

UniversalDesign: *Simplified.*

universaldesign.org

Authors: Scott & Sarah Pruett

Web: universaldesign.org

Email: hello@universaldesign.org

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The infrastructure of our society isn't designed for imperfection,
yet we live in a world full of people with imperfect lives.

We've deemed this flawed infrastructure acceptable, so we deal with it.

It's time for that to change.

To Start: An Analogy

Consider the invention of the automobile. It radically transformed the way we live, and subsequently the world evolved because of it. To this day, roads are continually built and improved to provide access just about anywhere. Maybe construction or an accident happens to occur on the routes we take. Even then, those obstacles are temporary, and detours often accompany them. Sometimes we have to accept a slower pace, and that's okay. We can still get where we want to go.

However...

Imagine if you hopped in your car one day and on the way to your destination, you had no other choice but to come to a screeching stop because you came upon a set of stairs in the middle of the road. *(Your car wasn't designed to climb stairs, obviously.)*

That'd be crazy, right?!

Imagine the feelings and emotions you might have. What are the chances that you'd consider driving your car down "Stairway Drive" ever again? I'm guessing a big fat zero.

Yes, this is a fictional scenario that would never happen, but it is a valid analogy that may help give you an idea of what people with less-than-

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of the road.*

perfect levels of ability encounter on a regular basis. There are barriers in our society that can force someone to come to a screeching halt because of a disability. The effects of enough encounters with barriers are detrimental to one's ability to feel safe, comfortable, and successful in life. Barriers that exist for some people may be completely invisible, unless you know what to look for.

The Reality of Our Society

Let's face it. Our world is a unique place with a wide variety of people who have varying levels of abilities. There are many factors that make up "disability," affecting people physically, mentally, or both. It can be visible or invisible. Disability affects all ages, races, and nationalities. It is not a stranger to anyone and can be life-changing. Individuals may be born with a disability, have an illness, develop a certain condition, or may experience a traumatic event. These situations affect everyone differently and may result in physical and/or cognitive changes. These changes affect what we do in all parts of our day. Every. Day.

Our population is aging. There are many factors that affect a person's body through diseases, conditions, and general "wear-and-tear" through life experiences.

Barriers that exist for some people may be completely invisible, unless you know what to look for.

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We all desire to be involved in life with friends, family, and our community. A church community, a sports team, friends from work, people from school, individuals in a recreational or musical group, or just a few ladies who enjoy bridge or are involved in a book club. No matter what our interests are, most of us desire to connect with others to feel involved and be part of something bigger. This gives us purpose, creates relationships, and encourages us to be better in what we do and how we live our lives.

Plus it can be fun! You've heard people say, "I don't know what I would have done if I had not have found _____ organization or connected with _____ group." We form connections with others, which can certainly have a positive impact on our self-esteem.

Think about the community of people in your life. What if you unexpectedly became ill, or were in a car accident that required months of recovery? Not being able to participate in your community and having to unexpectedly change your daily routine can have a detrimental impact on your life, because some form of loss has occurred. We imagine that your community would surround you in difficult times, but there is much more involved in the big picture of life when a disability is involved.

The roles you have as a mother, father, child, sibling, professional, etc. will often change. Transitioning from a hospital setting back into home as you

No matter what our interests are, most of us desire to connect with others to feel involved and be part of something bigger.

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know it can be challenging, because your definition of “normal” has changed, perhaps dramatically. Getting back into the real world (jobs, school, leisure activities) is even more difficult if independence with everyday tasks (e.g., getting dressed, showering, etc.) is compromised.

Maybe you're in the baby boomer generation, of which 10,000 of you are turning 65 every day. You want to be involved in as much as you can, for as long as you can, right? Age happens, and when the effects of age suddenly makes you realize that it might be unsafe or that there is a possibility of running into unforeseen situations when you venture outside of your home, it's easy to give up.

