programs that operate in the typical out of after school sphere.
- Looking for 5 or 6 people who have some flexibility, and that includes current college students, to work together as a team to learn high quality instructional practices. These will be paid positions. GRASSA was awarded \$25,000 from the Daisy Marquee Jones Foundation to move in this direction
- The Community Foundation is hosting a 50th anniversary gala next week.
- Trunk or treat is back on for this year. It is on Thursday, October 20th which is <u>national lights on after school</u> evening.
- GRASSA is a big supporter of this group and invites all to participate.
- Basic premise is to bring a vehicle and decorate it with any theme you want. You can be as creative as you want, plan an experiment or activity, giveaways, etc.
- The center for disability rights will provide the treats, so you will have buckets of treats to give away to kids.
- This is a very inclusive event. It will be spaced out at Frontier Field in a parking lot, so that kids in wheelchairs, and people with mobility issues can come and participate.
- This event is free for all children under ages 10 and younger, and children with disabilities ages 14 and under.
- There will be a couple of performances, including the Star Wars reenactors.
- j. Gretchen Anthony (Teaching Artists ROC)
 - Summer was busy, with a lot of time at a variety of camps, including Finger Lakes Community College.
 - We were given the opportunity to do 5 school and family related STEAM performances for a local charter school, the Academy Charter.

- Teaching Artists ROC will host a <u>showcase on October sixth</u>, at the Eisenhart Building at the Museum and Science Center from 4 until 8. This is an opportunity to see most of our artists and what they offer.
- Working on a grant right now for program development for several of our artists.

k. Pete Maslyn (Ontario County Farm Bureau)

- Big annual event coming up called <u>Fun on the Farm</u>, on September 24 at a dairy farm in Canandaigua.
- Activities include wagon rides, discussions about nutrient management for dairy farms, veterinary presentations, presentation on monitoring systems, and many different booths that are educational and farm related.
- There are a lot of give aways including ice cream, cheeses, apples, and juices.
- There will be one booth for food, , hosted by the music boosters club from Marcus Whitman school.
- Attendance is usually around 4,000 people the day of the event. The day prior is open to school kids who are invited. The school bus driver shortage this year may affect the student day, but looks like they have 6 different school districts coming, so potentially 800 school children this year for the Friday event. Friday event is geared toward 3-5th grade, but one school is sending kids as young as kindergarteners.
- Friday event is a quick tour with 3 activities as well as a quick wagon ride and ice cream cone, and they are invited to come back the next day with their parents
- Fundraising is needed for this event. They receive many donations from local businesses which help cover expenses like tent rentals, etc.
- The event also includes help from community groups. Boy Scouts, Girl Scouts, church groups and more come in to help run games and booths,

1. Sharon Sweeney (C&S Companies)

• Role at C&S is to keep the company in contact with local school boards associations and support their work.

• These connections help C&S with their serious commitment to supporting education at many levels.

m. Marv Sachs (Brighton CSD)

• Working with NTID to have it become a Hub Partner.

n. Harold Clark (Terra Fairs)

- TERRA Fair will be March 18th at the Rochester Museum and Science Center
- This year's event will return to in-person, which they are very excited about after 3 years of virtual events.
- Planning kick off is later this month, so more to report will be coming later.
- Terra science and education is a nonprofit educational foundation out of Syracuse, who offers grants to teaching professionals. They offer a \$500 stipend for a teacher and training, and \$500. if a teacher wants to run a science fair. They also offer \$1,000 to schools to support holding a science fair and they also offer capacity building grants for teachers ranging from a 1,000 to \$5,000.
- More information is on their <u>website</u>. Applications are due in October.
 This info will be shared with the network.
- o. Dan Schneiderman (RMSC Solar Eclipse, Rochester Maker Faire)
 - College & University Eclipse meeting on Thursday, September 29th at 9
 AM. RSVP at
 - We're 577 days until the April 8th, 2024 Total Solar Eclipse
 - https://www.rocgamefest.com/
 - Looking for rockhound suggestions, several suggestions made:
 - 1. https://www.usgs.gov/educational-resources/elementary-geology
 - 2. USGS list of programs on Geology for Elem. Students
 - RMSC will be closed for two weeks to clean and reset.

