

**“UNIVERSAL DESIGN: HOUSING SOLUTIONS FOR
ALL AGES AND ABILITIES”**
Leader Lesson Guide

Program Goal: To educate consumers and/or professionals on how to create attractive home environments that are usable and convenient for persons of any age or ability

Objectives:

Enable participants to:

1. Appreciate the value of planning an environment that is accessible for everyone.
2. Understand the concept of Universal Design.
3. Accurately assess individual limitations (physical/mobility) and evaluate features of the home living environment.
4. Identify universal design features and products that contribute to maintaining an independent lifestyle.
5. Plan for short term and long range changes that make the home a place that is safe, comfortable and user-friendly for all ages and abilities.

Things to think about when offering this program:

Section 1:

Time needed: 20 to 30 minutes

- 15 to 20 minutes for lesson
- 10 to 15 minutes for discussion if time allows

Section 2:

Time Needed: 20-30 minutes

- 20 minutes for lesson
- 15 minutes for discussion if time allows

NOTE: Due to a flexible format, this program can be offered in as short as 5 minutes or as long as 45 minutes.

Audience composition:

Older adults, adult children of aging parents, healthcare professionals (physical therapists, occupational therapists, nurses, social workers) builders, remodelers, real estate agents, home buyers, renters, and families with children.

Room set up:

Room set up will depend on the size of the audience, however, in order to encourage discussion, a circle or horseshoe arrangement is suggested with room for a presenter in front.

Equipment:

Overhead projector if using transparencies.

Supplies:

- (1) Universal Design Power Point transparencies or handout with 6 Power Point slides per page.
- (2) Universal Design resource folder for each participant

Format:

Lecture with group discussion Speakers notes are provided with visual reminder for corresponding Power Point slide.

Section 1 – What is Universal Design?

Section 2 – Identifying the Top 10 Features and Making a Plan

NOTE: These sections can be used together or individually.

Optional: Universal Design table-top display*

Universally designed products or fixtures*

Carpet or flooring samples

Safety devices (i.e.,smoke or carbon monoxide detectors)

*available at each District Office

What is Universal Design?

“Good News! We’re living longer. Most of us can look forward to many more years ahead. However, as we get older we may face some limitations with our strength and mobility. These changes can often make our homes much more difficult to live in. Also, we may have loved ones who are not able to use and enjoy features in our homes or worse may not be able to visit us because our homes are too difficult for them to get around in.”



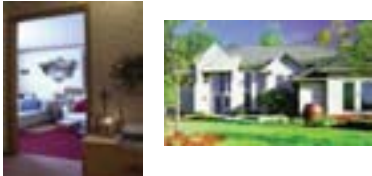
	<p>“Today we’re going to talk about Universal Design and how it can simplify our lives no matter how old we are, what our abilities are, or how much money we have.”</p>
<p>Have you ever?</p> <p>Struggled to get something big through a narrow door?</p> 	<p>“Ask yourself – Have you ever: - Struggled to get something big through a narrow door?”</p>
<p>Realized parts of your house weren’t convenient for children?</p> 	<p>“Realized parts of your house weren’t convenient for children?”</p>
<p>Wished you had more light?</p> 	<p>“Wished you had more light?”</p>
<p>Found it awkward to complete a cleaning task?</p> 	<p>“Found it awkward to complete a cleaning task?”</p>


<p>Had trouble reaching something on a high shelf?</p> 	<p>“Had trouble reaching something on a high shelf?”</p>
<p>Needed a handrail ?</p> 	<p>“Needed a handrail?”</p>
<p>Struggled to open a door with your hands full?</p> 	<p>“Struggled to open a door with your hands full?”</p>
<p>Then Universal Design is for You!</p> <p>What is Universal Design?</p> <p>It is simply... The design of environments and products that are useable for all people.</p>	<p>“Then Universal Design is for you!”</p>

“What is Universal Design? [Read] ‘The Center for Universal Design at North Carolina State University defines it 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.’ We might say simply that it is the design of environments and products that are useable for all people. There is a fact sheet on Universal Design in the left pocket of your folder that provides more details about Universal Design.”

<p>What Universal Design is NOT!</p> <ul style="list-style-type: none"> ➤ NOT JUST for persons with disabilities such as those in wheelchairs or older adults ➤ NOT "Handicapped design" ➤ NOT restricted by specific code requirements such as ADA 	<p>“In talking about Universal Design today, keep in mind what it is not. It is not just for people with disabilities such as those in a wheelchair or senior adults. It is not ‘Handicapped design’. And there are no specific code requirements such as with the American with Disabilities Act (ADA).”</p>
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“What it does do is...”