We don't want anyone to be afraid to take part in what brings them the most joy because the design of the community – or how the community functions – might not be welcoming to various needs. This decreases one's ability to be involved with all sorts of things, and ultimately decreases independence and quality of life.

We don't know everything that goes on with everyone, and neither do you. That's okay. It's difficult to determine how others feel about things, or understand someone's level of ability after meeting them for the first time. We don't expect anyone to be an expert about every condition. All we ask is that you be aware that different levels of ability exist in our society. If we focus on the strengths of others – and not on what they can't do – this will

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shift our thinking from seeing people with disabilities as burdens to seeing them for their potential as members of our society.

The Basics of Universal Design

Most of you reading this eBook will have received it via our website – universaldesign.org – so you already know that the foundation of our efforts is universal design. That said, it's foolish for us to assume that you already understand what universal design is. We're not calling you stupid, but universal design often gets confused with what the Americans with Disabilities Act (ADA) is all about – accommodating people with disabilities.

Universal design doesn't place focus on people with disabilities. Instead, it recognizes that no one has the same definition of "normal." Universally-designed places, products, and programs inherently offer access, use, or participation to the greatest number of people, regardless of their level of ability.

The idea of acknowledging that "normal" can be interpreted differently by anyone is pretty revolutionary. We're accustomed to seeing the world through our eyes, not someone else's. That's okay. What's not okay is

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creating labels for others that may struggle with something that the majority of people don't have an issue with. This is the crux of what creates a victim mentality in someone who then might feel categorized as disabled – or simply different – just because of a mental or physical imperfection.

Our mission is “to promote increased independence and quality of life for people of all abilities at home and in the community.” We have absolutely no desire for people to feel that they are victims of disability because of mental or physical issues that are out of their control to change. Instead, we want to see people empowered to tackle life, regardless of their imperfections.

As a member of society, you have the ability to empower others by infusing universal design into the things you work on or are a part of. As more and more places, products, and programs offer increased access, use, or participation to the greatest number of people, those with less-than-perfect lives will naturally feel welcome – and less “different” – alongside everyone else.

Chances are good that you're thinking this: “**So? What's in this for me?**” That depends on your perspective. (1) If you're a business or organization, providing accessibility features for your patrons or employees can be a headache. Universal design is a solution, though admittedly not always the

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easiest to implement if you're not in a design phase. That said, if you are in the middle of a design phase, don't overlook an opportunity to implement universal design characteristics into what you're working on! It will remove future accessibility-related issues, because accessibility will be built-in already. (2) If you're an individual with a mental or physical imperfection (or have a friend or family member with one), you may be finding yourself in a position of needing assistance, or providing a lot of support to someone who does. Promoting the implementation of universal design – anywhere – will create a greater likelihood for increased independence and success in all areas of life for yourself and/or the people in your life.

Simplification of Universal Design

Universal design isn't a new concept, and there's a good chance that you've heard the term before. It is comprised of 7 principles, supported by 30 guidelines. These components of universal design (version 2.0, published in 1997) are available on The Center for Universal Design's website, run by NC State University. You can find the link to them on our website: universaldesign.org/what-is-universal-design.

A lot has changed since 1997. Nowadays we're accustomed to having information at our fingertips, and instantaneously. We consume

Universal design will create a greater likelihood for increased independence and success in all areas of life...

information quickly. There's a ton of it available due to the web, which makes it necessary to filter out noise so we can focus on what matters.

The 7 principles of universal design are fantastic and offer a tremendous amount of depth, especially when further explained by the accompanying 30 guidelines, but it's a lot to digest and remember, especially if your focus is regularly elsewhere.

We simplified it.

The following 4 words encapsulate every element of universal design:

- **Flexible.**
- **Impartial.**
- **Safe.**
- **Simple.**

That's it.

Can you confidently say that your place, product, or program offers flexibility, impartiality, safety, and simplicity to accommodate and welcome the greatest number of people that's realistically possible? If yes, congrats! You've got a solid idea of what universal design looks like.

