



# i-STEM 2021 Summer Institute Agenda

Week One: June 15-17, CSI (Mountain Time)

## Institute Agenda:

Attached is an agenda for our institute. Please take note of the "Strand Instructional Time" versus Institute-Wide Sessions. Your strand meetings will be hosted by your strand provider and will be accessed **at a different Zoom link from the Institute General Sessions**. *Both links will be emailed to you at a later date.*

## Institute General Sessions:

Because of the virtual format, institute-wide and general sessions will work a bit differently than they have in years past. **All general sessions will be accessed through the same statewide Zoom link**, regardless of which location you are registered for. Certain sessions will be statewide, while others will be conducted in a breakout room just for your site. Our dedicated management team from IBL Events will be handling breakout assignments and making sure each of you makes it the site's breakout room. All you have to do is log on to the call! One thing you can do to help this process goes smoothly is to *make sure your name on Zoom matches your real name*, so our team is able to tell who you are! You can preview [how to change your name in Zoom here](#); however this and more Zoom help information will be shared with you as the event gets closer.

## Attendance Requirements (this will be monitored):

As stated in the registration requirements for i-STEM, you agreed to and are required to attend and be actively engaged in all strand-related activities. In addition, you are required to attend all institute-wide activities on the first day of i-STEM, including the statewide welcome session at 9am MT / 8am PT and your site's "STEMPower Your Local Partnerships" Panel in the late afternoon. (Again, both of these sessions will be accessed through the same statewide Zoom link.)

For the second two days of the institute, you have a *choice* of General Sessions. There are four General Sessions offered (A, B, C & D) -- one each morning and one each afternoon. Participants are **required to attend 2 of those 4 sessions, along with our site's Daily Wrap-Ups**. General Session titles and descriptions are available on the second page of the agenda. You do not need to indicate which general sessions you plan on attending in advance -- we will be able to automatically track which sessions you attend in Zoom. There is one exception: Anyone planning on attending the "Breakout Networking" general session on the morning of the third day will have to sign up for a specific breakout topic in advance. These sign-ups will be made available two weeks before i-STEM.

## Kit Pick-Up:

If you live within 35 miles of host site, you are expected to pick up your kit on Monday of your institute week at your host site. Otherwise, your kits will be shipped to you (those that are eligible for shipping have been contacted). If you have questions of your kit status, please email your strand provider ASAP.

Thank you, we look forward to a fantastic institute!

802 West Bannock Street, Suite 900

Boise, Idaho 83702

208-332-1729

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**\*NOTE\***

- All strand Instruction: *Individual Strand Zoom Link*
- All others: *Statewide Zoom Link*
- Required: Blue color and \*
- 2 of 4 required (you choose the 2): Maroon color and +
- All Zoom Links will be sent at a later date

Monday June 14

TBD

For those picking up kits: please pick up your kit at College of Southern Idaho. Please contact the site coordinator, John Hughes, [jhughes@csi.edu](mailto:jhughes@csi.edu) for pickup times and location.

Tuesday June 15 (Participants are required to attend ALL events today)

- 9am-9:50am **Institute Welcome/Kick off\***
- 10am-12pm **Strand Instruction\***
- 12pm-1pm Lunch
- 1pm-4pm **Strand Instruction\***
- 4:05-4:55pm **"STEMpower your Local Partnerships" Panel\***
- 5:00-5:15pm **Daily Wrap-Up\***

Wednesday June 16

- 9am-9:50am **General Session A: NCCE - Video Making and Recording in the Classroom+**
- 10am-12pm **Strand Instruction\***
- 12pm-1pm Lunch
- 1pm-4pm **Strand Instruction\***
- 4:05-4:20pm **Daily Wrap-Up\***
- 4:25-5:15pm **General Session B: NCCE - Digital Citizenship & the Community+**

Thursday June 17

- 9am-9:50am **General Session C: Breakout Topic Discussions/Networking+**
- 10am-12pm **Strand Instruction\***
- 12pm-1pm Lunch
- 1pm-4pm **Strand Instruction\***
- 4:05-4:20pm **Daily Wrap-Up\***
- 4:25-5:15pm **General Session D: STEM AC: Asset Mapping Workshop+**

**\*\*See general session descriptions on next page\*\***



## GENERAL SESSION DESCRIPTIONS

Participants are required to attend 2 of the 4 (you choose) listed A-D below. See day/times above.