<p>However, Universal Design does help people of all ages and abilities...</p> 	<p>“Help people of all ages and abilities. No matter what age you are or what your abilities are, Universal Design features can make your home more livable.”</p>
<p>Improve comfort and ease of living</p> 	<p>“Universal Design will improve the comfort and ease of living in your home. There are many universally designed products that can make your life easier. Lever controls can replace knobs. A detachable faucet makes it easy for someone in a wheelchair to use the sink. Having a keypad lock helps someone with arthritis unlock their door. For those who have trouble getting around, it is very convenient to have remote controls for lights, ceiling fans or shade blinds.”</p>
<p>Improve home resale value</p> 	<p>“Having universal design features in your home can make it more valuable should you decide to sell it. For instance, if you have 32” wide doorways and a sloped entryway, remind potential buyers that these features would make it easy for someone using a walker or wheelchair to use your house.”</p>

<p>Help someone "age in place"</p> 	<p>“Most older adults will tell you they don’t want to leave their home even when their physical abilities change. If you want to ‘age in place’ most of the things you need to make your home safe and accessible can be found in a home improvement store. Some of the changes you can make yourself and some of the major projects need to be done by a professional.”</p>
<p>WHO SHOULD USE UNIVERSAL DESIGN?</p> <ul style="list-style-type: none">➤ Builders➤ Architects➤ Remodelers➤ Homeowners➤ Renters➤ Those Shopping For A Home	<p>“No matter who you are, it is important to know about Universal Design. If those who design and build homes are aware of it, we will be able to make livable homes for everyone. If you are renting your home or apartment, there are things you can do to make it safer and more convenient.”</p>

Using Assessment Tools

When thinking a Universal Design, it is important to evaluate where and how these features can most help you or your loved one live safe and comfortably. In order to do this, you need to think about your physical abilities and/or limitations in addition to thinking about areas in your home that may cause you some trouble. Let's start out by considering our physical strengths and limitations.

“Have you ever thought about the changes that happen to us as we get older? Some of us experience these limitations as a result of an illness or accident; others may notice gradual changes occurring over a period of time. Let's look at the evaluation of physical abilities that is included in your folder.”

[Refer to 'A Personal Assessment Tool']

“This is something that you can fill out when you have time. It describes activities that are necessary for you or someone in your home to do in order to live independently. For instance, under ‘Strength and Range of Motion’, it asks you how well you are able to stand for long periods of time and if it is hard for you to reach things that are on shelves above your head. Under ‘Touch/Dexterity,’ it asks about how well you are able to adjust the faucet or if you can hang on to small objects. Filling this out for yourself or for someone who lives in your home will give you a pretty good idea of what limitations you may be dealing with.”

[Take a few minutes to talk about some of the activities and how physical limitations can affect one's ability to complete them.]

“Once you get an idea of what activities may be difficult due to physical limitations. Next, lets think about what areas in our homes may need to be modified or changed in order to live more comfortably.”

[Refer to 'Creating a User Friendly Home']

“Let’s look at different areas of your home and what things will make it safe and easier to live in. Under ‘General Features Throughout the Home,’ number 1 talks about having all areas of your home available without using stairs. If you are looking for a home to buy, this is something to think about. But even if you already live in a two-story house, you may be able to make some changes so that it works for your current or future situation. You might be able to expand a half-bath, for instance, by adding a walk-in shower. If your laundry area is in the basement, you might think about installing a washer and dryer in a closet on the main floor.”






“Under the ‘Kitchen’ section, number 25 talks about being able to use controls on the range and oven. If you’re in the market for a new stove or range, notice where the control knobs are located. Having the knobs on the front or the side makes it easier for someone in a wheelchair to use them. If you have young children in the house, side controls would be safer for everyone. If your range has controls in the back, you can make them accessible for someone in a wheelchair by using an everyday item such as a potato masher to turn them. If the knobs are small and hard to turn for someone with arthritis, there are attachments that will make the knob bigger and easier to turn.”

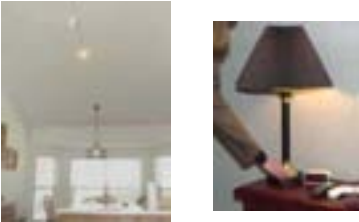
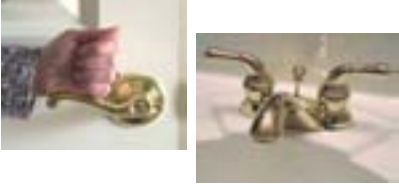


“If you have stairs in your home, it is a good idea to have handrails on both sides of the stairway. The section labeled ‘Stairs’ also talks about how important it is to have light switches at the top and bottom of the stairway.”