- RMSC is hosting the <u>American Astronomical Society Eclipse Workshop</u>, October 21-22 Everyone is welcome to participate
- RMSC after dark is hosting a Halloween event: monster bash, which is 21 and older.
- Anyone who has any soldering skills and is available on October twentieth from 4 7 PM, they are running a makeathon for open source solar devices that help the visually impaired experience a solar eclipse. This is a group out of Harvard. They are trying to assemble as many of them as possible in the new tech lab.
- RMSC Innovation Celebration Gala coming up October 14
- <u>Maker Fair Rochester</u> will be returning in November. <u>Student STEAM</u> <u>fest</u> is also returning for 3-8th graders.
- Looking at bringing back Mario the Magician
- When they reschedule Artemis, they will be holding another full dome Planetarium viewing at the RMSC

p. Ashley Simmons (RIT)

- RIT graduated about 38 STEP scholars and are now attending schools from RIT, St. John Fisher, LSU, community colleges, and more.
- Summer camp was held in person this summer at Greece Olympia.
- It had 4 weeks of summer camp, with about 43 students in total and 14 rising 10th to 12th graders, who went to Syracuse University for a residential summer camp experience and received college credits from courses like international relations, political theory, computer animation in game design.
- Finally received word that they can bring students back on RIT campus. Saturday sessions will now resume in person at RIT, which everyone is really looking forward to.
- Robotics students are meeting on Saturdays to get ready for first tech challenge
- There will be a call going out for research mentors, coaches, anyone who is interested in working with middle school and high schoolers on research projects as they prepare for spring competition, such as Terra and the STEP Statewide research competition in Albany.

- The Magic Center is hosting the Rochester Game Festival
- For many disciplines that are expanding, there are not enough individuals for the market. <u>RIT is offering condensed training</u> that allow individuals to go into the workforce and make really good money. These 6-8 week sessions.
- Cyber security is really robust right now. there's a certified program in this area as well.

q. Angie Olkey (GST BOCES)

- Big project recently is the installation of a solar field that will provide the energy for all 3 campuses as well as create revenue. in that process. The field is going to be where the adventure-based learning challenge course used to be.
- Yesterday had a showcase for our high elements course that is brand new
- March 20, 2023 will be the <u>NYSCATE regional conference</u> at Watkins Glen High School.
- Another big focus is distributing the science kits. They sent out many boxes in 2 weeks to 21 schools

r. Betsy Ukeritis (NYS DEC)

- Busy few weeks at the NYS Fair.
- The attendance was lower than they predicted for the fair, but they still had a good turnout.
- Had a good time with license sales and talking to the public and renewing and selling the conservationist magazine.
- Hosted a social media event of meet the fishes that were in the aquarium at the State fair, along with a social media live event from the fire tower that went really well.
- Green Careers Event series is continuing with events coming in many different regions.
- The Salmon River fishery is not yet open due to construction slowdowns and other issues

• Working on a massive update for the education web pages for the DEC, changing the content management systems which is antiquated.

s. Kellie Gauvin (FLCC)

 Community programming for Mueller; there are upcoming community paddles, which are guided paddles through the channel on Honeoye Lake

5. FLX STEM HUB WORK GROUP REPORTS

- a. STEM Recognition Program (Carla Stough-Huffman)
 - More updates coming once we settle into the school year.
- b. STEM Professional Learning (Steve Montemarano)
 - Looking to curate, develop or find videos that somehow are attached or connected, correlated to a standard, so that we can provide them as resources for teachers,
 - Thank you to Michael DuPre for beginning this work. The committee will pick up where he left off as we figure out what direction this committee should go next.
- c. Building the STEM Talent Pipeline (Bill Rotenberg)
 - No updates at this time
- d. Advocacy (Joe Marinelli)
 - No updates at this time
- e. Regional Outreach (Joe Marinelli)
 - No updates at this time
- f. FLX Website (Tammy Bonisteel)
 - Several survey responses have asked for a list of network members, just a reminder that this resource already exists. Please see Director's report for link to directory. This resource is not available on the website, since it is for network use only, not public use.

6. NEXT MEETING

- a. Date: Friday, October 14, 2022, 8:00-10:00
- b. This meeting will be hybrid, both in person at the RMSC Planetarium Multipurpose room and online via Zoom.
- c. Zoom link: Zoom link for meeting

Aerial view of the planetarium, park behind the planetarium and go in the door facing the parking lot. Turn left once in the doors and the multipurpose room with be down a few doors on the left.



- d. Future featured presentations:
 - October 14: A Conversation with Post High School STEM Students
 - November 11: NASA HUNCH STUDENT MENTOR Program