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Sharing space

Local students featured in book about the final frontier

Frederick Elementary School students Zion Perez, left, and Lauren Burke drew illustrations for the book "Kids to Space: A Space Traveler's Guide." Author Lonnie Jones Schorer collected students' questions about space and answers from scientists for the book. Times-Call/Bradley Wakoff

By Melanie M. Sidwell
The Daily Times-Call

LONGMONT - A book featuring dozens of students in the St. Vrain Valley School District is "bringing space down to Earth" with their questions and illustrations about the final frontier.

The book's author is Lonnie Jones Schorer, an architect, writer and space advocate.

As the director of Global Space Travelers, a subsidiary of the outreach organization ShareSpace Foundation with astronaut Buzz Aldrin, Schorer visited schools to talk about future developments in space exploration. What she learned from the students, however, was startling.

"Students were interested in space but said they felt the space effort offers few opportunities for them," she said. "Some gave up on math and science as early as fourth grade. As this was an alarming discovery, I wondered, who will be prepared to carry on with our visions for thefuture?"

She decided to begin a project that combined two things children love to do - "take vacations and ask questions" - and published the book ***"Kids to Space: A Space Traveler's Guide."***

The book contains space-related questions from children and answers from well-known space experts, including NASA engineers, former astronauts, astronomy professors and aerospace instructors.

Two years ago, Schorer sent surveys to schools throughout the country. The youngsters were asked what they would like to know before planning a trip to the moon or to an orbiting hotel, and they submitted drawings and questions.

Schorer said she received more than 18,000 responses. After eliminating duplicated questions, experts addressed the remaining 6,000 questions in the book.

"The idea was to involve a broad cross section of schools, from elementary through high school, representing all ethnic groups and economic levels," she said.

The queries and the answers range from the basic ("How do spaceships stay up in space?") to the complex ("What is delta V?"), with a mix of practical concerns (Yes, you need a license to command a spaceship) and wider issues ("Are space travel and exploration worth the time and money?").

Schorer said teachers can apply the children's curiosity about space to other topics, just as many aerospace discoveries have transferred outside the field.

For example, one of the many spinoffs from the Hubble telescope is the use of its charge-coupled device chips for digital-imaging breast biopsies; a NASA structural analysis program originally created for spacecraft design has been employed in the automobile industry and the manufacture of machine tools; and a NASA-created air-quality monitoring system is now used to test gases for compliance with smokestack emission standards.

"Humankind explores, and space exploration and settlement are a part of our future," Schorer said. "Instead of experts telling children 'This is what you have to learn,' the children are telling the experts, 'This is what we are interested in and want to know.'"

Zion Perez, now a Frederick Elementary fifth-grader, said he was surprised his illustration of a spaceship was selected for the book. The project, he said, initiated an interest in outer space.

"I didn't know a lot about space before," he said. "But now I have a telescope to look at the moon and the stars."

Emma Dell, now a seventh-grader at Sunset Middle, drew a picture of a gravity switch "so astronauts could turn turn it on and off," and the drawing is featured in the chapter about gravity.

Dell said the book educates students about space-exploration topics and encourages them to keep dreaming big.

"The kids learn in the book what we're capable of," she said. "These (questions) are the ideas for our generation to work on."