What is important of these two assessment tools is how they can assist you in identifying what areas or items in your home may need changing.

Identifying the Top 10 Features and Making a Plan

“The next set of photographs show what we call the ‘Top 10’ features of Universal Design that are important for your home. These features are also listed on a sheet in your resource folder so that you can follow along or look at them at a later time.

<p>TOP 10 FEATURES! FIRST FLOOR ACCESS</p> 	<p>“Access to your house begins with the entryway. Notice in the picture on the left, the sidewalk slopes up gradually to the front door so there is no need for steps. Once inside, it is important to have the living area all on one floor. If the bathroom or sleeping area is on another level, there needs to be some kind of lift device or at least, sturdy handrails on either side of the stairs. If someone uses a wheelchair or walker, all doorways need to be 32 inches wide – 36 inches is the preferred width.”</p>
<p>TOP 10 FEATURES! HAND RAILS</p> 	<p>“Once again we notice the importance of sturdy handrails on both sides of a stairway, whether they are outdoor or indoor stairs. If you are installing new handrails, make sure they are anchored in studs or reinforced walls.”</p>
<p>TOP 10 FEATURES! WALK-IN/ROLL-IN SHOWER</p> 	<p>“The first floor bathroom should have a walk in or roll in shower if possible. If that is not available, it is important that the tub or shower has some kind of seat and a hand held showerhead. Walk in showers are also convenient for bathing small children and pets.”</p>
<p>TOP 10 FEATURES! GRAB BARS</p> 	<p>“Grab bars in the shower and tub areas should be a must in every bathroom. We all have times when the floor is slippery and we’ve quickly grabbed for something to save a fall. Notice how the grab bars in these pictures either match the tub or look decorative. Safety features do not have to make your home look like a hospital. Like handrails, grab bars should be installed into studs or reinforced walls.”</p>
<p>TOP 10 FEATURES! ACCESSIBLE STORAGE</p> 	<p>“Being able to use storage areas is important for everyone. Shelves and racks can be rearranged as needs change. The equipment you need to install a closet system similar to the one pictured on the right can be purchased at most home improvement stores. Be sure that the walk-in storage floor space is at least 36 inches wide so it is accessible for someone with a walker or wheelchair.”</p>

<p>TOP 10 FEATURES! ADEQUATE LIGHTING</p> 	<p>“Good lighting is important for everyone, but it is especially important for us as we get older. Did you know that after the age of 50, most people need 4 times as much light as they did when they were younger?(!) Combining window light and electric lights on dimmer switches allows you to have just the right amount you need. Place extra lights over work areas and near chairs or beds for reading. Touch controls make lights easy to use. Using light colors in your decorating will increase the amount of reflected light and make the space brighter.”</p>
<p>TOP 10 FEATURES! EASY GRIP CONTROLS</p> 	<p>“Lever handles on doors and faucets are becoming quite popular. These are great examples of Universal Design. Lever handles make it possible to use an elbow or fist to open a door or turn on the water – a good idea if your hands are full as well as for those who have arthritis. C or D shaped drawer pulls, rocker panels and touch controls on light switches are also easy to use.”</p>
<p>TOP 10 FEATURES! ACCESSIBLE APPLIANCES</p> 	<p>“Having the right kind of appliances and installing them in the right place can make a difference in whether or not someone can cook for themselves. For example, in the picture on the left, notice that the refrigerator has its freezer on the side rather than above. This makes it easy for someone in a sitting position to use it. In the picture on the right, the microwave is installed at counter level and there is an adjustable shelf nearby to hold hot dishes.”</p>
<p>TOP 10 FEATURES! SAFE FLOORING</p> 	<p>“Most accidents in the home happen from falls. Floor surfaces that are even, firm, non-slip and non-glare are best. Fortunately, low-level loop or Berber carpets and a variety of smooth surface flooring materials are in style. <i>[If you were able to bring carpet or vinyl flooring, pass these around and discuss the merit and attractiveness of each.]</i> These surfaces are best for someone walking with a walker or using a wheelchair. Watch for slippery areas in showers and tubs and add stick on decals or rubber mats.”</p>

