

STATE OF THE IDAHO ECOSYSTEM

Spark! Strategic Solutions

March 30, 2023





Topics

About Spark! Strategic Solutions

About STEM Ecosystems

The Idaho EcosySTEM

Where have we been?

Where are we going?



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Spark!
STRATEGIC SOLUTIONS

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Data & Technology Specialist



Meet your Spark! team

We're here to build harmonious and co-creative communities where people:



Feel a sense of
belonging and
connection.



Can access community
capital to support their
well-being.



Recognize their
personal power and
opportunity to improve
humanity.



Above all else, we're guides.

Spark! is a team of passionate ideators, strategists, and mobilizers who love building vibrant communities.



How we work

**To build thriving communities,
we believe that you need to:**



See the whole system.



Lead with convening power.



Ensure balanced representation.



Use data to drive action.

The Spark! Method



Ideation

Spark big ideas.



Strategy

Craft a plan.



Action

Activate your team.



STEM Ecosystems



What is a STEM Ecosystem?

A STEM Learning Ecosystem encompasses schools, community settings such as after-school and summer programs, science centers and museums, and informal experiences at home and in a variety of environments that together



Constitute a rich array of learning opportunities for young people.



A learning ecosystem harnesses the unique contributions of all these different settings in symbiosis to deliver STEM learning for all children.



Designed pathways enable young people to become engaged, knowledgeable and skilled in the STEM disciplines.



The Idaho EcosySTEM was part of cohort 6.





Initial & Continuing Partners

- Boise State University
- Career & Technical Education
- Discovery Center of Idaho
- Galileo STEM Academy
- Idaho Commission for Libraries
- Idaho Diversity Network (EPSCoR)
- Idaho National Laboratory
- Idaho Out-of-School Network
- Idaho State Department of Education
- Micron Foundation
- University of Idaho
- & many more!

What about the Idaho EcosySTEM?

The Idaho STEM Ecosystem is a network of STEM education leaders and supporters striving for a STEM-literate Idaho.



Key Programs

- Chief Science Officers (CSOs)
- Externship Program
- i-STEM
- Idaho Science & Engineering Fairs
- STEM Leadership Academy
- STEM Scholarships
- STEM School Designation

Idaho EcosySTEM Vision

Dedicated partners collaborate to coordinate STEM experiences and opportunities in Idaho.

