

'Imiloa's planetarium technician Emily Peavy just earned her M.Ed. from UH Hilo, her thesis published in planetarium journal

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By Staff

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For her master's thesis, nine-year 'Imiloa veteran Emily Peavy conducted research on the efficacy of two different styles of teaching the public in a planetarium setting: interactive with a presenter, and passive with a movie. Participants in the study rated the educational and entertainment value of these two forms of programming.

By Susan Enright.



Emily Peavy in her element. Photo credit: Raiatea Arcuri for UH Hilo Stories.

Emily Peavy, planetarium technician and educator at 'Imiloa Astronomy Center for almost nine years, says the inspiration to recently earn her master degree came from her father, who nurtured her passion for both astronomy and education, guiding her to be the educator she is today.

"Education was a key core value that my father passed on to me and I feel like I am doing him proud," she says.

'Imiloa Astronomy Center is an outreach educational center on the campus of the University

of Hawai'i at Hilo, with a mission of educating the public on parallels between Hawaiian culture and western science. The center is a magnet for large groups of schoolchildren from around the island and state, who come not only to learn about astronomy but also about Native Hawaiian culture, the natural environment, cultivation of indigenous plants, conservation of insects and birds, and more.

Peavy, who has worked in different capacities during her years at 'Imiloa, recently completed the UH Hilo master of education program (M.Ed); her thesis was published in *Planetarian Journal of the International Planetarium Society* in December.

The research

Peavy's thesis, "Live and Pre-recorded Planetarium Programs Comparing Perceived Education and Entertainment Value," studied the efficacy of two different styles of teaching the public in a planetarium setting: 1) programming where planetarium audiences attend live programs with an interactive speaker or presenter, and 2) pre-recorded programs with the main feature being an educational movie. Participants in the study rated the educational and entertainment value of these two forms of programming.



Planetarium at 'Imiloa Astronomy Center. For her master thesis, planetarium technician and educator Emily Peavy conducted research on two different styles of teaching the public in a planetarium setting: interactive and passive. Participants in the study rated the educational and entertainment value of these two forms of programming. Photo courtesy of 'Imiloa.

"We found that audiences found the live program to be considerably more educational and entertaining than the pre-recorded program," says Peavy. "We can speculate that this is the result of the direct interactive quality of a live speaker who can encourage different forms of

active thinking, which a pre-recorded program could not. Supplementarily, my work also addressed the dynamic of education and entertainment in free-choice or informal learning environments.”



'Imiloa Astronomy Center

“With this in mind, at 'Imiloa we have been challenging ourselves to create more live and interactive programming that can actively engage the audiences with creative and critical thinking all within a memorable experience,” she says.

“For example, this past October, 'Imiloa organized a pre-halloween event celebrating nocturnal animals,” Peavy explains. “In the planetarium we organized a live, interactive, semi-theatrical program where audiences boarded a spaceship and were recruited as science officers on the spaceship to search for the nocturnal extreme. This program required the audience to think about daytime and nighttime on the surface of a planet and from the perspective of space as well as think about how life could potentially evolve elsewhere in the solar system under the most extreme conditions.”

The interactive program was a huge hit and, based on reactions, audiences appreciated the break from common passive learning experiences.

Improving skills



Emily Peavy's research conducted for her master of education thesis was published in Planetarian Journal of the International Planetarium Society in December.

In addition to her dad's encouragement, Peavy also was driven to earn her master's degree through her own nature to constantly learn and grow.

"I feel like I cannot stay stagnant for long, I always need to be improving myself in one way or another," she explains. "In pursuing my master of education, I was working to improve upon my skills as an educator."

The master of education program at UH Hilo is a professional development program designed to give local K-12 teachers the tools to become teacher leaders in their schools and communities while introducing them to the world of education research and how it can be applied to their classrooms and careers.

“No other profession deserves more respect than teachers in our K-12 classrooms, these educators care so strongly about their students and their effectiveness as educators to benefit the lives of their students and our community overall,” says Peavy. As she is not a classroom teacher per se, the planetarium technician worked directly with the education department and petitioned to join the program as an informal educator.

Peavy especially valued the way she and her classmates were asked to reflect on their perspectives and the unique backgrounds and worldviews each brought to learning experiences, both as educators and learners. She found great value in learning from others in the cohort, each with their own unique perspectives.

“Challenging myself to reflect on my own perspective as an individual, and how that can impact my role as an educator and how I interact with the unique worldviews in my role as an educator opened my eyes to all of these new perspectives,” she says. “[It] further challenges me in my role as an educator.”

Peavy believes it is of the utmost importance to the local community as a whole for UH Hilo to maintain its higher education and professional development opportunities and programs.

“When I first started thinking about pursuing another degree, I actually started by looking at programs on the mainland,” she says. “But when I found out that there was a program that would allow me to stay in Hawai‘i, continue my work here as an educator as I learned more, and directly impact my local community, then the choice was clear which program would be right for me.”

She adds, “For UH Hilo to help impact and grow our local community, these programs and our unique undergraduate programs need to grow and be maintained.”

Story by Susan Enright, a public information specialist for the Office of the Chancellor and editor of UH Hilo Stories. She received her bachelor of arts in English and certificate in women’s studies from UH Hilo.