### **General Session A: Video Making and Recording in the Classroom (K-5)**

Northwest Council of Computing Education (NCCE) is excited to present this workshop geared toward K-5 educators. Whether distance, hybrid or flipped learning, creating meaningful videos (for students, families and others) enhances learning and elevates lessons. Join this session for tips, tricks & terrific ideas through discovering new ways to utilize your videos in interactive lessons, and learning best practices in creating videos (e.g., length, audience, platform). We will also learn how to use PowerPoint recording (screen recorder, slide record, save as MP4, etc.), Photos app Video Creation (add titles, music, special effects, etc.) and Flipgrid for video creation (Shorts).

#### **Facilitators:**

Jennifer Brown

*NCCE Professional Learning Specialist, Computer Science Teacher, MIEExpert Master Trainer*

Jennifer Brown is a Computer Science Teacher and Business Technology Teacher at Walker Middle Magnet, a Microsoft Innovative Educator Expert and Trainer, and a Skype Master Teacher. As a NCCE Professional Learning Specialist, she is dedicated to showing teachers how to best utilize technology in their classrooms. Similarly, as a classroom teacher she demonstrates to her students how utilizing technology can empower their learning. Jennifer is passionate about showing students how to be self-directed, life-long learners and how technology can be used to achieve that goal.

Tammy Brecht Dunbar, M.Ed., STEM

*20-year veteran teacher & MIEExpert Master Trainer, 2018 Fulbright TGC, 2020 NCCE Closing Keynote*

Tammy Brecht Dunbar, M.Ed., S.T.E.M. teaches 5th grade in Manteca (CA) Unified and is a 2018-2019 Fulbright Teachers for Global Classrooms Fellow. With almost 20 years of experience as an educator and trainer, Dunbar has developed and delivered professional learning for educational conferences and communities across the country on such topics as Building Empathy through Global Communication & Collaboration, Hacking the Classroom, STEM on a Shoestring, and all the Microsoft showcase products like Minecraft, MakeCode, Sway, PowerPoint and Forms. She loves sharing ideas and strategies through her blog on [teachergeekischic.com](http://teachergeekischic.com) and on the Microsoft Educator Network.



## General Session B: Digital Citizenship in STEM (4-12)

Looking to integrate Digital Citizenship into your lessons? What part can the community play in supporting Digital Citizenship projects? Northwest Council of Computing Education (NCCE) is excited to present this session for Grades 4-12 educators. The session will highlight the important elements of Digital Citizenship, the connections between Digital Citizenship and student lives, and explore ways to connect digital citizenship to the community through student learning. Resources on implementing Digital Citizenship with groups of students will be provided as well as ideas on where to start making connections within the community. Leaving this session, participants will feel comfortable and knowledgeable on Digital Citizenship and how the community can support groups of students.

### Facilitators:

Aaron Maurer

*STEM Lead for Mississippi Bend AEA*

Aaron Maurer is the STEM lead for 21 school districts in Iowa helping to expand STEM, Computer Science, Makerspace, and Purposeful Play into classrooms K-12. Often spotted wearing bowties and drinking coffee he is on a quest to bring more wonder and play into the learning process in schools. Prior to this he served as an Instructional Coach for Bettendorf Middle School. He has taught sixth grade social studies, literature and computer as well as spending many years teaching gifted education in grades 4-8.

Nicole Tuminella

*District STEM Resource Teacher*

Nicole Tuminella is an educator in Hillsborough County (FL) Public Schools. With over 14 years of educational experiences, ranging from instructional classroom teacher to new teacher mentor to instructional leadership roles, she has always worked towards providing students and teachers with the skills, resources and tools needed to be successful in a 21st century learning environment. Nicole has developed, facilitated, and supported professional development at both school and district levels. Her professional development experience includes full-time new teacher mentoring, coaching staff through best practice implementation, demonstration classrooms, and trainings on learning new education technologies.



## **General Session C: Breakout Topic Discussions/Networking (PreK-12)**

Choose from a selection of engaging breakout rooms to connect & collaborate with fellow educators on topics important to YOU! Session topics are listed below. Rooms will be limited to nine people or less to allow for active participation for all. Advance Sign-Ups Required. Sign-up information will be made available one week before i-STEM.