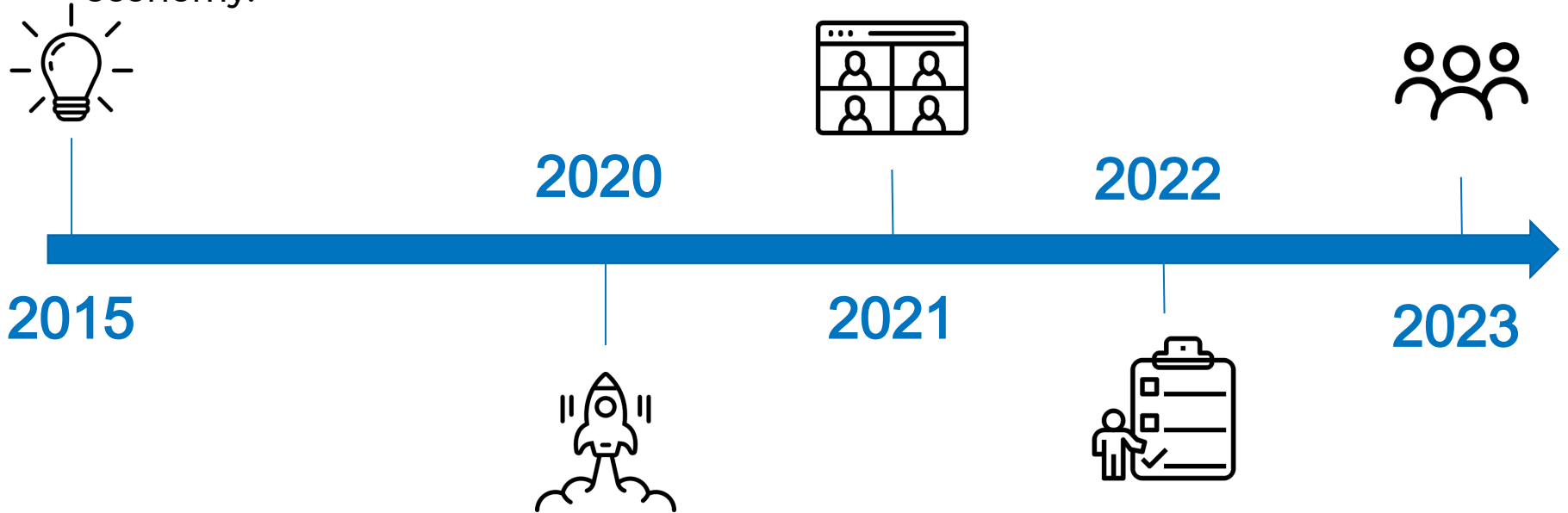


Where have we been?



Idaho EcosySTEM General Timeline

Mission: To foster the integration of STEM experiences for Idahoans, creating problem-solvers and critical thinkers who will lead and sustain our economy.



2022 Spring Convening

The Power of Partnerships

Meeting Intent:

Reinvigorate existing relationships and build new relationships, learn and share about STEM efforts throughout the state, and continue to develop out the goals and infrastructure of the EcosySTEM.

Intended Outcomes:



1. Shared understanding of what the EcosySTEM is, why it was developed, and how it works
2. Strengthen partnerships to leverage resources
3. Create actionable collaboration



Opportunities:

1. Shared, consistent, and tangible definitions, structure, and parameters
2. Aligned and clear communications
3. Community driven and community controlled access and promotion of STEM
4. Self sustaining and long-term durability



Strategic Action Planning

Timeline: May – July 2022

Shared Language

Created guiding principles, strategic objectives, and key results.

Accountability Structure

Defined how the various parts of the Idaho EcosySTEM work together and influence each other.

Idaho EcosySTEM Norming PowerPoint

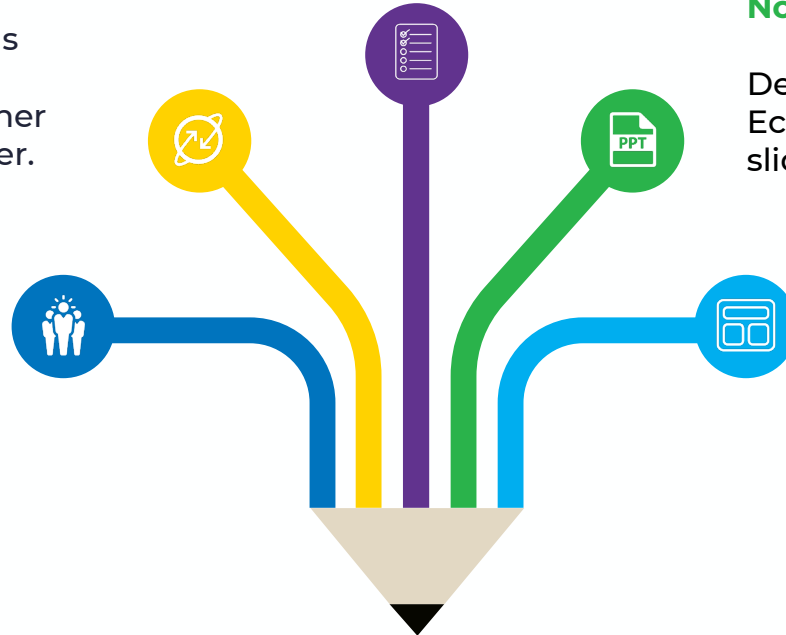
Develop a consistent Idaho EcosySTEM PowerPoint slide deck.

Leadership Team

Identified statewide partners to inform guidance and decision making for the Idaho EcosySTEM to create the content on this slide.

Strategic Action Plan Placemat

One pager “placemat” created to define and direct the Idaho EcosySTEM efforts.



