

Bi-Annual Idaho EcosySTEM Convening

April 16, 2021





This meeting is being recorded

- This convening is being recorded to provide reference data to develop the Idaho STEM Ecosystem.
- This recording will be kept on STEM AC's internal servers.
- Public chats will be copied for note-taking purposes.
- Notes and presentations will be posted to the Ecosystem website shortly after the meeting.



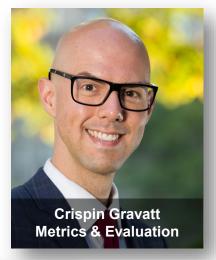




STEM AC Ecosystem Support Team



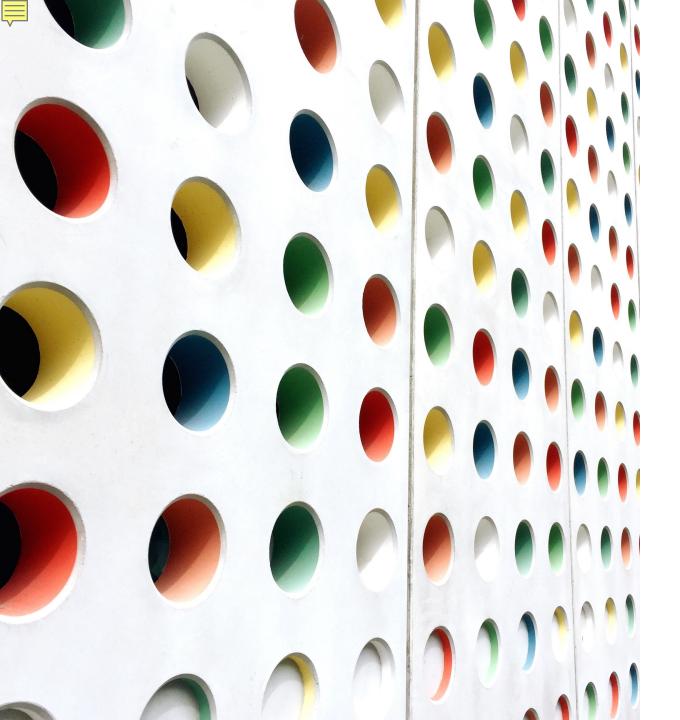








A STEM ecosystem provides the structure for cross-sector partnerships to improve STEM literacy, ensuring a strong workforce and global competitiveness for all.



Basic Zoom Tips & Controls

ECOSYSTEM PLANNING MEETINGS





Basic Zoom Controls





The control panel will appear at the bottom of your screen.



Mute/Unmute: This allows you to mute and unmute your microphone

Start/Stop Video: This allows you to start and stop your own video.

Participants: This opens up your participants window so you can see who is in the meeting

Chat: This opens up the chat feature. You can only chat with the host(s) for this event

Share Screen (Enabled for Hosts Only): Click on this icon to start sharing your screen. You will be able to choose an application or a screen you would like to share.

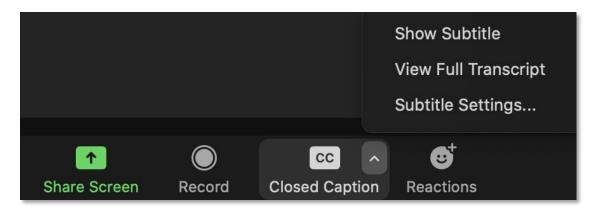
Note: the controls will sometimes auto-hide, so you may have to 'mouse-over' the bottom of the screen

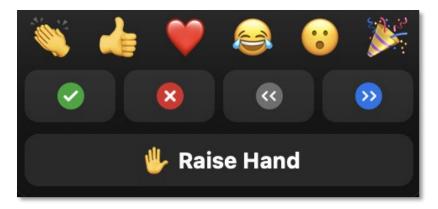






Closed Captioning: To enable, click the closed captioning icon and choose "show subtitles"





Reactions: Allows you to 'react' using emojis (i.e. thumbs up, raised hand, clap). Any Reactions you choose will show up in your individual picture window. We highly encourage the use of the 'Raise Hand' feature when wanting to ask a question.

