Education and Advocacy for Universal design and Accessibility in Housing

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Education and Advocacy for Universal design and Accessibility in Housing
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BACKGROUND

- In the United States, 1 in 4 adults has a disability (Centers for Disease Control and Prevention, 2022).
- By 2060, the number of people with mobility limitations is expected to double (Wellecke et al., 2022).
- Only 5% of the housing market in the United States offers accessibility for people with moderate mobility difficulties, while less than 1% of housing is accessible for wheelchairs (Bo'sher et al., 2015).
- Financial limitations and socioeconomic constraints are the main barriers preventing from living in accessible houses (Bo'sher et al., 2015).

PROBLEM

In the United States, there is a lack of adequate numbers of universally designed houses in the housing market for the elderly and people with disabilities. The lack of universally designed houses limits accessibility and participation in desired occupations.

PURPOSE

The purpose of this project was to provide education and advocacy for universal design and accessibility in housing by:
- Educating people with disabilities and older populations about financial resources and environmental barriers.
- Educating and advocating for other professionals including architects, interior designers, builders, and realtors by creating an educational universal design booklet, checklist, blueprints, and blog to increase universal design housing options.

METHODS

**Need Assessment:** recruited from Uncurbed in Iowa and California

**People with Disabilities and Older Population**

**Interviews** (in-person with home observation, virtual, and phone calls)
- Self-created 11 demographic and 10 project-related questions
- Semi-structured interviews with approximately 45 minutes

**Surveys** (online and paper)
- The rate of accessibility for each occupation at home
- Self-created 13 questions multiple choices with an option for short answers
- Scale from 1 (Not accessible) – 5 (Very accessible)

**Other Relevant Professionals**

**Interviews** (in-person, virtual, and phone calls)
- include architects, interior designers, an interior design student, and realtors
- Self-created 5 demographic and 11 project-related questions
- Semi-structure interviews with approximately 45 minutes

**Learning Experiences:** Contributed to product developments
- ASID with windshield walking observation
- Abilities Expo
- ACTCP (ADA courses)
- Housing Element and DRC
- HMOTA

PRODUCT DEVELOPMENTS

These products were created with Uncurbed by utilizing the literature and conducting a needs assessment and learning experiences.

<table>
<thead>
<tr>
<th>UD housing experience booklet</th>
<th>UD housing checklist</th>
<th>UD Blueprints</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st chapter: background of universal designs and professional resources</td>
<td>Attached in the booklet</td>
<td>Attached in the booklet for illustration</td>
</tr>
<tr>
<td>2nd chapter: accessible MLS terms</td>
<td>Subsequent chapters covered:</td>
<td>Created 3 blueprints for tiny cabin houses using Smart Draw and Chief Architect software through Uncurbed</td>
</tr>
<tr>
<td>3rd chapter: financial resources</td>
<td>- Entrances and exits</td>
<td></td>
</tr>
<tr>
<td>4th chapter: attached blueprints</td>
<td>- Interiors (doors, windows, flooring, stairs, elevator)</td>
<td></td>
</tr>
<tr>
<td>5th chapter: attached UD checklist</td>
<td>- Kitchens</td>
<td></td>
</tr>
<tr>
<td>6th chapter: additional resources</td>
<td>- Bathrooms</td>
<td></td>
</tr>
<tr>
<td>7th chapter: additional resources</td>
<td>- Bedrooms</td>
<td></td>
</tr>
<tr>
<td>8th chapter: additional resources</td>
<td>- Additional areas</td>
<td></td>
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</tbody>
</table>

Deliverable

All the products were posted on the blog on Uncurbed LinkedIn. The blog provided a summary of the project and the products.

Discussions

- The main barriers that prevent people from living in accessible housing include unaffordability, lack of availability, lack of knowledge for design professionals, and government barriers.
- Kitchens and bathrooms are the most complex rooms with many environmental barriers.
- Even though the ADA guidelines do not cover residential dwellings, design professionals still can utilize the guidelines to build housing with minimum accessible features.

IMPLICATIONS FOR OT

- This project would increase the understanding of OT roles for other professionals so that they know the importance of OT in this field.
- In clinical settings, OTs can use the products to increase their understanding of universal design and housing accessibility. OTs can provide the financial resources within the booklet to clients who face housing-related challenges.
- In home modification and universal design practice, OTs can utilize the UD checklist as a powerful communication tool between design experts and clients. This would reduce the barriers at home and increase clients’ occupational performance.

References


Centers for Disease Control and Prevention. (2016, October 26). Disability impacts all of us infographic. [Infographic](https://www.cdc.gov/ncbddd/disabilityandhealth/infographic)


This project does not involve human subjects and does not require IRB approval.