Implementation Planning

Timeline: September 2022 – March 2023

Capacity Workgroup

Identifying how to create a network of partners around the state.

Communications Workgroup

Co-creating talking points for the Idaho EcosySTEM.

STEM Experiences Workgroup

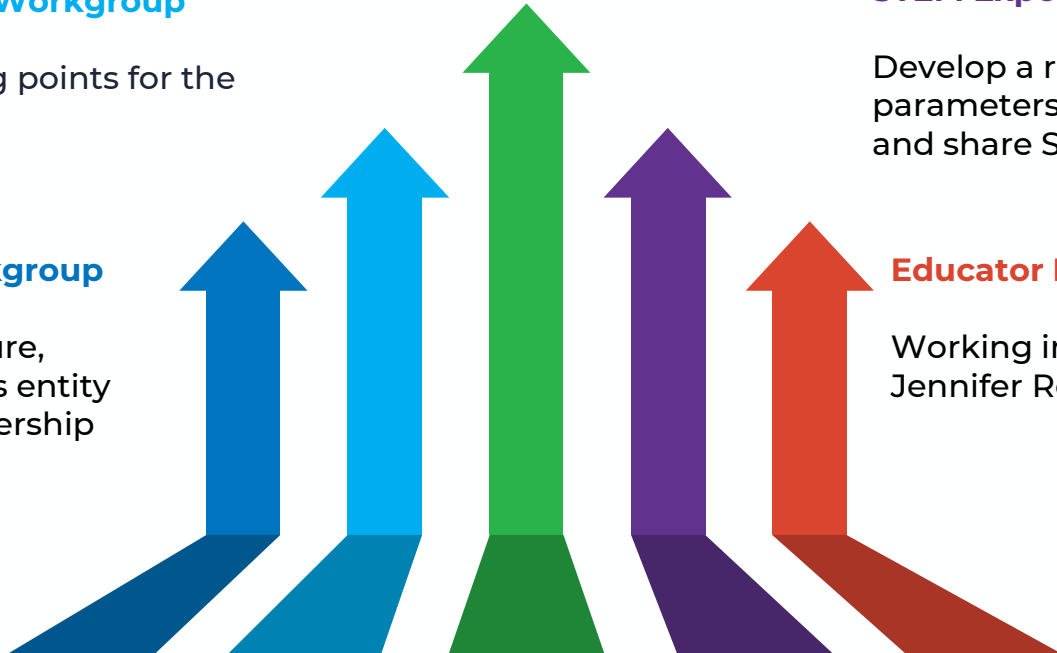
Develop a rubric to identify parameters to define, measure, and share STEM Experiences.

Infrastructure Workgroup

Building infrastructure, bylaws, and business entity options for the Leadership Team to discuss.

Educator Preparation Workgroup

Working independently; led by Jennifer Redford.





Where are we going?





EcosySTEM Hubs



Idaho North & North Central (INNC) Hub

Connecting Partners

- Computer Science Week
Hour of Code
- Science Saturdays
- STEM Creator Fair



Idaho South & East EcosySTEM (ISEE) Hub

Visibility & Outreach

- Shirts and magnets
- Events Calendar &
Facebook Page
- Program & Event
Sponsorship
- Increased requests from
schools, STEM Nights,
and other events



South West Idaho STEM Hub (SWISH)

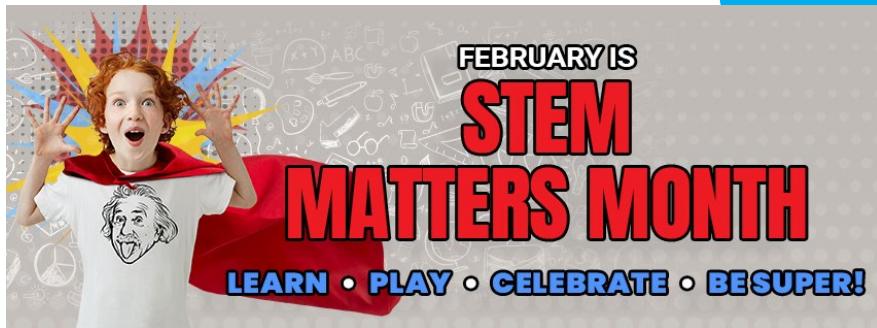
Engagement

- Over \$30k awarded to
STEM programs
- Sponsorship of STEM
GEMS Program
- STEM Nights
- STEM Day at the Fair
- Robotics Workshops



