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
August 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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not endorse the information or views expressed or ensure the accuracy of any information contained within.

AUGUST 2022 ROUNDTABLE BULLETIN

1. WELCOME AND INTRODUCTIONS

- a. 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.
- b. Present: Joe Marinelli (FLX STEM Hub), Tammy Bonisteel (FLX STEM Hub), Dan Schneiderman (RMSC Solar Eclipse, Rochester Maker Faire)Frank Capozzi, BSA, Nancy Pickering (Monroe County School Boards Association), Harold Clark (Terra Fairs), Marv Sachs (Brighton CSD), Gretchen Anthony (Teaching Artists ROC), LaToya Collins (BSA Exploring), Kellie Gauvin (FLCC), Mike Wischnowski (St. John Fisher), Carla Stough-Huffman (GRASSA), Betsy Ukeritis (NYS DEC), Sharon Sweeney (C&S Companies)
- c. New members to the Hub network Finger Lakes Inclusion Network(Lynn Thurston, Executive Director), and Tracy Harris, UPrep Rochester, Director of CTE

2. DIRECTOR'S REPORT

- a. FLX STEM Hub Network's Membership Growth
 - We have reached 200 members, up from about 150 in 2019 and underrepresented groups. Please continue to share our information widely with your connections and suggest membership in the Hub network.
- b. Hub as a Network of Networks
 - Skipping over this item for August, will present in September
- c. Hub's Roundtable Bulletin
 - Renaming our monthly meeting's notes and adding some more descriptive
 information so that if the bulletin is shared outside the network (which we
 hope you do where appropriate), there is some built-in background
 information and links to more detailed info.

- d. Hub's New Partnership Opportunities (Funders' Support)
 - We have a donation program that supports the FLX STEM Hub
 - The Hub operates on donations only through this partnership
 - Documents have been revised to more accurately reflect what we are currently doing.
 - Updated Partnership Opportunities document has been added to the website
 - We do not solicit grants due to the time required
 - We lost partners due to the pandemic, so funding is down
 - Suggestions for prospective partners and making connections always welcome
 - Marv announced NTID would like to become a partner.
 - Suggestion to add chart of benefits to website; we will look at incorporating this suggestion to the website.
 - Suggestion to check accessibility issues before adding to website, this is an important step and we will be checking all Hub documents for accessibility.

e. Roundtable Meeting Location Arrangements

- Offering hybrid meeting beginning in September
- Survey showed high interest in getting back in person
- Meeting at RMSC to explore locations was held. There are currently 2 meeting rooms that are equipped with the OWL system, the Cunningham Studio where we have traditionally met, and the multipurpose room at the planetarium.
- First meeting will be in the planetarium in the multipurpose room. This room was chosen due to its smaller size and thought to be better acoustics. Several people stated they had used the OWL in the Cunningham Studio, and they did not experience the echo and auditory issues we were worried about. The OWL system has features that cancels the echo and increases auditory functions. We may try out both spaces to see which best meets the needs of our group.

f. Website Reviewers

- The new website is live and basic updates have been made. We have asked for volunteers to help review the website and suggest further edits and improvements.
- Volunteers to date are Harold, Dan, and Angela G.
- Nancy P, and Gretchen also volunteered

• We will be asking all network members to give input once these volunteers have met and given feedback that is updated. This will not require a meetings, just a look through the website with feedback provided.

g. STEM Students' Presentation

- High interest in learning from recent HS graduates about the STEM pathway they took, barriers and successes etc.
- Looking at welcoming students in October for a panel presentation and discussion.
- If you have students that may be able to participate in person or on Zoom please let Joe know.
- Suggestion to ask Ashley Simmons at RIT if she has any students who may be willing to participate.
- List of questions will be developed, so students can be prepared for the meeting.
- h. Meeting with GRASSA and the Center for Governmental Research (CGR) regarding access to Out of School Time programs
 - They're looking at research on the access of minority youth in Rochester to after school activities, and one of the findings was that after school and summer learning programs are uniquely positioned to prepare young people for the jobs of tomorrow by developing 21st century skills, introducing youth to potential career pathways, and STEM exploration and opportunities to gain real world experience.
 - Joe attended this meeting on behalf of the Hub and shared its mission with CGR
 - These are factors Carla Stough Huffman of GRASSA has been sharing with our network.
 - Rand conducted similar studies in other cities to look at the same issues.
 - CGR has been working pulling together local stakeholders for more than a year, and these last couple of meetings are phase 2 where the community has narrowed it down to about 7 priorities that they would like to fine tune even more since 7 priorities are currently just too many to accomplish with the current working groups.
 - At the end of this process, GRASSA will have a new direction with potentially more funding and may become a standalone 501c3.