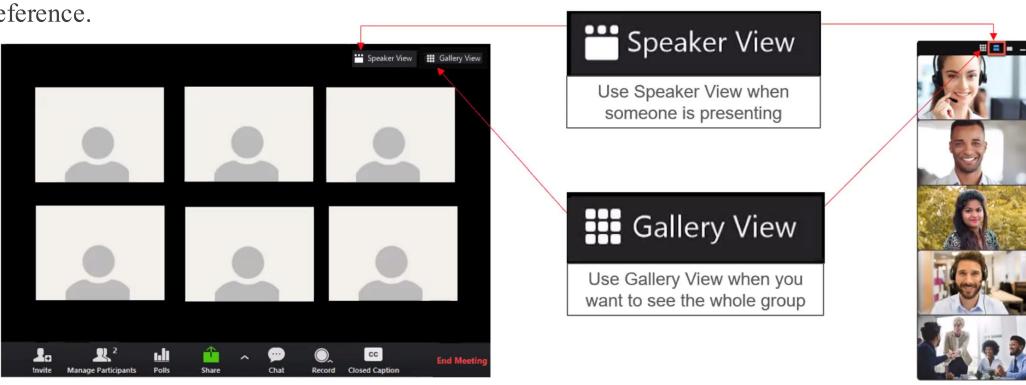






Viewing Options: In the upper right hand corner you can change the layout based on your viewing

preference.





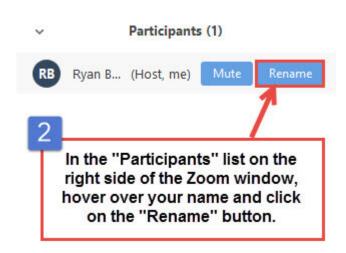
Additional Zoom Controls

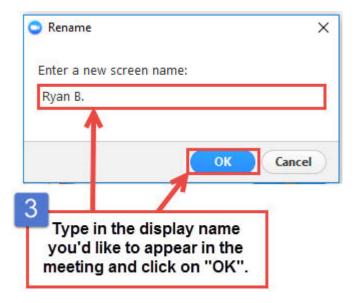




Changing Your Name In Zoom:







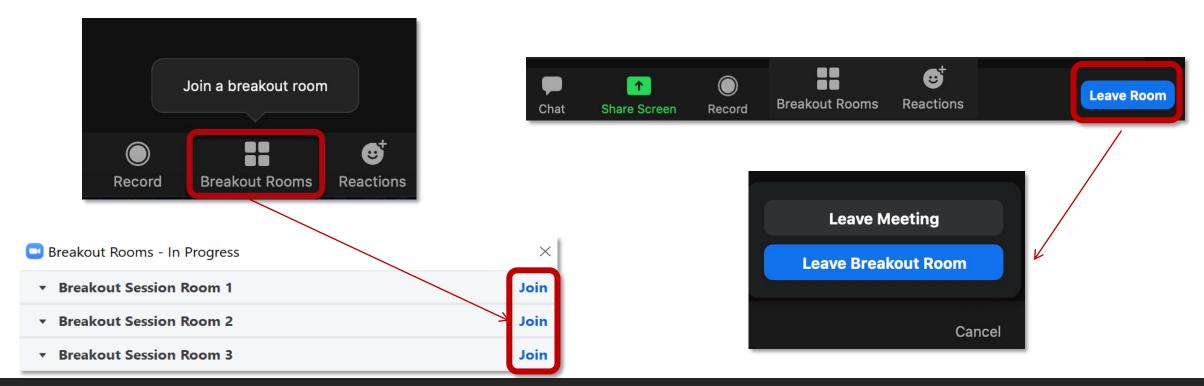






Select the Breakout Session Room of your choice. You will be able to enter and leave breakout rooms freely.

Note: Any attendees not joined with the desktop or mobile app (version 5.3.0 or higher) will not be able to self-select a breakout room. The host will need to facilitate moving these participants manually.



Onsite Technical Support During Meetings

Technical Zoom Support:Support moderators will be on hand during the meetings and can be accessed through the chat feature. Look for the moderators with "Zoom Support" in their name.

Have a great event!