STEM Matters Month

February 2023



STEM Statewide Strategic Plan

2014 – 2018



GOAL 1

All students will have equitable access to P-20 STEM education opportunities, curriculum, programs, and policies that will improve P-20 student content knowledge, academic performance, and interest in STEM, contributing to the success of students and employees entering STEM fields.



GOAL 2

P-20 educators will be diverse and of high quality and be prepared and able to incorporate and integrate STEM education in their curriculum and instruction.



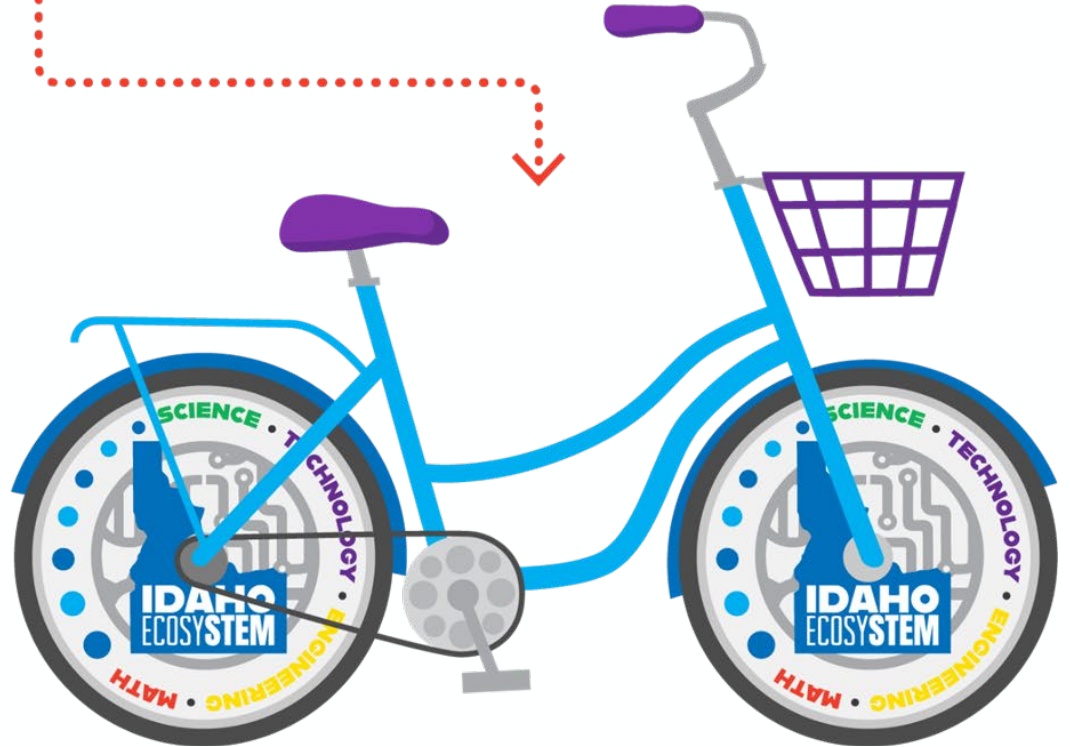
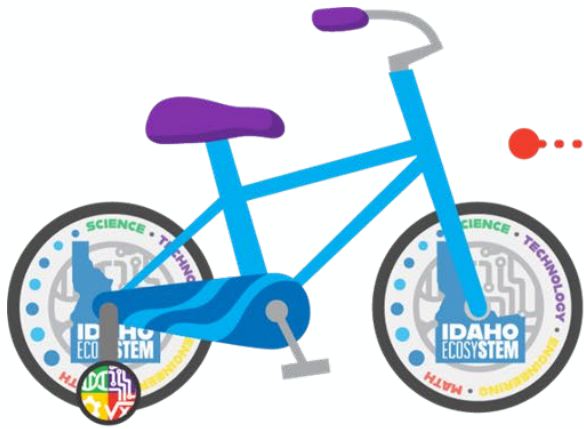
GOAL 3

Create awareness and support for STEM education across the state.