• They don't know what the final iteration will be, but the work has been deep and long, and we are looking to get the information out across the community. If you would like to see the presentation that Joe was a part of, Carla will send it to you and ask you for feedback on it

3. STEM RELATED TOPIC PRESENTATION/DISCUSSION

Theme: STEM and Career Exploration.

- <u>The Exploring Program</u> of the Seneca Waterways Council BSA, a non-traditional hands-on OST co-ed program.
- Exploring: Discover your Future
- Presenters: Frank Capozzi, Director of Field Services/Chief Operating Officer, SWC and LaToya Collins, Exploring Executive, SWC
- Exploring Clubs are for grades 6-8, Exploring Posts are for grades 9-12
- http://www.swcexploring.org/wp-content/uploads/2021/01/Unit-List-asof-1.14.21.pdf
- Website will be updated soon with joining activities for this year's programs.
- <u>Latoya.collins@scouting.org</u>

4. ROUNDTABLE PARTICIPANTS' ANNOUNCEMENTS AND UPDATES

- a. Dan Schneiderman (RMSC Solar Eclipse, Rochester Maker Faire)
 - 605 days away from the total solar eclipse. If you go outside the last week of August and first week of September at 3:20 pm, the sun should be in about the exact same position as it will be on April 8th of next year.
 - Save the dates for October 21st and 22nd for the American Astronomical Society Eclipse workshop weekend that will be hosted at the RMSC. This is a National/International conference that will be all things Eclipse, with everyone from museums and planetariums to state officials, educators, informal and formal logistics, a bit for everyone.
 - RMSC After Dark in October is the Monster Bash!
 - RMSC closing for 2 weeks in September, will not affect our Roundtable meeting there.
 - RMSC new exhibit in November that's currently under construction, The Wonders of Water.
 - Planetarium is putting James Webb Space Telescope images up on the dome.
 - Maker Faire: will be taking place this year and is bringing back the Student STEAM Fest on the Friday. Looking for makers for the event, as well as volunteers

- Artemis I's launch on Aug 29th. It's the first mission on the path back to the moon. https://www.nasa.gov/artemis-1
- June 2024 Artemis II will have humans go around the moon
- Fermentation Festival is this weekend
- RMSC just had a camp create this new mural: https://twitter.com/rocRMSC/status/1557109795206856706

b. Harold Clark (Terra Fairs)

- Terra Rochester Finger Lake Science and Engineering Fair is the regional Science and Engineering fair associated with the Regeneron International Fair
- In the quiet season right now. Kickoff meeting to prepare for 2023will be in September.
- The young man (rising high school senior) who we sent to the International in May won first place in chemistry and has now gotten a patent on his invention and been asked to give 2 Ted talks.

c. Nancy Pickering (Monroe County School Boards Association)

- We provide a lot of professional development for school boards, and also interact with the superintendents, the curriculum folks, HR, etc. Currently re-launching our website to be much more user friendly to all users.
- Currently developing programming for the school year. The science museum came and spoke to our board members, who can then share it with their school districts, ie.the info about the eclipse in 2024. The Eclipse will have an impact on schools, since it's happening during the school day. Many kids will be on buses when the eclipse occurs. How can they incorporate it into their curriculum?
- Will plan on bringing the information about the Exploring program to her members, who can then share with all the school districts in Monroe County.

d. Mary Sachs (Brighton CSD)

• Schools are quiet, gearing up for the new year.

e. Kellie Gauvin (FLCC)

• Nursing expansion building is opening this fall. This is a huge increase in space about triple the capacity for nursing students. The new facility has new labs including human anatomy and physiology. Ribbon cutting ceremony is in 2 weeks.

- Cooperative lab with Case Western Reserve U. where instructors will teach
 anatomy and physiology using <u>HoloLens</u>, which is VR technology that is
 part of a grant program with that university and will have its own facility
 there.
- Eventually, in addition to the RN program, there will be an LPN program in that space.
- if anyone knows somebody who would be willing to teach human anatomy and physiology in the daytime in Geneva, they are looking for an instructor.
- GRIT program is advanced manufacturing and computer skills. Classes are being taught through a partnership with different rural facilities: Bloomfield Central School District Operations Center, Yates County Workforce Development, Penn Yan, Macedon Public Library, Clifton Springs Public Library, FLCC Geneva Campus Center, FLCC Newark Campus Center
- This program is in partnership with academic classes So those courses will articulate to degree programs.
- The advanced manufacturing class articulates to the smart systems technology program, which is housed in Victor. That program is designed for students who are looking at a career in technology and manufacturing. It is set up so students are placed in an internship during the day (paid), and then take their classes in evenings and weekends around that particular internship. Program has a 98-100% job placement rate.
- Automation is also a big field right now. Heard a presentation about the Finger Likes Workforce space at MCC. If you haven't been to see that space by Frontier field. It is amazing. Their CAN-LPN bridge program is there, and they have a just unbelievable automation lab space. This would be a great space to hold a Network meeting/mixer at.
- We are continuing to do programming at our Mueller field station
- Paddle and yoga program on October 15th if you want to go check out that facility. Many other programs happening as well. 2 educators there who do just fantastic job with the facility and all the different programming that is going on there, and they have done a great job at exploring different ways to engage the public at that facility.
- In terms of thinking about community college careers, we have an excellent conservation program that has a lot of different programmatic offerings; natural resources, conservation, law enforcement, environmental studies, and horticulture. The horticulture program has a cannabis track which has expanded astronomically over the past couple of years, and as part of the