Focus on what matters.

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If this just triggered a stress response and you suddenly feel somewhat overwhelmed, that's okay. Universal design isn't implemented on a widespread level.

We don't expect that everyone reading this realizes the amazing impact that universal design can actually have on our society.

Yet.

That's why we're here.

The following pages explain our simplification of universal design in greater detail, using the descriptors **flexible, impartial, safe, and simple.**

Universal Design: Flexible

Let's say you're coordinating a meeting with a friend, and you say "I'm flexible. I can meet wherever is convenient. Any time is good for me."

What you are saying here is that you aren't restricted to one location or one specific time, but rather that your friend's preferences will more than likely work just fine. You are offering your friend a choice, understanding that you can easily adapt to their schedule and level of ability for accessing a location.

The same concept applies to the design of places, products, and programs. If there are multiple approaches for access to a location, different ways of using a product, or various ways to adapt a program, then people aren't going to be excluded because they are different than the primary demographic that something was initially designed for.

All we are saying here is that the design can meet the needs and desires of people with different abilities. Sometimes some adaptation will be required, and that's okay. It doesn't have to be complicated, and it doesn't have to be expensive. Flexibility can even come naturally.

Example: consider the widespread popularity of smartphones. The technology inherently offers flexibility of use. Many smartphones have the options to increase text sizes for easy reading, or have components inside

If there are multiple approaches for access, people aren't going to be excluded...

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FLEXIBLE /

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that vibrate to alert a user who isn't looking at the device. Even touch screens that require less effort to manipulate than buttons do offer increased ease-of-use for everybody.

That's flexibility. That's one way to ensure that people don't get left out, even if you don't have to try very hard.

Universal Design: Impartial

Impartiality expands on the idea of flexibility. Being impartial is an intentional effort to create a design for a place, product, or program that isn't specific for one demographic. This means that there isn't a requirement for a person to have certain abilities to access, manipulate, or understand something.

Think about the places we go. Universal design removes segregation, which believe it or not, still exists today. People should not be forced to take an alternate route to navigate a location, or maybe sit in a designated area, just because of a physical disability. "Accessible" entrances or paths are helpful, sure, but they are segregating and stigmatizing, often drawing attention to one's limitations. Why? Think about who gets the privilege of using them: people who are different from the majority.

There isn't a requirement for a person to have certain abilities to access, manipulate, or understand something.

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The basis of universal design is understanding that everyone has a different definition of “normal,” and then finding ways to make things work the same way for the greatest number of people. This means building in provisions that extend the same function, required effort, ability to be understood, safety, security, and privacy to anyone. Places, products, programs – the idea behind it is still the same.

The easy association to make here is access for wheelchairs, which is probably the best starting place when being welcoming to those with physical disabilities. Think about it. If your space can accommodate a wheelchair, which means having a step-less entry, routes that don't have an unsafe approach (i.e., too steep of a slope and/or uneven surfaces), and plenty of room to move around without bumping into things, then there's a pretty good chance that people who fatigue easily or rely on support from other mobility devices (e.g., walkers, canes) will have no problem with access.

It's not just about getting inside, though. Think about how things can be reached, seen, and used, no matter if someone is sitting down or standing up. People with visual or hearing impairments may need different cues to help them figure out where to go and what to do. Individuals with cognitive impairments may benefit from staff members who understand that it might take a little longer to process information, or know that the amount of sensory stimuli can have an effect on communication styles.

Think about how things can be reached, seen, and used, no matter if someone is sitting down or standing up.

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The list can go on and on, but universal design will address most all of these issues if applied well.

Now, there are bound to be some questions going through your mind about impartiality. We don't hold the position that everything has to be impartial, specifically when it comes to programs (for example, competitive events or sports). There are some things in life that people participate in because they've spent a lot of time developing a specific skill that other people haven't. We commend that, and certainly don't discourage it. However, if you're going to offer something – anything – to the public, we want you to truly consider how the design can be impartial, welcoming the greatest number of people.