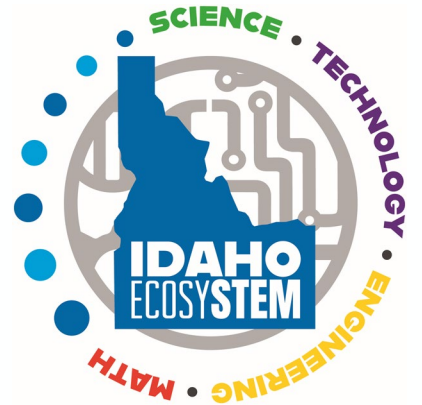


GOAL 4

Develop a diverse STEM talent base that is prepared to meet the demands of a globally competitive economy and is informed by and aligned with statewide economic and workforce development initiatives.



Questions?



Thank you!

Go be the Spark!

connor@sparkstrats.com





APPENDIX

What did we create?



Idaho EcosySTEM Leadership Team

NAME	ORGANIZATION	EcosySTEM Hub
Kay Seven	Nez Perce Tribe	INNC
Alaysha Whitworth	American Heritage Charter Schools	ISEE
Katie Kory	ATC Manufacturing	INNC
Chet Andes	Idaho Career & Technical Education	Statewide
Tracie Bent	Idaho State Board of Education	Statewide
Cathy Beals	Idaho State Department of Education	Statewide
Sonia Martinez	Idaho State University	ISEE
Erica Compton	Idaho STEM Action Center	Statewide
John McFarlane	Idaho STEM Action Center	Statewide
Melinda Davis	Impact STEM ED	INNC
Rachel A. Jameton	Lewis Clark State College	INNC
Lisa Lalliss-Skogsberg	FIRST Idaho	SWISH
John Cassleman	Schweitzer Engineering	INNC
Dennison Webb	Selkirk Outdoor and Leadership Education (SOLE Experiences)	INNC
Sarah Childers	Temple View Elementary School	ISEE

Idaho EcosySTEM Hub Coordinators:

- Ashley Schaffner – Idaho South & East EcosySTEM Hub (ISEE STEM) Coordinator
- Dan Schillo – South West Idaho STEM Hub (SWISH) Coordinator
- Susan Stauffer – Idaho North & North Central Hub (STEM INNC) Coordinator



FOUNDATION

OUR VISION

Dedicated partners collaborate to coordinate STEM experiences and opportunities in Idaho.

OUR PRIORITY AUDIENCES

- **Youth (PreK – 20)**
- **Families**
- **Educators (informal and formal)**
- **Employers**

OUR GUIDING PRINCIPLES

Reinforce Existing Activities – Avoid duplication by supporting what already exists and building reciprocal partnerships.

Ensure Balanced Representation – Prioritize inclusion of individuals who are furthest from STEM in Idaho and promote access and opportunity for all Idaho STEM voices and partners.

Lead with Connection – Bring education, industry, and other leaders to the table to collaboratively address STEM workforce development needs in Idaho.

Engage the Whole System – Communicate and work across sectors in Idaho and deliver programming at the local level.

Use Data to Drive Action – Hold a strong commitment to evidence-informed decision-making and continuous improvement.

Ground in Joy – Joyfully and inclusively advance STEM access and opportunities in Idaho.

STRATEGIC OBJECTIVES (O) & KEY RESULTS (KR)

OBJECTIVE 1 | Formalize the Idaho EcosySTEM structure.

- **KR 1:** Develop and finalize leadership team bylaws.
- **KR 2:** Review and align on selected business plan created by Boise State EMBA program and finalize process of implementation for Idaho EcosySTEM.
- **KR 3:** Build and implement an Idaho EcosySTEM communications plan.