- nursing expansion they are looking at adding additional new science lab space, such as for tissue culture.
- They have always done mammalian cell tissue culture, but this will allow for plant tissue culture and for different cannabis strains; some of the chemical testing for that.

f. Carla Stough-Huffman (GRASSA)

- Currently (2019 stats) we are averaging 12 different "jobs" in our lifetimes.
 Good article on this: https://www.zippia.com/advice/average-number-jobs-in-lifetime/
- Currently looking at scheduling a bunch of new curriculum training. for the fall
- Connecting with Hu network member Betsy Ukeritis of NYDEC to bring some more <u>Project Learning Tree</u>, <u>Project WET</u>, and <u>Project WILD</u> trainings to our front line.
- Working with Hub network member Kaeti Stoss, RIT, who has completed her plastic pollutions curriculum, and we are going to get some of our OST educators trained in that and then start piloting it this fall with their kids.
- Many plans to bring both new trainings and retraining to new Frontline staff,
 while also getting that new STEM group up and running

g. Mike Wischnowski (St. John Fisher)

- Teaches in the executive leadership program, and with the <u>NOYCE</u>
 <u>INSPIRE Grant</u>, which provides almost half the tuition for those interested in being either a science or a math teacher.
- We also work with FLCC if students would like to start at the community college level, can do a 2+2 program as well. The grant is specifically to provide teachers for rural schools.
- Working with Bloomfield.CSD. This is the 8th district they have worked with. The districts will do all the field experiences and student teaching placements for these students, so that those rural schools have an opportunity to really have an opportunity to vet these teacher candidates, and possibly hire them.

h. Betsy Ukeritis (NYS DEC)

- Green Careers workshop is going really well. They have been working with FLCC, the Livingston County Chamber of Commerce, Angela, and the Workforce Development Institute staff
- Date is tentative for March of 2023 to start. Workshop will be 90 minutes or so of curriculum, and then 2 or so hours of working with FLCC and MCC to see some industries like sustainability, solar, etc.
- Looking at 50 CTE/BOCES educators and school counselors. This will be a slow start, with hopes to ramp up to get the CTE instructors, BOCES educators and school counselors to examine different STEM careers
- Plan on connecting with Network member Marion French at WXXI to access different tools, like American Graduate, that can be included.
- Will also connect with Nancy Pickering connect info to the schools.
- NYS Fair starting very soon, which is a busy time for DEC.

i. Gretchen Anthony (Teaching Artists ROC)

• SAVE THE DATE for our upcoming Showcase 10/6/22 from 4:00 -6:00 at Eisenhardt Auditorium at RMSC

5. FLX STEM HUB REPORTS

- a. STEM Recognition Program (Carla Stough-Huffman)
 - Looking to have a program this Spring
 - RMSC is looking to start planning for their STEM Program Recognition. They plan to get together in September to start planning that.
 - A couple of people did reach out between last month's meeting, and now saying that they would be willing to be on the recognition committee
 - Plan is to bring us together for a meeting after this September meeting and will be reaching out by email to those people over the next couple of weeks.
 - If anyone else is interested in helping on this committee, please let Carla know.

b. STEM Professional Learning

- Michael DuPre was looking for new leadership for this committee. Joe announced Steve Montemarano(BOCES 4 Science) has agreed to lead this committee. Thank you to Steve for stepping up
- Huge THANK YOU! Michael for your contributions to this committee over the years.

- Looking for videos that align with the science standards and that show how the science standards apply in real life.
- Many of these videos already exist, so it would not necessarily be creating the videos, but more curating a list that we can highlight on the STEM Hub YouTube channel.
- 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)
 - See Director's Report
- f. FLX Website (Tammy Bonisteel)
 - See directors report
- 6. Next meeting
 - Will be our first in-person meeting since before the pandemic.
 - Will be held in a hybrid format for those who want to zoom in remotely.
 - September 9th at 8 AM at the RMSC Planetarium. Enter the Planetarium from the parking lot side and turn left once you are in the building. The meeting room is just down the hallway on the left, the multipurpose room.
 - Zoom link for meeting
 - Future featured presentations:
 - Sept 9th- Summer STEAM Camps FLCC
 - October 14-A Conversation with Post High School STEM Students
 - November 11- NASA HUNCH Student Mentor Program

THANK YOU to our 2022 partners:



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