



Contributor:

Erin Partridge, PhD, ATR-BC

Art Therapist

Elder Care Alliance, California



The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 6,000 not-for-profit organizations dedicated to expanding the world of possibilities for aging.

For more information contact:

Zohra Sirat, Project Manager, CAST
zsirat@LeadingAge.org
(202) 508-9438
LeadingAge.org/CAST



Amplified Voices: Art-based Inquiry into Communication with Older Adults

Categories

Functional/Health Outcomes

Quality of Life/Satisfaction with Care

Organization Type/Care Settings

(Elder care communities serving older adults with limited verbal communication abilities) Independent Senior Living Communities, Assisted Living Facilities, Skilled Nursing Facilities, Memory Care, Life Plan Communities (formerly Continuing Care Retirement Communities (CCRC))

Other Partners

- A non-profit organization operating four elder care communities in California.
- HP provided Sprout by HP all-in-one computer technology for the study.
- A student researcher from Notre Dame de Namur in Belmont, Calif., recorded and transcribed interviews with participants.

Professional Background

Erin Partridge, PhD, ATR-BC

Researcher, Author "Amplified Voices: Art Based Inquiry into Elder Communication," 2016

Art Therapist with Elder Care Alliance, California

Erin Partridge is an artist and board-certified, registered art therapist living on a ranch in the Bay Area. Her clinical experience includes work in community, pediatric, forensic, and geriatric settings. Erin received a BFA, studying fine art, psychology and women's studies at Cal Poly, San Luis Obispo. She obtained a MA in art therapy from New York University in 2008; her thesis work was about her work with a young child with Mobius syndrome and tactile defensiveness. She completed her PhD in art therapy at Notre Dame de Namur in 2016. Her dissertation work investigated the communication experiences in the elder care setting through art-based and participatory inquiry.

Project Description

Dr. Erin Partridge investigated communication needs and experiences of 59 older adults to help support patient-directed elder care in light of a growing population with Alzheimer's and memory challenges. Dr. Partridge integrated [Sprout by HP](#) into four elder care communities to research effective forms of communication through individual and group art projects. The Sprout technology platform provided accessibility for minimally verbal and nonverbal elders to communicate, interact with, and participate in, their own care and community while creating a positive experience and enriching their quality of life.

System Type

- Sprout by HP is an all-in-one computer with two touch surfaces – the computer monitor and a flat horizontal touch mat.
- The touch mat is a 20" diagonal, 20-point touch-enabled touch mat with an ultra-resistant top coating.
- HP Illuminator is powered by the HP DLP Projector, the HP High-Resolution Camera with up to 4.6 megapixel resolution and the Intel® RealSense™ 3D Camera for instant capture of 2D and 3D objects, along with an LED desk lamp.
- The stylus is an Adonit Jot Pro stylus to facilitate writing and drawing comfortably. It can be attached magnetically to the upper-right side of the Sprout display.
- The integrated display is a 23" diagonal, 10-point touch-enabled, Wide Viewing Angle, White-LED backlit LCD Display.

Business Model

The research was supported in-kind by Elder Care Alliance. (Note: It was not funded.)

Implementation Approach

Erin Partridge, PhD, ATR-BC, recently concluded doctoral research and a written thesis in her work with a non-profit organization operating four elder care communities in California. In order to address the evolving needs of the older adult population, Dr. Partridge worked to expand the spectrum of communication for participants involved.

The American population over age 65 is growing and projected to reach 20% of the population by 2030.

Diagnosis of Alzheimer's now impacts more than five million Americans and is increasing. The group over the age of 85 is of greatest concern as it is the most frail, least able to adapt, and experiencing the most decrease in life-satisfaction. The White House Conference on Aging discussions highlight the importance of creating opportunities for older adults to stay connected.

The overall focus of this research process and thesis was to help amplify the voices of the above-mentioned population of older adults. The research process incorporated Sprout by HP technology to obtain participation and input from minimally verbal and nonverbal elders, a group seldom able to communicate and effectively provide input.

Partridge integrated the Sprout by HP to provide older adults with easy-to-use computer images to initiate dialog and communicate in non-verbal ways through markings generated with the simple touch of a finger on Sprout's touch mat. Individual and group art-based projects provided significant engagement in the elder care setting.

The Sprout by HP provided opportunities for participating older adults to create images that could express their ideas, help them communicate, and nonverbally respond to questions through art and drawing.