OBJECTIVE 2 | Align communications efforts to promote awareness of the importance of STEM.

- **KR 1:** Develop shared language around Idaho regarding STEM.
- **KR 2:** Present at 3 local and statewide conferences in 2023.
- **KR 3:** Publish quarterly op-eds or other content in each region to promote local STEM success stories and partnerships.
- **KR 4:** Develop and share common metrics for measuring STEM awareness and success stories and partner on publishing annual data with the Idaho STEM Action Center.

OBJECTIVE 3 | Convene partners to build capacity and continued investment in STEM pathways.

- **KR 1:** Use the STEM experience inventory to help inform how different STEM experiences in each region can build on one another/connect to inform 3–6-month STEM pathways.
- **KR 2:** Plan the 2023 Idaho EcosySTEM convening and invite and engage parents, students, employers, educators, and statewide partners in collaborative activities. **(TRANSITIONED TO CONVENING PLANNING GROUP)**
- **KR 3:** Create a local network that includes families, educators, and employers in local communities to share tips and best practices for integrating STEM at home, in the classroom, and in the community.

OBJECTIVE 4 | Coordinate existing STEM experiences to improve access and opportunities for priority audiences.

- **KR 1:** Partner with local industry partners to build an inventory of STEM experiences and identify existing and new STEM opportunities.
- **KR 2:** Publish and share the STEM experience inventory with families, educators, and employers and manage timely updates.
- **KR 3:** Increase accessibility of professional development resources for Idaho formal and informal PreK-20 educators. **(EDUCATOR PREP WORKGROUP)**

IMPLEMENTATION

OUR MISSION

To foster the integration of STEM experiences for Idahoans, creating problem-solvers and critical thinkers who will lead and sustain our economy.

ACCOUNTABILITY STRUCTURE

Idaho EcosySTEM

A group of partners working together to support STEM learning and workforce development in all Idaho communities to ensure a prosperous future.

Infrastructure Workgroup | Communications Workgroup
Capacity Workgroup | STEM Experiences Workgroup
Educator Prep Workgroup

Leadership Team

Cohesive team that provides direction and decisions for the EcosySTEM. The Leadership Team is representative of Idaho STEM voices.

Regional Hubs (ISEE, INNC, SWISH)

Community partners that support the development of strategic implementation plans by designing solutions to enhance the regional STEM landscapes.

Idaho STEM Action Center (STEM AC)

The Idaho STEM Action Center serves as the backbone organization by providing operational support and fiscal sponsorship for the Idaho EcosySTEM at this time.

KEY PERFORMANCE INDICATORS (KPIs)

OBJECTIVE 1 | Structure and bylaws established; business plan implemented; communications plan implemented
OBJECTIVE 2 | Shared language implemented; # presentations at conferences; annual STEM data published; # of op-eds published
OBJECTIVE 3 | # of network partners and collaborators; connect STEM experiences into STEM pathway options in each region; # 2023 EcosySTEM convening attendees by group
OBJECTIVE 4 | Inventory of STEM experiences; STEM experience “inventory” is publicly available and informative for families, educators, and employers

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.



Guiding Principles



Reinforce Existing Activities

Avoid duplication by supporting what already exists and building reciprocal partnerships.



Ensure Balanced Representation

Prioritize inclusion of individuals who are furthest from STEM in Idaho and promote access and opportunity for all Idaho STEM voices and partners.



Lead with Connection

Bring education, industry, and other leaders to the table to collaboratively address STEM workforce development needs in Idaho.



Engage the Whole System

Communicate and work across sectors in Idaho and deliver programming at the local level.



Use Data to Drive Action

Hold a strong commitment to evidence-informed decision-making and continuous improvement.