Universal Design: Safe

Ah, safety. The bane of liability concerns. Really, all that we are talking about here is figuring out ways to best reduce the chances of unplanned actions that can contain elements of harm to an individual. The tricky part of figuring this out happens once you realize that people with less-than-perfect levels of ability are more prone to accidents... right?

If you're going to offer something to the public, consider how the design can be impartial, welcoming the greatest number of people.

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Not necessarily, as this is completely dependent on context. Look at it this way: Accidents occur due to hazards. Remove or minimize hazards, and accidents will be reduced, or sometimes even eliminated. It's true that people with physical limitations encounter more hazards in today's society. Little things that able-bodied folks don't think about (uneven terrain, steps, steep slopes, etc) can make a huge difference in whether someone feels comfortable in (or getting to) a certain location, or even becoming a patron of a business or organization. We're seeing an increase in the prevalence of cognitive disabilities, and with that increase comes greater need to ensure that safeguards and more awareness exists for individuals who might take a little longer to perform a task.

We're not suggesting that it's necessary to eliminate everything that might be hazardous. That's not always realistic, sometimes due to location, or because a little bit of risk is inherently involved (e.g., product development for a sharp tool). We are, however, suggesting that you consider implementing some features that provide fail-safe measures, i.e., safeguards (even little things like stops that prevent drawers from falling out when extended, or wrist straps on Wii remotes). All it takes is a little extra thought, and at the very least, making people more aware of hazardous issues.

Consider implementing some features that provide fail-safe measures.

Universal Design: Simple

Simplicity is key to so much of universal design. We're completely sold on the idea and we don't want to offer a complex explanation (paradoxical, huh?). Let's unpack the concept of simplicity though. When we want to do something and are presented with multiple options, there's something in our brains that says "pick the simple one," even if we feel up for a challenge or see benefit in something more involved that may influence us otherwise. But what if multiple options don't exist and there's only one choice?

Again, consider people with less-than-perfect abilities. All too often, the lack of flexibility (hint, hint) in designs of places, products, and programs creates a situation in which there is unnecessary complexity involved. This may be in the form of something overly difficult to manage based on physical or mental capacity. Perhaps the "accessible" route requires extra distance and/or additional actions to get to the same location as the "standard" route. Maybe a registration process for an event assumes that everyone perceives information the same way, but cluttered print layouts make it difficult for some people to focus on what needs to be filled out. Maybe those same people can't read a certain language and there aren't any illustrations to assist. There are countless situations that people with

Simplicity... We're completely sold on the idea.

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physical or mental limitations can encounter, and our objective is to help minimize struggles by building simplicity into a design.

Think of every person you know. Even if no one comes to mind who has a diagnosed physical or cognitive disability, there's bound to be at least one person who just seems to have a screw loose in their head, and you know that there's a certain amount of intuitiveness necessary that makes things much easier for that person to understand what's going on. That's what we're after here. The easier something is to use or understand, the more likely that people will be independent with it. It shouldn't matter what someone's abilities are, or what their knowledge or experience levels are. The simpler, the better.

This applies to physical effort as well. We don't want people exerting themselves to the point of fatigue, or feel like they have to compromise on what should naturally be comfortable. This could be applied to the process of making dinner at home, specifically with the operation of appliances, or maybe to the routes one has to take through airports while traveling. Context will reveal issues in greater depth, but **simplicity wins every time when designing places, products, or programs for the benefit of the greatest number of people.**

The easier something is to use or understand, the more likely that people will be independent with it.