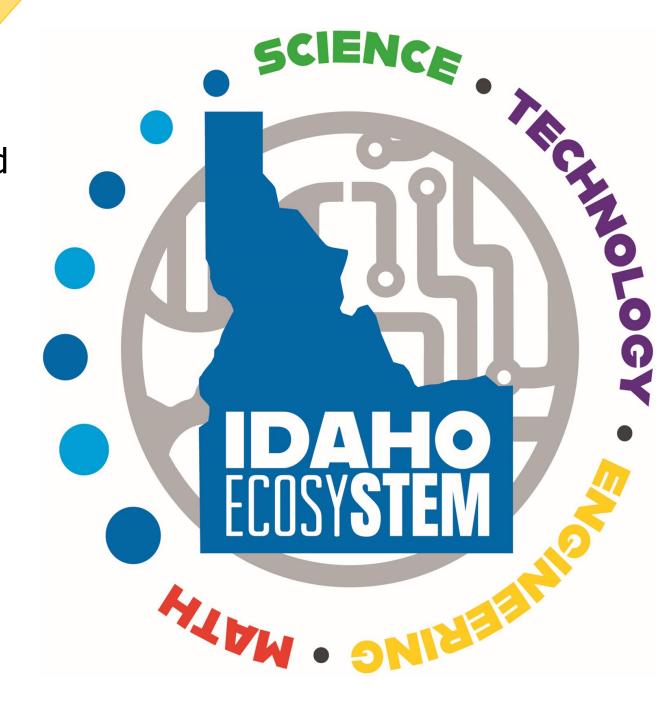






Meeting Norms

- We participate as equals with shared responsibility for the outcomes
- We communicate openly, honestly, and respectfully
- We listen as allies
- We stick to the agenda
- We have no hidden disagreements or questions; if we disagree, we do so with grace and tact
- We help each other learn
- We show up on time and prepared





Networking Lunch

12:30 – 2:00pm

Breakout Rooms

Gondwana

Pangea

Laurasia



Share your thoughts & ideas through out the meeting on the Padlet!



