



University of Idaho
Extension



IDAHO EXHIBITION OF IDEAS TEAM GUIDE 2026

Updated July 1, 2025



OVERVIEW

Idaho Exhibition of Ideas (IDX) is a multi-week, team-based digital design and fabrication competition where students learn and practice design, iteration, and rapid prototyping skills with 3D printing technology. Student teams brainstorm, develop, and prototype an idea for a solution that responds to a challenge theme and incorporates 3D design/printing in some way. Each team works with an educator coach, who guides the team through the design process and assists with documentation. IDX culminates in a regional Student Showcase, where teams will present their solution to a panel of judges and compete for prizes.

The **Challenge Theme for the Spring 2026 Student Showcase is Sports Science**. You can find more information about this theme, as well as suggested topic areas and resources, in the “2026 Theme Information” section at the end of this document.

Team Eligibility:

- Each team should consist of 4-6 youth in grades 5-8.
- Submissions for the 2026 Showcase will be judged in two divisions: Junior (Grades 5-6) and Senior (Grades 7-8). Mixed-grade teams are welcome; however, division will be determined based on the grade level of the oldest student on the team.
- Each team should have at least 1 adult (Coach) responsible for guiding the team, assisting with documentation and submission, and coordinating travel and chaperones to the Showcase.
 - Virtual webinar sessions will be available in the Fall and all coaches are encouraged to watch/participate.
 - Coaches are the main point of contact for the EcosySTEM.
 - Coaches are encouraged to only support one team.
 - First year coaches are required to meet with their Hub Coordinator before committing to participate in the competition.
- Teams must have access to a 3D printer and associated software in order to complete their Showcase entry.



STUDENT SHOWCASE

Locations, Dates, and Times

Four regional showcases will be held at the following dates/locations. Showcases will begin with team set-up between 9:30am and 10:30am and conclude between 3:00pm and 4:00pm on the same day. *Exact schedules are subject to change and will be provided to registered teams closer to the event.*

Registration will open in November 2025. Teams must register and attend the Regional Showcase in the location closest to the sponsoring school/organization. Travel reimbursements may be available to teams traveling over 50-miles to a showcase location.

North Idaho Student Showcase:

Location: *TBD*

Date: *TBD*

Southwest Idaho Student Showcase:

Location: *TBD*

Date: *TBD*

South Central Idaho Student Showcase:

Location: *TBD*

Date: *TBD*

East Idaho Student Showcase:

Location: *TBD*

Date: *TBD*

Stay Informed: Create your account on our Community Platform at community.idahostem.org to stay informed about updates to this year's program.



Showcase Student Requirements

Teams are required to submit an **original or innovative idea** that responds to the Challenge Theme.

Team entries should include the following:

1. Solution Prototype:

- a. A physical representation of the solution idea created primarily by 3D printing.
- b. Prototypes should be thoughtfully designed and respond to the theme in a meaningful way.
- c. Teams are highly encouraged to bring and display previous prototypes and iterations, including failed prints, that help tell the story of the team's process.

2. Digital Documentation:

- a. A 5-12 page slide deck detailing the team's process and what they have learned. [A template is provided](#) with minimum requirements, although the structure and design of the slide deck is up to the team.
- b. Slide deck should include both visual (photo/video) and written content by the students.
 - i. Slide 1: Project/Design Name and Team Name
 - ii. Slide 2: Team member names and Coach(es) name(s)
 - iii. Slide 3-12: Define the problem researched, explain the team's process and lessons learned, and review the proposed solution and prototype designed.
- c. Teams will be asked to provide the FINAL slide deck as a PDF to the EcosySTEM one week prior to the Showcase.