Universal Design in the Home AND in the Community

Think of any location that you have the ability visit to in-person. Restaurants, shops, hotels, and countless other locations of business are obvious, but consider private homes (e.g., those of family & friends), or natural spaces like state parks or national forests that may have “accessible” features, but are much more limited. When accessibility is an issue, those places become less “welcoming” to guests with less-than-perfect abilities. If assistance is needed, independence is thwarted and safety is likely compromised.

Often times the community isn’t set up to be as accommodating as someone’s home. By translating these concepts of universal design into the community, it’s safe to say that more individuals with less-than-perfect ability levels will feel confident in leaving the security of their home and participate in life outside of the safety of home. Being involved in the community creates increased independence, increased confidence, hope, and a desire to focus more on life as a whole versus assumed limitations.

Taking the concept of universal design into the community doesn’t come without challenges. There isn’t one perfect way to fully meet everyone’s

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needs. Creating an impartial design that allows a variety of people to participate gives the general population a way to be involved in their communities without fear of getting caught in a situation that is difficult and/or unsafe.

Cause and Effect

Here's the point: We want people to live active and healthy lives as long as possible, which includes getting out of the home environment and into society by being part of the community. If an individual is comfortable and feels confident in managing needs in their own home, he/she will likely be more willing to venture out into the community with similar confidence.

However, if the community presents challenges and difficulty, that confidence will be shattered, and we'll have a big segment of our population weary of leaving their homes.

This is why universal design is important for places in the community.

If the community presents challenges, we'll have a big segment of our population weary of leaving their homes.

Examples of Issues Faced in the Community

Here are a handful of examples of how the community may be difficult to access for some individuals...

- The restaurant has one entrance with five steps to get inside, and arthritis has limited grandpa's ability to climb stairs safely.
- The gym doesn't have room for a wheelchair to fit between the workout equipment/machines, or even offer equipment for those with physical disabilities to utilize.
- The Parks and Recreation department (tax-funded!) does not have staff that are knowledgeable in integrating children with autism into their programs.
- The door to get into the bookstore is really heavy with knobs that are hard to turn with one hand and limited balance after a stroke.
- The restaurant does not offer a menu in Braille.
- The retreat center where the ladies event is being held does not have a cabin with bathroom doorways big enough for a wheelchair to get through, and all the bedrooms are on the second floor of the building.

- The large grocery store does not offer motorized carts, or wheelchairs for individuals that have decreased energy and/or difficulty to walking long distances.

If people aren't comfortable with how they move and interact with their environment at home, then they sure aren't going to go out into public, especially alone. The risk of getting stuck somewhere without the assistance needed is too great.

Little things make a big difference.

Universal Design and Private Homes

Universal design is frequently discussed in the residential homebuilding market. While we do want more accessible homes to allow individuals to stay in their home longer as they age (giving individuals more independence for their daily activities, and allowing other people to visit the home without worry of barriers upon entry), it is important to note that universal design may not be the best option when modifying an existing home, especially if financial constraints exist.

Homes should be designed to meet the needs of homeowners based on abilities, and not designed to accommodate a variety of different people.

Universal design may not be the best option when modifying an existing home.

That said, universal design is ideal for new construction, as it opens up many more options for ease of adaptation for specific needs.

Quality of Life & Independence

So why should any of this matter to you?

Our lives would not be as satisfying if we weren't able to go to our favorite bookstore, coffee shop, cute boutiques, get to school or jobs, or spend evenings out with friends. If we were afraid to go places independently, we would just stay at home – or continually need to ask for assistance – because it is easier and/or safer, but not necessarily ideal by any means.

Alert!

If someone doesn't feel comfortable leaving home, it creates an entirely new set of problems on top of what may already be going on physically or mentally. This includes someone's social circle shrinking, possibility of depression increasing, and meaningful relationships reducing in number. Communities that are welcoming to many different types of people will increase everyone's quality of life, and ultimately increase independence for those who struggle with it.

And that's worth the effort.

Communities that are welcoming to many different types of people ultimately increase independence for those who struggle with it.