https://padlet.com/crispingr avatt/8qmu4yjwqmht1qzf



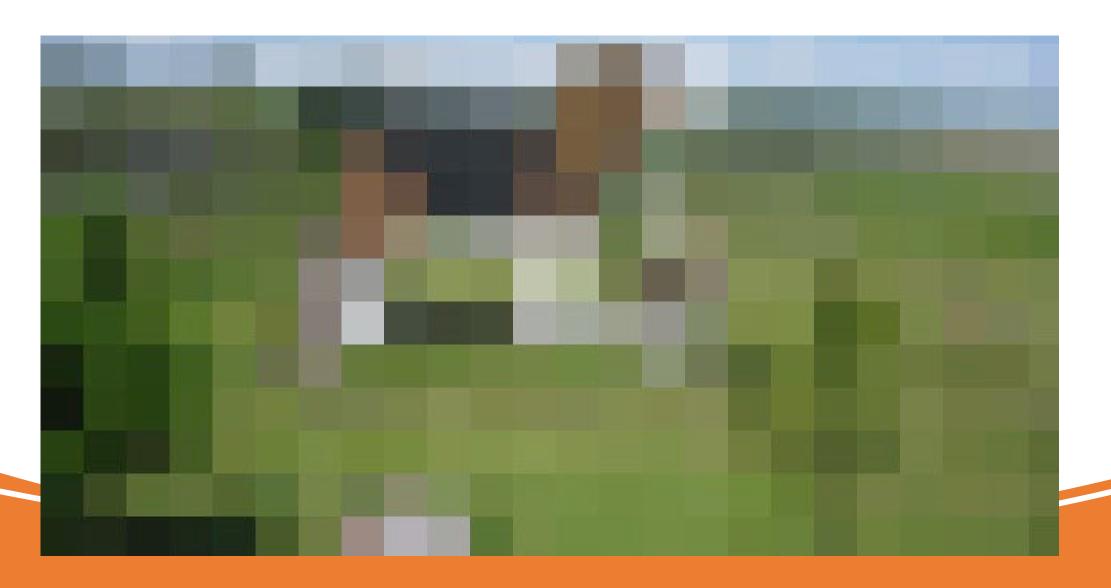
ICEBREAKER "WHAT AM I" GAME

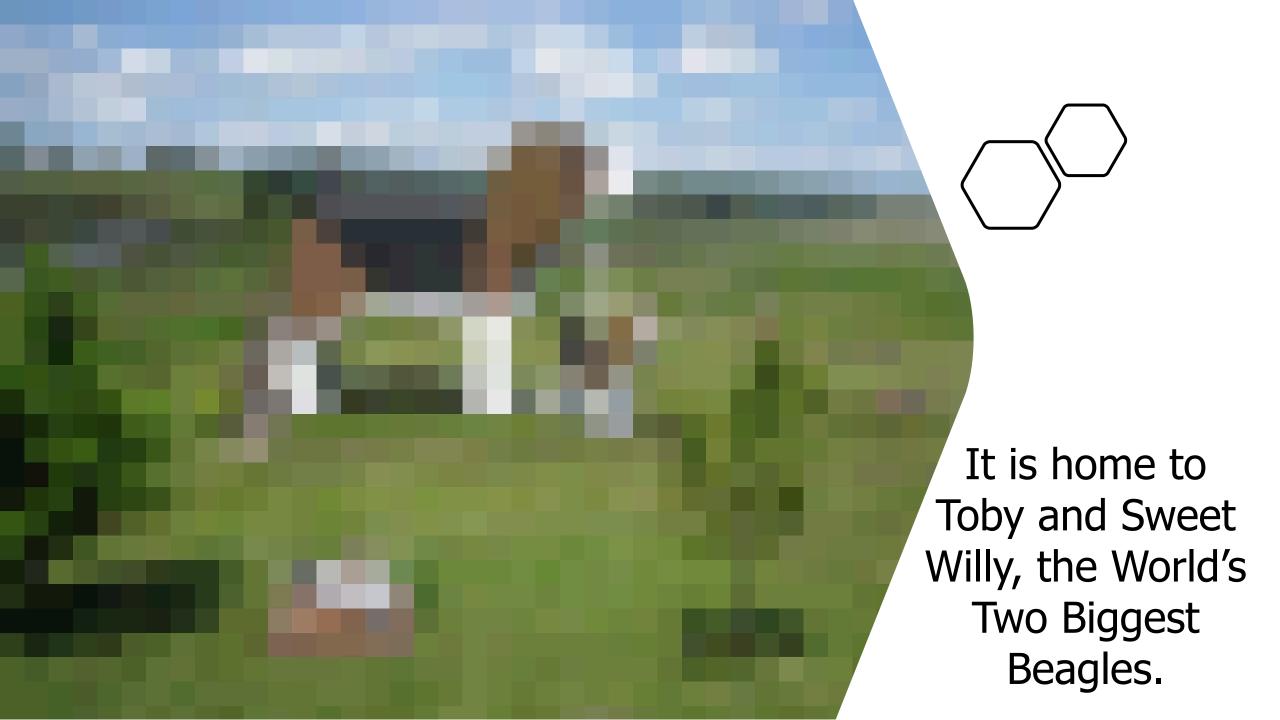
- We will show you a series of images
- We will provide a clue with each corresponding image until someone guesses correctly
- The first person to guess the image correctly wins!
- You must submit your answer through the chat (make sure "everyone" is selected)
- Only one answer per person...so choose your answer carefully



This structure was created by husband-and-wife artists Dennis Sullivan and Frances Conklin.