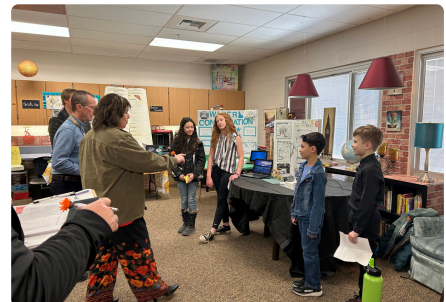
3. Presentation:

- A presentation of 5-7 minutes introducing the team's idea and describing the design process.
- Include information about the solution, how the team arrived at the idea, challenges encountered, changes made, roles of individual team members, and how the team might reiterate the design in the future.
- A slideshow is NOT required during the presentation; however, teams may choose to use the one created for their documentation, or a new one.
- The presentation will be followed up by a 3-minute Q&A with the judges. Students should be prepared to answer judge questions independently, without assistance from the Coach.

4. Visual Materials:

- Each team will be allotted a (6-8ft.) table to display the prototype, previous iterations and any accompanying visual materials.
- Team presentations will take place at team tables inside the presentation room.
- No specific visual materials are required however teams will receive a "Display" score based on how they use the space to explain their idea and process. Teams are encouraged to use a tri-fold display board to showcase their process and work.

A full scoring rubric can be [accessed at this link](#).





At the Showcase: What to Expect

- Each Showcase schedule will be unique and based on other events, tours, and presentations happening during the Showcase. A full schedule of events will be sent to Coaches approximately two weeks before each Showcase.
- Generally, teams will be allotted one hour at the beginning of the Showcase to set up and practice their presentations.
- Generally, project tables will be open to a public viewing session for family members and EcosySTEM partners. This may take place before judging begins or during deliberation.
- A catered lunch will be available for students and Coaches following set-up. If any student/coach has special dietary restrictions or food allergies, they should plan to bring a boxed lunch.
- Judges will travel from table to table for team presentations. Only presenting teams, and accompanying adults, will be allowed in the presentation room. A judging line-up will be provided so that teams know when they will be visited by the judges.
- Judges will spend 10 minutes with each team: up to 7 minutes for the presentation and an additional 3 minutes for Q&A.
- To expedite the judging process, team slide decks will be reviewed by judges prior to the start of the Showcase. Teams will be asked to submit their final slide deck as a PDF one week prior to the scheduled Showcase date.
- Students are encouraged to visit the displays of other teams. All participating students will be asked to vote on a “Student’s Choice” award for their favorite entry. The Student’s Choice Award will be given out alongside other prizes at the end of the Showcase. Students are not allowed to vote for their own project.
- A special tour or industry demonstration will be available for students during the Showcase.
- The Showcase will conclude with a brief Awards Ceremony, where prizes will be given to selected teams.



Awards and Prizes:

Place Awards:

- A 1st, 2nd, and 3rd place prize will be awarded per division. Places will be awarded based on the scores given by judges on the rubric.
 - 1st Place: New 3D Printer + \$250
 - 2nd Place: \$300
 - 3rd Place: \$250

Category Awards:

- Student's Choice Award will be awarded to the team that receives the most student votes across all divisions. All students participating in the competition are eligible to vote. Students are encouraged to vote for projects based on the same criteria as stated in the rubric. Students are not permitted to vote for their own team.
 - Student's Choice: \$100
- Judge's Award may be awarded to one junior and one senior team. This award celebrates innovation, creativity, and excellence that may not fit within the parameters of traditional place award categories, but nonetheless deserves recognition.
 - Judge's Award: \$100





TEAM ROLES AND RESPONSIBILITIES

Students

Students are the “makers” and bear most of the responsibility for developing a solution idea and completing a prototype. Student responsibilities include:

- Attending meetings/work sessions and participating by sharing ideas, giving feedback and contributing talents to get the work done.
- Using 3D design software to design and model the agreed-upon solution.
- Using 3D printing software (with Coach or Mentor supervision/assistance) to complete prints and subsequent iterations.
- Working to reach milestones and complete the project on time.
- Documenting the team’s process on a slide deck, including:
 - Developing an idea and prototype from start to finish.
 - Important discoveries and decisions along the way.
 - Challenges encountered and how the team responded/iterated.
- Being able to explain the project idea and the design process, including:
 - The role of each individual team member in developing the final prototype.
 - The reasoning behind different design decisions.
 - The overall value of the solution idea.
- Answering judge questions.
- Creating the presentation and display materials for the Showcase.





