



Students build skills with robots

Youth perform under pressure in area competition

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JUNEAU EMPIRE

When Dave Patterson asked the audience at the opening ceremony of the Juneau Robot Jamboree on Sunday, "Who had their robot fall apart during their trials?" nearly every small hand in the audience went up.

The elementary and middle-school students were minutes away from competing in timed trials with the robots they had been building for weeks out of packaged kits that mostly included colorful Legos.



Michael Penn / Juneau Empire

► David Caldwell, 12, a student at Floyd Dryden Middle School, lines up a Lego robot Sunday during the First Lego League competition at Centennial Hall.

Eighth-grader Ian Andrews winced repeatedly through the first face-off on the main competition table as his robot struggled to perform assigned tasks such as striking a 4-inch-tall plastic "satellite tower." Despite the hours of work he and his teammates from Dzantik'i Heeni Middle School put into the project, Ian had trouble at the controls.

"There were some unexpected field set-up issues," the 13-year-old said afterwards as he set up a laptop so the team could work on problems before the next round of competition.

Meanwhile, dead batteries stymied students from a second Dzantik'i Heeni team as the clock ticked and their robot stubbornly stood still. As upbeat music blared and parents and coaches looked on, they furiously changed parts and manipulated their robot until time ran out.

Perseverance is just one trait learned by robotics participants, Patterson said. The president of the nonprofit Alaska Robotics Education Association said the competitions allow children to discover that they can find solutions and they have the capacity to accomplish their goals.

"Quiet kids that were afraid to talk in class, I've seen them become confident in what they've learned and now take the lead," Patterson said of past participants.

Sunday's event at Centennial Hall was the area's inaugural First Lego League robotics competition. Thirteen teams made up of 9- through 14-year-olds from Juneau and Hoonah competed not only with their robots, but also in categories of teamwork, design and programming.

An overall theme of "energy management and conservation" asked students to evaluate a building of their choosing for energy efficiency, then present their findings Sunday to judges. Another competition segment tested teamwork as students raced against the clock to design a specific feature out of uncooked spaghetti straws and miniature marshmallows.

A panel of judges, which included Commissioner for the Alaska Department of Education and Early Development Barbara Thomson, scored each segment of the competition and winning teams were announced Sunday afternoon.

Students from the team dubbing itself the "Irrationals" from Dzantik'i Heeni Middle School won the overall competition. They will travel to the state competition in Anchorage to represent Southeast Alaska in January. The team "Floyd Droids" from Floyd Dryden Middle School won second place overall and an invitation to compete in the state tournament from Juneau via satellite.

Alaska's winners will be invited to Atlanta for the national competition in April.

While the festive atmosphere Sunday had students dressed in costumes or donning same-colored T-shirts to promote spirit, recently retired extended learning teacher Barbara Mitchell said the event offers a special chance for kids to study serious academics.

"Most of what's done for kids academically is very small, such as a spelling bee," Mitchell said. "But to have all these kids coming together to learn problem solving and teamwork, it's what we need to get them ready for corporations."

Mitchell introduced a small group of local children to the concepts of robotics this summer by holding a two-week workshop. It is hoped the event will expand to include high school competitions in the future, in which more difficult tasks and complicated parts are assigned to older students.

Sunday's event was organized by SpringBoard, a partnership between the Juneau Economic Development Council and the U.S. Department of Defense.

Michael Penn / Juneau Empire

▶ Working as a team: Judges Eric Eriksen, left, Linda Frame and Marshal Kendziorek, right, listen to Geri McLeod's Glacier Valley Elementary School team explain their Lego robot's design.