These will be open discussions. No facilitators will be leading the groups. Padlets (collaborative web platform) with a couple resources will be provided as conversation starters and educators will be encouraged to add to the Padlet. Padlet resources will be sent to participants after the session.

### **Family Engagement (Pre-K-12)**

How do you get families to engage in your student's STEM Learning? What kinds of activities work best for family engagement? Do you have tips for getting families to show up at your family engagement events? Come share and discuss the benefits of engaging families in a student's STEM learning, your success stories, and tips on how to better engage families to be an extension of what students learn in your classroom.

### **The Future of Work (Grades 6-12)**

You may have seen or heard about the ever-changing workforce needs. Changing technologies have impacted the future of work globally. Has technology changed how you see your role as an educator preparing your students for these future jobs? How do you prepare your students for jobs that don't exist yet? Come discuss how these have affected your own classroom and share how you have changed how you approach it.

### **Realistic Strategies for Inquiry-Based Learning in the Classroom (Pre-K-12)**

According to Exploratorium and the Institute for Inquiry, inquiry-based learning is an approach to learning that involves exploring the natural or material world, which leads to asking questions, making discoveries, and testing those discoveries in the search for new understanding.

Do you use this approach in your classroom? What are some successful ways you have introduced these models in your learning environment? What challenges have you experienced in incorporating this approach? Come discuss and share various types of inquiry-based or student-centered learning models that you have used.

### **Value of School-Library Partnerships for STEM Learning (Pre-K-12)**

When was the last time you used your Library? Libraries are a wealth of resources for not only educators but parents and students. Come discuss the importance and value of school-library partnerships for STEM learning, how to leverage them as an extension of your STEM programs, and tap into their vast knowledge and resources for you and your students. We would love to hear your examples and successful partnerships stories. What ideas do you have on how you can bring such partnerships to your community?

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### **Creating Opportunities for STEM Career Exploration – Middle School Level (Grades 6-9)**

It is never too early to start exploring career options! Middle school students are at an age when they understand the connection between careers, salaries, and the kind of lifestyle they want. This is also the time when the students will need to choose their high school courses, some of which are specialized pathways to a particular area of post-secondary study. How do you incorporate career exploration in your classroom? Come discuss and share strategies and resources for creating opportunities for career exploration for middle school students.

### **Creating Opportunities for STEM Career Exploration – High School Level (Grades 9-12)**

STEM jobs pay nearly twice the median wage of non-STEM jobs, and they continue to change rapidly. In March, Idaho had 8,446 open STEM job postings. Building a toolset of STEM skills can take students in multiple directions with their careers. How do you help students navigate the challenges of the career jungle gym, braided river, and career ladder? What successful tips or stories can you share with your peers? Come discuss how to create opportunities for career exploration for high school students.



## General Session D: Partnership Asset Mapping Workshop (PreK-12)

Looking to build partnerships to support real-world engagement in STEM -- but not sure where to start? In this workshop, you will identify and "map" potential partners ("Assets") for STEM learning in your local community and consider how you might engage those partners through shared values. Note: For this activity, you will need a few pieces of paper and some crayons or colored pencils.

### Facilitators:

Dr. Kaitlin Maguire

*Interim Director, Idaho STEM Action Center*

Kaitlin has worked with STEM AC for three years coordinating the i-STEM Professional Development program, writing grants, and establishing the Idaho STEM Ecosystem. A former scientist, Kaitlin is passionate about STEM education and workforce development. Kaitlin received her Ph.D. in Integrative Biology from UC Berkeley, an M.S. in Geology from Ohio University and her B.S. in Biology from George Washington University. In her free time, she enjoys sharing her passion for paleontology and natural history with others.

Crispin Gravatt

*Research and Data Analyst, Idaho STEM Action Center*

Crispin joined the Idaho STEM Action Center team in March 2016 to help facilitate the grants process and ensure effective accountability. Crispin also volunteers in his community to foster stronger relationships between business, nonprofit, neighborhood, and educational organizations. He is dedicated to ensuring that education opportunities exist for all people, regardless of any existing barrier. Crispin was born in Pocatello and grew up in various places along the Snake River. He graduated from Boise State University with degrees in Sociology, French, Gender Studies, and Economics.