

Title	Description	Grade Levels	Subjects	Instructor(s)
Origami: Ancient Art Meets STEAM?	Hands-on Math Using the Art and Mathematics of Paper Folding Introduce your students to the application of Geometry and correct mathematical vocabulary with ORIGAMI! In addition to mathematical thinking, we'll draw on some history, culture, and literature for a truly thematic unit. Shapes, forms, angles, Platonic Solids, Archimedean Solids, and engineering! Participants will leave this workshop with several models and all the supplies needed to further their knowledge and share the fun. *This strand is appropriate for informal educators.	3-6	Engineering, Math	Marcelle Barrett and Avery Walker
Mechanisms of a Makerspace: Design Thinking and the Maker Movement	In this strand, educators will learn more about the maker movement utilizing design thinking. Participants will leave this strand with hands-on training, a solid plan for maker focused expansion with a focus on coding and programming, and supplies necessary to keep the STEaM engine rolling in their schools and districts. Appropriate for 4-6, 7-9, and 10-12 and those informal educators from after school programs, museums and public libraries. *This strand is appropriate for informal educators.	3-12	Science, Technology, Engineering, Math, Computer Science	Morgen Larsen and Becky Firth

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STEM+C: Exploring Computation Thinking	The goal of this strand is to take STEM innovation to the next level and add Computational Thinking, commonly called STEM+C by education research. Computing is an important practice in today's tech-dependent world and students need a strong and developmental foundation to explore the nature of problem solving and increase understanding of the world and society; connecting to all disciplines. Computational Thinking is innovative and innovation is considering process, articulating thought and decisions, considering 'why' and working through ideas all the way to the end. Participants will gain knowledge in various technologies as they are prompted to keep track of iterations, generalize patterns, and record efficiency and effectiveness all while considering limitations and constraints in effort to answer the question; How can I make something better? Experiences will include 3D Modeling & Printing, Raspberry Pi, simulations, as well as "un-plugged" activities with connections to multiple content areas. *This strand is appropriate for informal educators.	5-8	Science, Technology, Engineering, Math, Computer Science	Dinah Gaddie
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Experiencing STEM through the Lens of Aviation	Research has found that teachers need to experience the same hands-on learning environments and practices as their students. In this strand, STEM subjects come to life through aviation-themed experiential activities. Educators become learners immersed in a fun and engaging atmosphere with lesson elements that include history, theory, application, experimentation, observation, makerspace, and word wall. They engage in workshops such as A Beautiful Mind(set), The Art and Science of Flying, Design and Fly a Tumblewing, Paper Airplane Design Challenge, Navigation Lab, and Help a Pilot Glide to Safety. Educators collaborate and share expertise using jigsaw groups. And they tour the Aerospace Center at North Idaho College, and the maintenance facility at Empire Airlines. Although content will be delivered to a high school level, concepts and activities are adaptable to a middle school level. Further, concepts will be explored through hands-on activities that use simple, readily-available materials. *This strand is appropriate for informal educators.	6-12	Science, Technology, Engineering, Math, Other	Rich Stowell
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Pull Out Your Cell Phones!	Few things are as personal to each of us as how we use technology in our lives daily. This strand is designed to equip teachers with digital tools to help engage, enable, and empower students to ask and answer relevant questions in academic and personal environments using student-owned technology resources. Participants will become familiar with a variety of online tools that can be used in and out of the classroom to make learning personal and relevant. Strand activities include STEM and open ended problem solving and critical thinking exercises, strategies to motivate and inspire participation, opportunities for personal and professional exploration, resources for making important decisions, collaboration practice with contributing partners, and development of 21st Century skills leading to life-long success and satisfaction. *This strand is appropriate for informal educators.	6-12	Technology	Brett Simms
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