This bed & breakfast guesthouse is located along Route 95



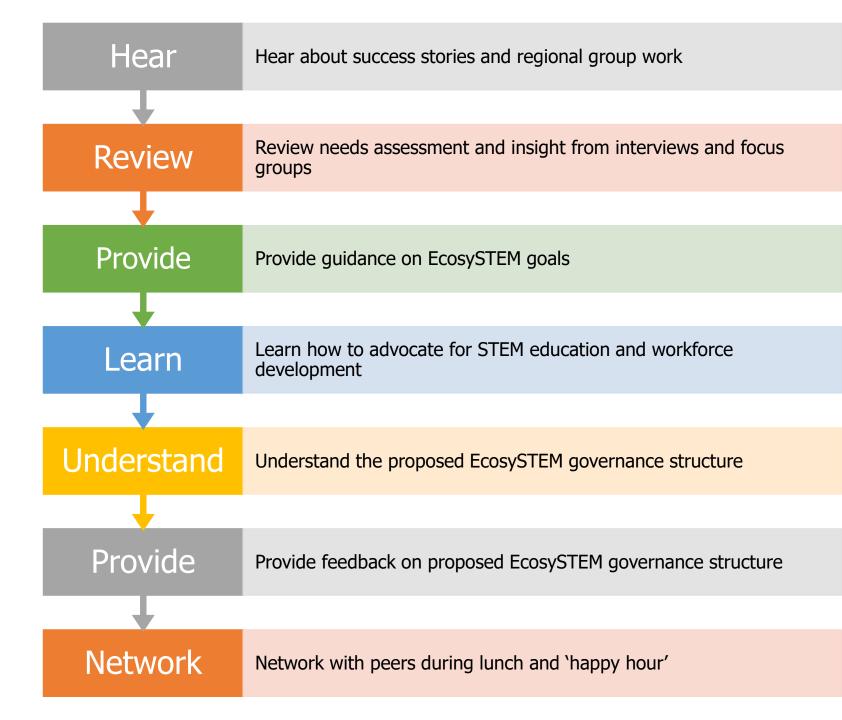








Intended Outcomes



Idaho EcosySTEM Timeline & Overview









Why Idaho STEM EcosySTEM?

A group of stakeholders that work together to design and implement a comprehensive vision of STEM learning for all and to further develop clear STEM career pathways for Idaho's youth through a **collective impact**

Together, we will focus on:

- Broadening STEM equity
- Promoting access to, alignment with, and awareness of, STEM education and careers
- Creating successful metrics for STEM education and programming
- Building STEM momentum within the state and nationally



Framing the Goal of the Meeting

What you told us that you hope the Idaho STEM Ecosystem can do for you, your organization, and/or your region

- <u>Networking</u> with other STEM educators and professionals
- Funding for STEM opportunities
- Stronger <u>connections</u> between in and out of school education opportunities
- Stronger <u>connections</u> between PK12 education and higher education/career opportunities
- Discussion and work related to <u>policy</u> and governance







Success Stories!

What are EcosySTEM members working on?





Regional Planning Opportunity Details

- Regionally focused work to plan/develop local ecosystem efforts.
- Regional group work:
 - Identify and/or survey stakeholders in your region;
 - Build stronger partnerships;
 - Establish methods for communication with statewide ecosystem;
 - Develop regional ecosystem sustainability and expansion;
 - Create a leadership structure and governance model;
 - Determine regional STEM goals and outcomes;
 - Identify needs and assets, etc.;

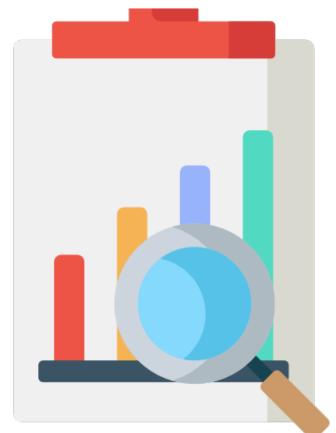




Regional Planning Group Updates







Assessment Update

TIES Focus Groups & Interviews - Preliminary Results



Welcome TIES Leadership!!









Making the Case for STEM Ecosystems in Idaho

Focus Group Review









Idaho Focus Groups

- In February 2021, TIES interviewed STEM leaders across all regions of the state, representing diverse sectors K-12, early learning, post-secondary education, business, libraries, museums, community based organizations, etc.
- Discussion topics included Idaho's assets, biggest challenges and observations about how to best support families in regions throughout the state.





"One of my favorite reasons for living here is that no matter which direction I go on a road, I can eventually get to somewhere beautiful."







Defining Community

Regions 1 & 2

- Rural
- Remote
- Agricultural
- Tribal presence
- Strong connections to land
- Mixed industry, largely featuring forestry & agriculture
- Divides

Regions 3 & 4

- Statewide/regional-big, diverse population
- Specific industry focus/gov agencies
- Local-peripheral rural communities
- Hispanic populations
- Low SES populations

Regions 5 & 6

- Rural
- Remote
- Agricultural
- Hispanic/Indigenous populations
- Socioeconomic dividers create/reinforce educational divides





"Idaho Falls is pretty awesome because it is a growing community. A lot of that's due to upcoming projects at the Idaho National Laboratories.