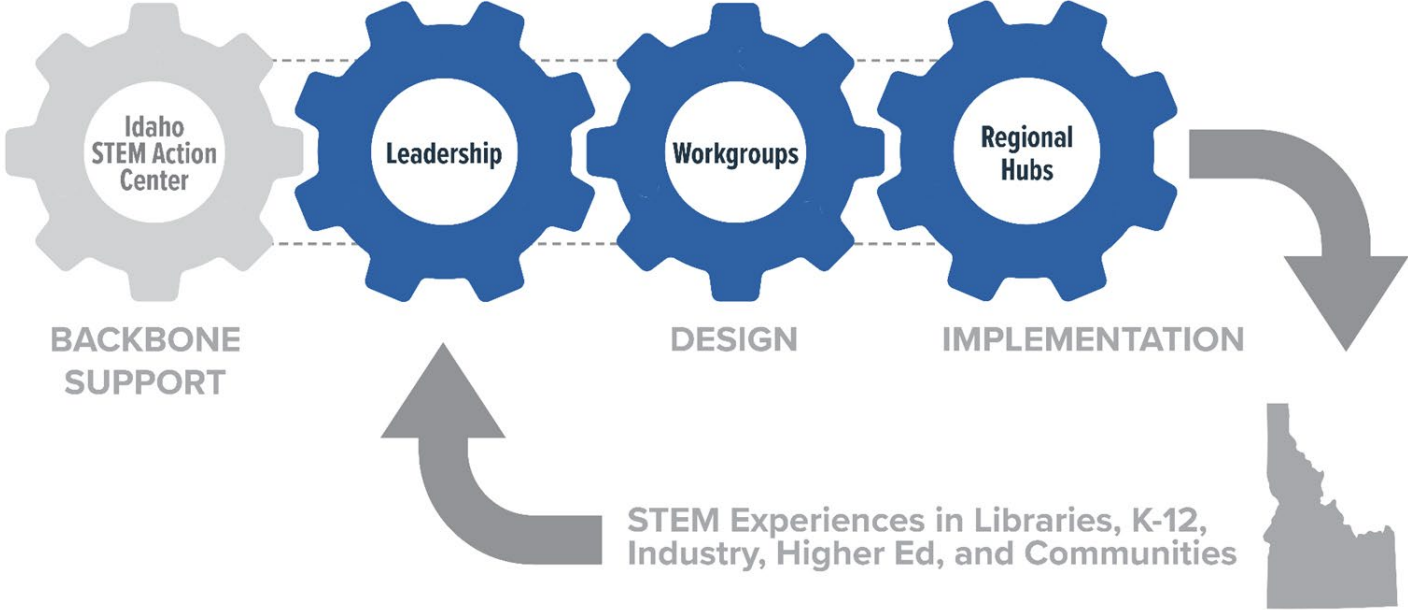


Ground in Joy

Joyfully and inclusively advance STEM access and opportunities in Idaho.



Idaho EcosySTEM Accountability Structure



Idaho EcosySTEM Implementation

WORKGROUP	STRATEGIC OBJECTIVE	MEETING DATES	PARTICIPANTS	LEAD
Infrastructure	Formalize the Idaho EcosySTEM structure.	11/16 12/14 1/11 2/8	Sarah Childers Cathy Beals Katie Kory	Erica Compton
Communications	Align communications efforts to promote awareness of the importance of STEM.	12/7 1/18 2/15	John Cassleman Melinda Davis Lisa Lalliss-Skogsberg Sarah Penney-Jackson Joshua Sneideman Kayleen Hoyt	Dan Schillo
Capacity	Convene partners to build capacity and continued investment in STEM pathways.	11/15 12/13 1/19 2/16	Aaron McKinnon Alaysha Whitworth Courtney Taylor Sonia Martinez Trisha Mick Felice Otero Frankie Adams	Susan Stauffer
STEM Experiences	Coordinate existing STEM experiences to improve access and opportunities for priority audiences.	11/30 12/15 1/5 2/2	Andrea Baerwald Angela (Angie) Good Dennison Webb Dr. Joy Jansen John McFarlane Julia Hopper Lisa Lalliss-Skogsberg Rachel A. Jameton Space Idaho	Ashley Schaffner John McFarlane