It feels good to be welcome. It feels good to be accepted, thought about, and cared for. That's what makes life more enjoyable.

Time to Take Action

Making real change takes time, patience, and persistence, which is not what we're used to these days. It's just easier to do things the way(s) we've always done them, and sometimes we do things and we don't know why.

Jeff Foxworthy has a bit about the women in his family always preparing ham the same way. They all cut off the bottom of the ham and stuck it in a dish to cook. When asked why they cut the bottom off, no one knew. The reason was because great-grandma's dish was too small for the ham so she had to cut part of the ham off for it to fit in the dish she had! The family just got stuck in their ways and didn't think twice about it.

Making changes to mainstream thought processes is hard, but essential. This is how new things are discovered and thoughts are altered. It's priceless when it affects the lives of people we love.

Sarah: I don't know how many times I have seen my husband or other individuals struggling with disease and disability, frustrated at their life circumstances, but also struggling with the fact that they aren't able to do

Making real change takes time, patience, and persistence. This is how new things are discovered and thoughts are altered.

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what they want to do because physically or mentally they're bodies aren't "normal." They are unable to interact with the world as we know it, because the world doesn't know how to interact with them. The bigger issue is that they can't interact with the physical environment because the physical environment isn't designed for them to use.

Let's create a change in our culture's thinking to encourage more problem-solving that can positively impact the lives of individuals dealing with disabilities, visible and invisible, so those people (whether you're one or not) can feel value in society.

You and your business or organization can play a part.

It starts by recognizing what this means and how all-encompassing these concepts of universal design really are.

Let's create environments that allow people to learn, interact, and grow within the walls of your program, building, or organization.

Let's open doors for individuals who were once not able to interact and communicate with others because of "differences."

Let's increase independence and quality of life for our friends and family and motivates us to become more understanding of those that are different than ourselves.

They can't interact with the physical environment because the physical environment isn't designed for them to use.

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We're changing our culture, bit by bit. Changing culture isn't instantaneous by any means. It's like our new years resolutions: if we try and change too many things at once, it'll be overwhelming and we'll eventually shrug it off.

We personally like to conquer one thing before beginning another, to avoid unnecessary stress. If you envisioning all the different things you can change with your business/organization, it can be overwhelming. That's why we're here to help you along the way.

Maybe the introduction of one new concept to your staff each week could create a culture change within the workings of your business over time. Maybe altering your logo, marketing materials, or website for increased usability and user-friendliness can make a difference. Creating a barrier free entrance for your building would allow more people with physical limitations to easily enter. Preparing for an individual to communicate via sign language during meetings or conferences will open the audience to more participants. Having a large-print menu on hand for those with difficulty seeing, and adding more food options to accommodate those with food allergies, will welcome more visitors to use your restaurant at ease.

The possibilities are nearly endless.

If we try and change too many things at once, it'll be overwhelming.

We Can Help You

Some of you may be thinking...

"It's too hard."

"It's difficult to generalize this to everyone with a disability."

"These days there are so many rules when making something 'accessible' that I just don't even know where to start!"

We understand that there are codes and guidelines established by the law; we are available to help with ADA compliance. That said, we are more concerned with the usability of your building. The ADA provides a great framework in which to encourage accessibility, but often times the provisions that are implemented are not functional within the everyday life of your business/organization. *(Keep an eye on our blog for more on the topic of legal accessibility vs. functional accessibility.)*

Changing how your business/organization functions can increase the independence and quality of life of those in our society. As we age and our bodies decrease in function, we'll notice that we can't do a lot of the same things we used to. Staying active increases in importance. Communities that people feel comfortable in and participate in will increase confidence and provide a sense of purpose, regardless of one's life situations.

Changing how your business/organization functions can increase the independence and quality of life of those in our society.

Make a change.

Start today.

Find out how via our website: universaldesign.org.

Thanks for taking the time to read this eBook.

- Scott & Sarah Pruett

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