They're forecasting about five thousand additional jobs being added between now and 2024.

Some of that is concentrated in the construction area, labor and trades, and then other parts of that might be research. They're talking about building some mini nuclear reactors out there. We have the Naval Nuclear Reactor in our area. So, there's some exciting things coming from that area."







Resources

Regions 1 & 2

Available

- · Specific programs
- Higher education networks

<u>Missing</u>

- Funding
- Coordination; Connection between industry & education
- Interest & awareness, especially for families





Regions 3 & 4

<u>Available</u>

- Volunteers
- Funding
- Training Operations
- Venues

Missing

- Ongoing funding
- Staffing
- Resources
- Leadership
- · Access & inequity
- Awareness
- Training
- Time

Regions 5 & 6

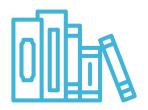
Available

- Industry funding support
 & volunteer expertise
- University student and professional volunteers
- · Clubs/extracurriculars

Missing

- Leadership
- · Additional human power
- Connection & communication strategies
- Funding

Assets for Improving STEM Education





Increased funding for public libraries will lead to greater STEM education opportunities for students and families.



Idaho's geography offers an abundance of natural learning opportunities, assuming STEM Ecosystem learning partners are sufficiently funded and are able to structure those opportunities.



Idaho's stakeholders and industries are willing and enthusiastic partners, and able to provide the resources needed to improve STEM education in community ecosystems if given opportunities to do so.





"We need more passionate people, and for them to have more resources and more prominence in their communities, so that people are listening to the..people that really make up a majority of the state."







Strongest STEM supporters or implementers in your community

Industry	33%
Higher ed	17%
STEM AC	8%
OoS	19%
School	14%
Other	3%
Govt	5%

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"We want a STEM trajectory, but tailored to Idaho to keep kids in Idaho, to keep our jobs in Idaho, to grow and expand local industry and tech in Idaho."









My community knows what STEM <u>means</u> .	My community shows <u>interest</u> in STEM.	My community values STEM skills.	STEM <u>careers</u> are available in my community.	My community understands that STEM is important to its long-term economic health and prosperity.
3.90	3.91	4.02	4.01	3.58
78.01% (-0.84)	78.28% (-1.91)	80.40% (-1.33)	80.13% (+0.51)	71.60% (-1.80)
0.88	0.85	0.88	0.92	0.95

What are the biggest assets in your community?







Challenges to Improving STEM Education



Lack of reliable broadband Internet access, lack of technology, and challenges for using technology hinders STEM education advancement. This heavily impacts Latino and Native American families as well as those in rural areas and this, in turn, perpetuates inequities across race, ethnicity and socioeconomic status.



The **lack of reliable transportation** in marginalized, remote, and rural communities is a significant barrier to accessing STEM education opportunities.



Some **cultural barriers and misunderstandings have provided some challenges** on determining the best way to measure impact and allocate funding throughout the state.









My community has available infrastructure to support STEM opportunities .	My community has technology available to support STEM opportunities.	has funding	My community has human power available to support STEM opportunities.	My community has leadership available to support STEM opportunities.
3.52	3.51	3.17	3.57	3.66
70.33% (-0.25)	70.20% (-0.67)	63.36% (-1.35)	71.39% (-0.73)	73.20% (-1.36)
0.98	0.94	1.06	0.92	0.90

"The disparity and privilege are on top of each other. We're all intermixed. There are profound disparities within the same ecosystem. My kids have to work twice as hard to get half as far. We're not so far apart, but we are."





Barriers to Success

Regions 1 & 2

- Funding
- Cultural barriers
- Lack of devices/tech support

Regions 3 & 4

- Lack of funding
- Lack of equitable access
- COVID-19
- Lack of awareness/outreach needed
- Lack of time
- Policies

Regions 5 & 6

- Barriers to participation (transportation, language, registration, fees, etc.)
- Cultural attitudes toward STEM
- Geography





"The go-on rates need to be much improved, and not just academic institutions, but trade schools and any post-secondary. How can we get more of our students to explore those avenues?

