

## Chapter 86

# The LiveAbility House: A Collaborative Adventure in Discovery Learning

**Sarah D. Kirby**

*North Carolina State University, USA*

**Debra M. Sellers**

*Kansas State University, USA*

### ABSTRACT

*This chapter follows efforts of an online community of practice whose mission is to make individual educational experiences for family caregivers widely available. The case study illustrates the collaborative learning and creative processes of the community of practice as it worked to construct and transform informal educational content into engaging, interactive, and immersive educational tools for its intended audience. As part of its efforts, the CoP created The LiveAbility House, a virtual demonstration home, constructed in Second Life®. This virtual home is designed to teach individuals about real life universal design principles and assistive technology devices that may increase their ability to remain living at home despite physical or cognitive challenges they may encounter due to aging, illness, or disability. In addition to the creation of a virtual learning experience, the chapter also addresses plans to then take that experience out of the virtual world and apply and demonstrate learning principles in a real world setting.*

### INTRODUCTION

In this chapter, we detail the development of a specific project, The LiveAbility House (TLH), constructed within the virtual world of Second Life®. The LiveAbility House is a virtual home,

built to educate individuals about universal design principles and assistive technology devices. Specifically, the goal of TLH is to raise public awareness of design features and assistive technology that can make it possible to remain in a home with physical or cognitive challenges due to aging, illness, or disability.

DOI: 10.4018/978-1-4666-4422-9.ch086

This project was formulated and implemented within the structure of a national community of practice with a mission to create informal educational materials for family caregivers. We discuss the importance of the community of practice as a foundation for the project, the partnerships that were formed as a result of the community's work over several years, the expansion of the community into immersive learning environments, and the current status of the project. We will emphasize the challenges that we faced as subject-matter experts exploring the use of an innovative technological platform for informal education. Finally, we discuss the limitations and projected next steps for the project.

## **BACKGROUND: LAYING THE FOUNDATION**

In order to fully understand the developmental process that took place in developing TLH, we will discuss the context of our work. A holistic, historic, and long-range view of our mission is necessary, we believe, to understand TLH as a progression of innovative educational outreach that has existed for 100 years. The land-grant university and Cooperative Extension systems and the eXtension initiative and corresponding communities of practice provided the foundation for the project's inception; the setting was crucial for its development.

### **The Land-Grant University and Cooperative Extension Systems**

Land-grant universities were established by the Morrill Act (1862), which provided funds from the sale of public lands to establish colleges concentrating in agricultural and mechanical arts for the "liberal and practical education of the industrial classes on the several pursuits and professions in life." In 1890 a second Morrill Act established sixteen land-grant universities to address the needs

of the African-American population, again with a focus on agriculture and mechanical arts. These institutions are often referred to as historically-black colleges and universities.

The Cooperative Extension System (CES) was initially established through the Smith-Lever Act of 1914 and extends the educational mission of land-grant universities to include informal education, outreach, and engagement. CES utilizes the research of academicians at the land-grant university to develop, implement, and evaluate evidence-based educational programs to help citizens improve the quality of their lives.

### **The Cooperative Extension System and Adult Learners**

Early on, Cooperative Extension targeted the education of adult learners through concrete, hands-on learning application. The Smith-Lever Act specifically mentions the development of practical applications of research knowledge and the provision of instruction and applied demonstrations of existing or improved practices or technologies in agriculture (National Institute of Food and Agriculture [NIFA], 2010a). The Extension Workers' Creed (Lloyd, 1922) is reflective of a philosophy that centers the acquisition of knowledge and application with the learner. The Creed begins with the following statements:

*I Believe in people and their hopes, their aspirations, and their faith; in their right to make their own plans and arrive at their own decisions; in their ability and power to enlarge their lives and plan for the happiness of those they love.*

*I Believe that education, of which Extension is an essential part, is basic in stimulating individual initiative, self-determination, and leadership; that these are the keys to democracy and that people when given facts they understand, will act not only in their self-interest, but also in the interest of society.*

22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/the-liveability-house/80693](http://www.igi-global.com/chapter/the-liveability-house/80693)

## Related Content

---

### Technology to Facilitate the General Education Curriculum

Cindy K. Sherman and Susan De La Paz (2014). *Assistive Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 1332-1339).

[www.irma-international.org/chapter/technology-to-facilitate-the-general-education-curriculum/80676](http://www.irma-international.org/chapter/technology-to-facilitate-the-general-education-curriculum/80676)

### Sensors and their Application for Disabled and Elderly People

Jesus Tomas, Jaime Lloret, Diana Briand Sandra Sendra (2014). *Assistive Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 357-376).

[www.irma-international.org/chapter/sensors-and-their-application-for-disabled-and-elderly-people/80621](http://www.irma-international.org/chapter/sensors-and-their-application-for-disabled-and-elderly-people/80621)

### Gaze-Based Assistive Technologies

Thies Pfeiffer (2014). *Assistive Technologies and Computer Access for Motor Disabilities* (pp. 90-109).

[www.irma-international.org/chapter/gaze-based-assistive-technologies/78425](http://www.irma-international.org/chapter/gaze-based-assistive-technologies/78425)

### Assistive Technology and Rehabilitation Engineering

Andrew Y. J. Szeto (2014). *Assistive Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 277-331).

[www.irma-international.org/chapter/assistive-technology-and-rehabilitation-engineering/80617](http://www.irma-international.org/chapter/assistive-technology-and-rehabilitation-engineering/80617)

### Helping Struggling Writers: Assistive Technology as Part of Intervention Programming

Michael Dunn (2014). *Assistive Technology Research, Practice, and Theory* (pp. 44-56).

[www.irma-international.org/chapter/helping-struggling-writers/93468](http://www.irma-international.org/chapter/helping-struggling-writers/93468)