Participating older adults were asked to work at the Sprout by HP and pose a jointed human figure. This simple outline of a human body was used so participants could use a figure to represent themselves and another figure to represent someone they communicate with. Participants made additional marks with a simple finger movement on the touch mat to add observations or comments. A strong majority—85%—depicted two figures facing each other and 11% depicted the figures facing the same direction. The participants described posture, whether upright, bent over or seated.

Many participants put a lot of thought into their color choice. Some described the feeling they wanted to represent and then selecting a color accordingly. A memory care resident described the reasoning for choosing blue. "Bright blue— we've all got the blues." In this case, the color illustrated emotion and life satisfaction.

Advantages to the Approach

Use of the Sprout by HP with older adults helps forge a connection between older adults and new technology. It also encouraged input by providing older adults, including those with dementia, with an accessible means to share experiences and ideas in art and words.

The ability to provide visual responses helped participants communicate emotions and concerns. One man visually described his biggest fear as falling and needing a higher level of care. He had a previous experience falling on the sidewalk and called out for help. He knew falling was a big warning sign and now he feared another fall that could require him to go to a care center.

Outcomes

The research yielded rich responses from the senior communities. The older adults used the art to illustrate their strengths as well as express concerns and voice their needs. The technology helped remove barriers. One participant commented, “What is interesting about this process is you learn more about yourself that you ever thought you would.” Participating older adults were able to self-evaluate and self-reflect.

After a very short demonstration, individuals were able to interact with the Sprout using the HP touch mat to create images. The sensitivity of the touch mat, the familiar flat horizontal position, and the immediacy of being able to work with their fingers gave participants an experience similar to drawing on paper, but without the difficulty of gripping, applying pressure, and drawing or writing by hand. The touch mat allowed older adults to create expressively like in finger painting. Creativity and technology are areas of interest for researchers studying brain health and cognitive decline.

Including the Sprout by HP in the process provided greater access to qualitative information from the participants. Many older adults are willing and able to participate, communicate, and share ideas given appropriate accessibility tools to ease the process. As the older adult population increases, it is important not to let their voices fade.

Participants envisioned a variety of potentials for using technology. Some expressed that technology could assist with age-related limitations to verbal communications. And many participating older adults thought the technology has the potential to increase access to family and friends. Through art-based communication and art

projects, participants also recognized technology as a new and exciting tool for new projects, family projects, and more. Even the simple process of searching the Internet for information using touch was extremely appealing.

Simplicity was an emergent theme in the feedback of participants. One participant drew one line, connecting her figure to her sister. “Nothing is very complicated, I know that. It comes from my heart. Like, if I’m saying it and it is going to her, I would draw it from my mouth to her heart,” she responded.

With regard to technology, the theme of simplicity was common as well. Several participants described a need to simplify technology to empower older adults to use new tools; an adult volunteer suggested making it as “seamless and intuitive as possible” for elders to use new technology.

Challenges and Pitfalls to Avoid

The older adult participants were clear about wanting simplicity in technology. It is important to introduce easy-to-use and easy to understand technology with simple instructions and beneficial results, especially in research studies. Technology is not likely to be accepted if it is complex or confusing for the user population. Research participants should be able to intuitively start using technology tools with little or no assistance. In this research, the participants immediately started using the technology intuitively.

Lessons Learned

Participating older adults demonstrated a high level of enthusiasm for the process of providing their input through the Sprout technology tools. Assisted-living residents were lined up to participate the first day of the research study and the input sessions with older adults. Some even called the front desk to ask how to take part in the research. In future studies, we would provide supplemental information about the importance of participation of older adults in relevant research.

Advice to Share with Others

Input from older adults helped generate new ideas for future art projects and activities. Visiting family and friends can engage in an activity together along with their older loved ones, and at the same time, create new memories and keepsakes of the positive experience.

Art therapists have an ability to facilitate opportunities for all elders to participate in conversation. Art activities at older adult and senior living communities can help enhance the daily sense of friendship and create new experiences that encourage and confirm a positive quality of life experience.

A staff participant explained that we can learn a lot from elders just from listening. The stories they tell, the advice they give, everything they say – it always comes from the heart.

Dr. Partridge concluded that to learn anything from elders, we must slow down, listen and allow the voice of the elders to communicate. And today, that ‘voice’ may be heard in newly expressive ways, thanks to innovative technologies, like Sprout.