

Overview of Universal Design Issues

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This issue of *Housing and Society* begins with two articles on universal design, a topic of interest to many HERA members. The first article by Roberta Null (coauthor of *Universal Design: Creative Solutions for ADA Compliance*) describes the development of the universal design concept from a unique perspective involving her interactions with the founder of the universal design movement, Ron Mace, and her work in designing a low-vision kitchen at San Diego State University. Null discusses the seven principles of universal design as well as efforts by a number of HERA members who have contributed to educating students, professionals, and students in universal design. As noted by Null, the universal design concept will become even more important in the future as housing and design professionals develop, build, and design housing for an aging population.

Carolyn Deardorff and Craig Birdsong present research to clarify a common terminology regarding universal design and related terms. This is a need stated by Ron Mace in the 1980s. The definition of universal design is accepted by most housing and design professionals as the design of products and environments to be useable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The list of definitions and the model that resulted from this research should become part of the philosophy of housing and design professionals, and can serve as excellent handouts in the classroom or workshops.

The articles on universal design are followed by research reporting the effects of functional disability, personal assistance, and built environment features on the relocation of older persons. Not surprisingly, the development of disabilities increases the likelihood of relocation to either other housing situations or to a nursing home. What is fascinating in this article is the finding that the presence of simple built environment features in the home reduces the likelihood of an older person with a disability to be relocated to a nursing home. The five built environment features all fit in nicely with a universally designed home in the form of home modifications.

In Colorado, Cooperative Extension has developed a home modifications program focusing on universal design and built environment features. The program consists of a variety of materials, including references and Cooperative Extension fact sheets, available to housing educators:

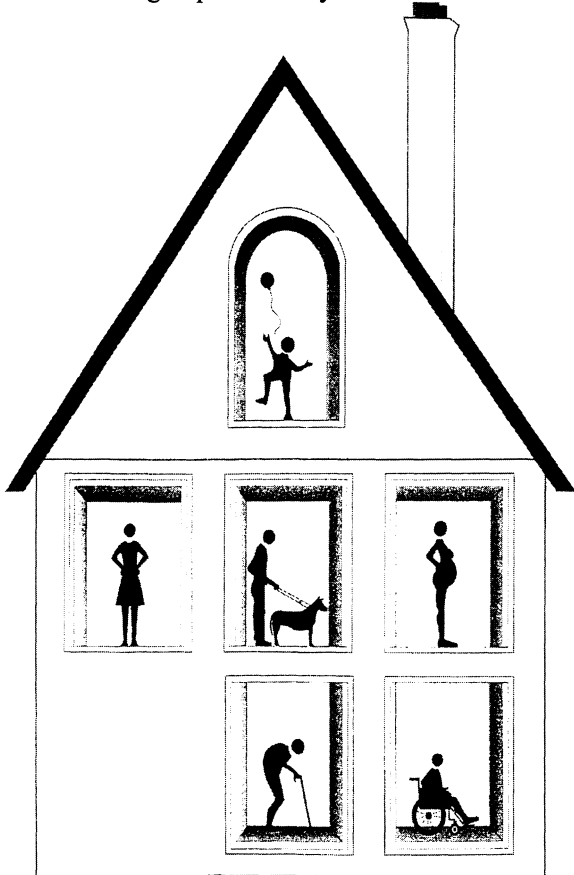
Overhead transparencies cover demographics such as living arrangements of seniors, physical changes associated with aging, the importance of housing, and simple home modifications such as removing doormats or throw rugs, removing unnecessary furniture that reduces open space, making sure all furniture is sturdy, maintaining proper lighting, and using contrasting colors to give important objects more visibility.

Home Sweet Home is a video directed at older persons and their children that discusses age-related changes and home modifications.

Product catalogs for program participants to look through so they can develop a better knowledge of types of modifications and assistive devices, places where they can be purchased, and cost.

Assistive devices that can be easily purchased at low cost. During a program older persons can see and feel the 38 devices, including kitchen utensils with large rubber handles, a carpet gripper, a cutting board safety pad, a door knob opener, grab-bars, and motion activated light controls.

Illustration boards consisting of floor plans, materials, and rendered perspectives show program participants how modifications might look in their homes. These include larger scale modifications such as installing a ramp, designing an accessible bathroom, and relocating important daily activities to one floor of the house.



This illustration portrays diverse individuals that universal design must take into account: children, persons with visual impairments, pregnant women and others who may have temporary problems navigating the built environment, older persons who may be frail, wheelchair users, and persons experiencing no disabilities or who have disabilities not readily noticed such as hearing impairments, arthritis, or cognitive difficulties. The key idea is that universal design is quality design for all people.

Adapted from U.S. Department of Housing and Urban Development brochure cover, 1988.