<p>TOP 10 FEATURES! SAFETY DEVICES</p>  <p>The image shows two separate photographs. On the left is a close-up of a white toilet. On the right is a person in a dark jacket standing in a doorway, holding a white box or folder.</p>	<p>“Safety devices such as smoke and carbon monoxide detectors (if you have gas appliances) should be in every home. Other safety features include keyless locks and an intercom system. These allow you to identify visitors at the door, especially important for those who have mobility problems. You might also want to consider emergency call systems, nightlights, glow in the dark switches, and anti-scald features. These items may be a good idea, no matter what your age.” <i>[This is a good time to pass around any safety devices you may have been able to bring and talk about which ones are important to people with different kinds of needs.]</i></p>
<p>WHERE TO FIND THE PRODUCTS</p> <ul style="list-style-type: none">➤ Home Improvement Stores➤ Catalogues➤ The Internet➤ Specialty Stores	<p>“How do you go about finding some of the products we’ve talked about today? A good place to start would be your local home improvement or hardware store. If they don’t have what you’re looking for, be sure to ask about it. Most things can be special ordered and received in a short time. There may be a medical supply store in your area that would carry the items or you may want to order a catalog from a mail order company and shop from your home. For those of you who like to use the Internet, there are websites available for on-line ordering. Your packet has information about some of these companies.”</p>
<p><i>[Allow your audience time to look through this information and possibly share places where they’ve seen Universal Design products sold.]</i></p>	
<p>WHO WILL DO THE WORK?</p> <ul style="list-style-type: none">➤ You➤ Family Or Friends➤ Hire A Contractor	<p>“After you’ve decided which features are most important to have in your home, the next step is deciding how they will be installed. Some jobs are simple and you or a friend or family member may be able to do them. If you decide you need to hire a contractor, be sure to find someone who understands what your needs are and is willing to listen to your concerns. It might be a good idea to share some of the information on Universal Design in your packet with them. We would also</p>

	<p>encourage you to ‘do your homework’ before you make any kind of decision. Your packet includes a checklist for hiring a contractor. [<i>Refer to this sheet in the packet.</i>] Take some time to go through the items listed and assure yourself that you’re getting the best person for the job.” [<i>Talk about some of the questions on the list and emphasize the importance of getting details of the work in writing.</i>]</p>	
<p>MAKE A PLAN!</p> <ul style="list-style-type: none"> ➤ Not all the changes must take place at once. ➤ Determine those features that are the most needed/ affordable and do those soon. ➤ Plan for larger, more expensive changes for the future. 	<p>“Unless you’re building a new home, it probably won’t be possible for you to make all of the changes you have in mind at one time. This means it is important to list the projects needed in the order of their importance to you and those who will be visiting your home. Decide which projects are most important and which ones are the easiest and least expensive to do. For major projects, you may want to draw up a schedule and plan a way they can be financed.”</p>	
<p>SPREAD THE NEWS!</p> <ul style="list-style-type: none"> ➤ UNIVERSAL DESIGN For all ages and abilities Improves comfort and ease of living Attractive Improves your home’s resale value Allows you to age in place 	<p>“We appreciate being able to share this information with you today. Hopefully, it has helped you look at your home in a different way as you think about what is important for you and your family in future years. Pass the word! Universal Design is a good idea for everyone.”</p>	
<p>Project Directors:</p> <p>Dr. Susan Zavotka, Associate Professor <i>Dept. of Consumer & Textile Sciences, The Ohio State University</i></p> <p>Dr. Christine Price, Assistant Professor <i>Dept. of Human Development & Family Science, The Ohio State University</i></p>	<p>Project Funding:</p> <p><small>Ohio State University Outreach and Engagement Initiative - OSU CARES Grant. <i>Funded by the Kellogg Foundation</i></small></p> <p><small>The Ohio State University Extension – Family & Consumer Sciences Administration; Adult Development and Aging Issue Team</small></p> <p><small>Low’s Home Improvement Warehouse</small></p> <p><small>Corporation for National Service and Campus Collaborative</small></p> <p><small>© Reprint of this material with permission of authors only.</small></p>	<p>We appreciate the assistance of the following:</p> <p><i>Photographs from:</i></p> <p><small>The Center for Universal Design, North Carolina State University</small></p> <p><i>Universally designed homes of:</i></p> <p><small>Mr. Mac Gray, Lancaster, Ohio Mr. Roger Howdyshell, Hilliard, Ohio</small></p> <p><i>Photographer: Jodi Miller, OSU Extension</i></p>

“As you leave, please take a minute to fill out the evaluation form if you haven’t already. This gives us an idea of what information is most important for us to include. Thank You.”