

The Seven Principles of Universal Design

It can be easy to forget that users don't come in a standard format when designing products. We're getting better at catering for different personas or demographics, but the industry still lags a long way behind design that is accessible to as many disabled people as possible.

The principle of "Design for All" is one that begins with the Seven Principles of Universal Design. These were founded at North Carolina State University back in 1997 by a team of design specialists across multiple disciplines which was headed by Ronald Mace. The Seven Principles help designers evaluate the effectiveness of their designs to be used by as many people as possible.

1. Equitable Use

Is your design going to be useful to a wide range of people, including those with different physical and mental capacities from your test users? Can it be marketed to those people with different capacities?

2. Flexible Use

When is your design put into use; can it be used in many ways? Will adapt to the way one person wants to use it or must use it because of differing abilities?

3. Simple and Intuitive Use

How easy is your design for someone to pick up and start using immediately without instruction? The easier it is for someone to use irrespective of their previous skills, experiences or learning and irrespective of their ability to concentrate for long periods of time; the easier it will be for a wide range of user to use it.

4. Perceptible Information

Does your design give the user enough information to make the most efficient use of your product? Is this true in all conditions?

5. Error Tolerances

Have you tried to make your design “foolproof”? In that, no matter how it is used, there are minimal errors and minimal consequences for those errors? This is vital for those with differing abilities; they may make mistakes compared to other users, but they should not be unduly inconvenience for those mistakes either.

6. Minimal Physical Effort

Has your design tried to minimize the physical effort needed to get the best use from your product? Have you tried to keep motions that may cause fatigue in the user to a minimum?

7. Size and Space in Both Approach and Usage

finally, have you considered the environment that the product will be used in? Does your design allow for the right amounts of space for a user to approach and manipulate the product? Is this true for a wheelchair user or someone on crutches?