And then the lack of preschool opportunities in the state is another big barrier, little funding and so few resources in so many of our communities that would greatly benefit so many Idaho kids."





What is one solution to a barrier that would impact your region the most?









Idaho STEM Ecosystem Report

- Data from these focus groups will be compiled in a larger report about STEM in Idaho.
- If you are interested in adding your voice to the report, please complete this brief form.







Federal Report

- Idaho is one of 94 STEM Learning Ecosystems located across the globe to participate in Town Hall Meetings in January.
- The Town Halls resulted in a report for the Biden-Harris administration highlighting six recommendations of how to support STEM. The report can be found here.





Thank you!



www.stemecosystems.org



Questions at info@stemecosystems.org







Guiding Aspirational Statement

The Idaho EcosySTEM fosters the integration of STEM experiences for Idahoans, creating problem-solvers and critical thinkers who will sustain and lead our economy.





Strategic Priorities Working Groups Updates







Educator Preparation, Training & Support –

Focusing on finding new and better ways to prepare and support PreK-20 educators in STEM education. Building a database of available professional development opportunities for formal and informal educators in Idaho and working on developing materials to showcase the value of implementing STEM education in all disciplines.



Career Pathways &

Exposure – Focusing on further developing clear STEM career pathways for Idaho's youth. Building a database of resources to broaden awareness and assist in career pathways and exposure. The intent is to share the database with the larger asset mapping project.



Outreach & ...

Communications – Focused on external communication mechanisms. Provides guidance and insight on newsletter and website as primary mechanism for communication to partners. Provided feedback bright spots to highlight members. Reviewed and provided guidance on survey data.



Access and Equity – Recently completed an educator survey to develop "persona mapping" of underserved student populations. Launching survey shortly and will share out results. Our goal is to identify barriers to access and develop strategies to overcome.







Next Steps for Ecosystem Goals

- What's missing?
- What clarification is needed?
- What fine tuning of the goals are needed?
- How are the strategic priority working groups?

Add your comments and questions to the Padlet!







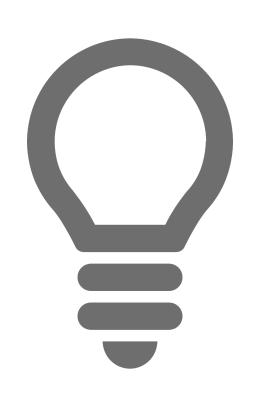


See you in 5 minutes!

https://stem.idaho.gov/re sources-portals/online-pdresources/







From your input at the fall meetings and educator listening sessions



Would you participate in regional meetings related to STEM education, workforce, and other STEM topics in your region?

STEM AC may be able to support regional efforts to connect stakeholders in education, industry, government, out-of-school, and other organizations and individuals for conversations about STEM education, economy, and workforce development.





Would you utilize a directory of **STEM** organizations in the state of Idaho?

STEM AC may be able to create and maintain a directory of organizations and individuals dedicated to supporting STEM education in Idaho. Directory may be print or virtual, and may include primary contact names, emails, phone numbers, organization mission, and other details as available.



Should we invite parents and/or student organizations to be a part of the decision making and strategic planning groups for the Idaho STEM Ecosystem initiative?

What are the best ways they could be involved?





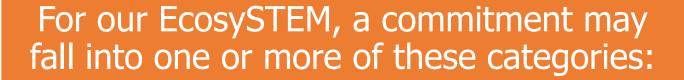
Other Ideas from September Regional Meetings

- Need more rural data: awareness, knowledge, resources, programs, etc.
- Need to include resource management agencies/organizations (F&G, USFS, BLM, etc.)
- Should include indigenous ways of knowing as related to STEM
- Consider hosting an ecosystem-wide equity training
- Regional "techies" to support families
- Regular networking opportunities



EcosySTEM Commitments

Commitments are **specific** and **measurable** actions taken by community stakeholders in support of achieving the EcosySTEM aspiration. Commitments can be large or small and do not necessarily require large investments or funding.



Education

Partnerships

Equity

EcosySTEM Infrastructure



Why EcosySTEM Commitments Matter

Help demonstrate our collective work for state leadership, for grants, and to potential donors.