Coaches

Each team has an adult who supports the team and acts as the point of contact with the Idaho EcosySTEM. The Coach's responsibilities include:

- Registering the team with EcosySTEM.
- Arranging travel and additional chaperones to the Showcase (EcosySTEM may provide travel reimbursements for qualifying schools/organizations).
- Ensuring that any school-required permission slips or forms, including photo releases are completed by youth and their parents/guardians.
- Coordinating with youth/parents as needed to set up meetings and work sessions for them to complete the project.
- Introducing youth to 3D design software and printing technology and assisting with technical troubleshooting.
- Guiding youth through problem-solving/design thinking process. Coaches should not be heavily involved in the ideation, creation, and prototyping stage, but instead act as a guide allowing students to lead the process.
 - Provide a scaffolding/process for students to identify a problem, brainstorm a solution and develop a prototype.
 - Ask questions about design ideas and prototypes.
 - Prompt them to think about factors/users/circumstances they may not have considered.
- Submitting team documentation slide deck any information requested by EcosySTEM.



TOPIC AREA #1

Enhancing Human Performance

This subtopic explores how athletes can move, train, and recover more efficiently by understanding the science behind human performance. From biomechanics and nutrition to mental focus and recovery, students are invited to investigate how physical and mental factors work together, and how science and engineering can help optimize and improve athletic output and reduce injuries.

Sample Problem Statements:

- How can we design a tool that helps athletes stretch properly and reduce injury risk?
- How can we engineer a tool to improve form or technique in a specific sport using tactile feedback?
- How might we support athletes in maintaining focus before or during competition?





TOPIC AREA #2

Innovation in Equipment and Materials

This subtopic focuses on creating better sports gear and equipment through innovative design and materials. Whether improving safety, reducing environmental impact, minimizing weight, enhancing grip, students can explore how equipment can be engineered to meet the unique needs of today's athletes.

Sample Problem Statements:

- How can we make sports equipment more modular or customizable for different users?
- How might we reduce the cost of high-performance gear or youth athletes?
- How might we teach young athletes about the signs of concussions using a hands-on or wearable prototype?





TOPIC AREA #3

Adaptive eSports Solutions

In this subtopic, students will be challenged to design tools and devices that make eSports more accessible and inclusive. From ergonomic equipment that supports extended play to adaptive devices for players with physical disabilities, students will explore how thoughtful design can reduce barriers and improve the experience for all players.

Sample Problem Statements:

- How can we create an adaptive controller grip for players with limited hand mobility?
- How might we design a modular mouse or keyboard set up for different physical needs?
- How might we design an eSports accessory that uses visual or tactile feedback instead of sound for players with hearing impairments?





TOPIC AREA #4

Custom Sports Science-Related Topics

This option allows teams to choose their own sports science-related topic, allowing for creativity and innovation beyond the predefined subtopics. This empowers students to explore unique ideas, novel applications of sports, or address specific issues that they are passionate about within the field.



RESOURCES TO GET STARTED

- [Sportology](#): the Science and study of sport YouTube channel
- [Let's Talk Sports Science Resources](#)
- [The Institution of Engineering and Technology \(IET\) Summer Sports](#)
- [Assistive Technologies](#) module from WebAIM
- [AbleGamers](#) eSports Accessibility
- [Inventions that Changed Sports History Almanac](#)
- [8 Incredible Inventions that Opened Up the World of Sports](#)- BBC
- [Sports Innovations](#)- National Inventors Hall of Fame
- [Latest Sports Technology Innovations Enhancing Athletic Performance](#)- CAS