Submit your organizations commitment to **Erica.Compton@STEM.Idaho.gov**

Commitments are publicly available on the EcosySTEM website.







EcosySTEM Commitment Categories & Examples

Education

How will your organization support the EcosySTEM's aspiration?

Ex 1: We will host/sponsor three camps on coding for a total of 100 girls during the summer of 2021.

Ex 2: We will provide a total of 100 hours for employees to volunteer as mentors or guest speakers in local schools.

Ex 3: We will increase the number of undeserved students in STEM education by 15% in 2021.







EcosySTEM Commitment Categories & Examples

Partnerships

How will your organization develop new, or enhance existing, collaborative opportunities in your community, region, or the state?

Ex 1: We will develop a partnership with a local STEM business to provide classroom mentors for 10 elementary educators.

Ex 2: We will continue to partner with five school districts to implement STEM specific initiatives, impacting over 3000 elementary students by summer 2021.







EcosySTEM Commitment Categories & Examples

Equity - How will your organization work to close the gaps that exist in STEM education and workforce development?

Ex 1: We will increase the number of undeserved students in STEM education by 15% in 2021.

Ex 2: We will offer community engagement activities for families in three rural communities in spring of 2021 that will impact 95 elementary students.

EcosySTEM Commitment **Categories & Examples**

EcosySTEM Infrastructure

How will your organization support the governing structure development of the Idaho STEM EcosySTEM?

Ex 1: A representative from our organization will serve on the EcosySTEM leadership board for one year.

Ex 2: We will host an EcosySTEM convening in spring 2021.





Welcome James Brown!!

- Executive Director, STEM Education Coalition
- Raise awareness at every level about the critical role that STEM education plays in enabling the U.S. to remain the economic and technological leader of the global marketplace of the 21st century.







Happy Hour Topical Sessions



Pick your top three and we will choose the top 5 for the happy hour breakout rooms

- Advocacy
- Access & Equity
- Fundraising
- New Partner Recruitment Strategies
- Summer Programming & Re-Opening Plans
- Impact Data
- Promising Practices in STEM Programming
- Industry and STEM Education
- Apprenticeships, Internships, Job Training
- Other



Caliper Survey



https://www.surveymonkey.com/r/9J385B5







Networking Lunch





Join a Room!



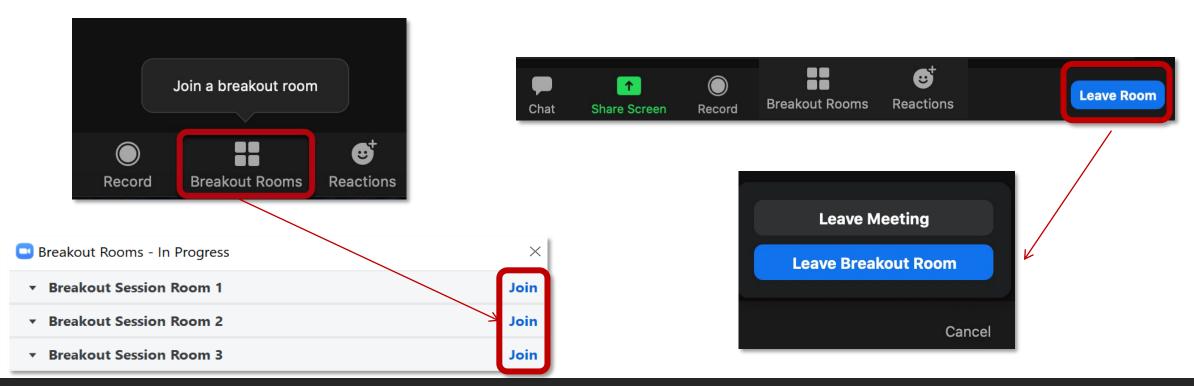






Select the Breakout Session Room of your choice. You will be able to enter and leave breakout rooms freely.

Note: Any attendees not joined with the desktop or mobile app (version 5.3.0 or higher) will not be able to self-select a breakout room. The host will need to facilitate moving these participants manually.





Reminder that we will come back together at 2pm MT/1pm PT