



ONE GESTURE IS ENOUGH

GUIDELINE
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GUIDELINE FOR CREATING/DESIGNING ACCESSIBLE INTERFACES



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Design for accessibility

Design for accessibility refers to all (linguistic, presentational, contextual) designs made with due regard to the skills, habits and wishes of the intended audience, so that the end-users with disabilities may access a product/service.

Resources to be used to design in line with the main tenets of accessibility:

- 1) Research and implementation in the relevant literature
- 2) Sampling/modelling from previous designs for the intended end-users
- 3) Information/approval to be obtained from the end-users involved in the project or process
- 4) The experiences of individuals who carry out accessibility studies with the end users

Considerations in accessibility designs

1) Who is the target audience? – While it is important to determine who the target audience is, the most important problem in this context is the variation within the group and the background of the end-users. For example, decisions about the ‘average’ audience in a design for all Deaf and HoH end-users will differ from decisions taken with regard to the ‘average’ end-user when dealing with a group of a certain age in a particular workplace.

Therefore, in line with the content of the work to be done,

a) Either the background information related to end-users is obtained from the organizations such as Federations and Confederations, that represent the Deaf and Hoh, OR

b) In the case of smaller populations (age group, educational status, etc.), a sample reference section is taken from that group,

AND the skills of the end-users are taken into consideration.

2) If the target audience includes more than one profile: In such cases, the design targets the skills and constraints of those who are seen as the most disadvantaged group. The common conception is that when the most disadvantaged group is targeted in design, even though ‘all the wishes’ of other end-users may not be met, all the end-user groups will not have any difficulty in receiving and using the service or product presented.



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Design elements:

Misconceptions:

- 1) The intended audience is familiar with and easily uses any phenomenon that has many examples on the websites or in applications: This idea is wrong because, although some designs introduced after the first decade of the 2000s are based on the principle of 'design for all, universal design', some applications have not fulfilled their purpose; and the remaining applications were designed without regard to this issue.
- 2) Details do not matter: Perhaps the most important factor in accessibility rests in the details. There are many issues that the design team decides upon, especially in terms of 'aesthetic' value and engineering design when they design. However, the accessibility of a product or service is usually hidden in the details of these decisions.
- 3) Deaf and HoH individuals have lower perceptual capacity than other individuals in society: This is a basic misconception. When the hearing individual observes the limited participation of the Deaf and HoH individuals in social activities, and when they observe that they do not know something that can be considered basic information for hearing individuals in the process of communication, they may misconstrue the situation if they do not have any experience other than this sort of short interaction with the Deaf and HoH.

First of all, it should be recognized that most of the systems, services and products in the world have been designed for individuals who do not have any kind of disability. In some cases certain add-ons are attached to these products originally made for society at large to provide access to the Deaf and HoH. For example, movies are designed for hearing audiences, subtitles or sign language for the Deaf and HoH were added after the design process. However, although in some cases these post-production add-ons make the product accessible, in other cases the existence of this sort of add-on does not provide access because these were not designed specifically for accessibility.

When design for all is embraced from the go a different approach is taken for the Deaf and HoH individuals. This perspective should be ingrained in all interfaces for accessibility from day one. The biggest risk here is that the designers move forward without consultation. Some mistakes may occur unwittingly since they do not know the profiles of the end-users group.

The Deaf and HoH individuals have developed much better 'coping' strategies than the hearing individuals to live in a system not designed for them. Because from the day they were born, they have been living in a world where they cannot communicate with and integrate into a large portion of society. Hence, their 'access skills' are better than the average persons.



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4) There are some universal standards in design for accessibility, and when these standards are used, accessibility is provided: Design standards for accessibility are important resources clearly stating issues to be considered, illustrating good practices based on research. Currently, there are many standards ranging from audio-visual product design to design for internet access.

However, in this context, it is necessary to take the necessary steps with due regard to the different realities of end-users in each country. All over the world, people with disabilities are socio-economically disadvantaged. They suffer from disadvantages in every society due to the “system designs made without regard to the disabilities”. This group, which has limited access to education and the business world, may suffer from additional constraints due to these factors. However, the level of this constraint will vary in line with the realities of the society in question. For example, ‘inclusive education’ is developed for Deaf and HoH individuals in some country and these individuals are educated in classrooms together with the other members of the society. However, in order for this system to be successful, the infrastructure must be established correctly, if the deaf and HoH child is subject to the same education system and curriculum as their classmates (for example, if an educator explains the content verbally and asks students to read from the book for reiteration), the disabled child may encounter a disadvantage as he/she will not have access to the information provided verbally, and in addition, the material provided for him/her to read will not be in the ‘main language of communication’ as will explained below. Therefore, while inclusive education was successful in some countries, that have a successful system infrastructure, in some countries the same success has not been achieved.

Although universal standards can be taken as a starting point, based on all these factors designs that focus on country, language, culture and end-user specificities are necessary.



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Deaf and HoH individuals have average reading skills: This is a common misconception. An individual with hearing impairment may be educated and literate but their level of competency may vary from that of the average. Two issues need to be taken into account here:

- a) their reading and writing skills will be lower than the average individual as evidenced throughout the world due to educational disadvantages,
- b) when reading written language, they are not reading in their mother tongue (sign language) but another language.

The main communication language (mother tongue) of the majority of the Deaf and HoH is sign language. Although this language, has similarities with other languages in the world, it also differs in many aspects. To start with a concrete example, written Turkish is a language built on verbal Turkish. This language is an agglutinative language. On the other hand Turkish sign language is not based on suffixes- it is not agglutinative. The use of suffixes is not present in the 'language reservoir' of Turkish sign language user. Therefore, in order to read and make sense of every sentence and word written in Turkish, he/she must have gained a certain amount of experience throughout his/her life in written Turkish. This is not an easy task in terms of the realities of these end-users.

In line with these considerations, the language should also be designed for accessibility.

- 6) The Deaf and HOH are a homogeneous group: This is a very common misconception. But this group is not homogeneous. They cover a wide range of individuals with differing hearing abilities, from a degree of hearing loss to the Deaf individual. Depending on their level of disability, they may or may not have certain abilities. Although the objective is to target the most disadvantaged in the design process, it is important to offer oeuvres to. For example, an individual with low literacy skills should be able to obtain all the information from the sign language video, but since the individual with access to the hearing world with a hearing aid may not have the same competency in sign language, thus written versions should also be provided for this individual.



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Design elements:

The elements listed below are basic elements only. (There are many sources and guidelines in literature regarding how to 'tailor' the design.)

Colours: Check whether colours have an unintended connotative effect in the Deaf subculture.

Language: All written material should be presented in 'plain' language design for accessibility. Plain-language translation is an approach that includes many elements, and it is done by experienced translators. The average writer may assume that material presented is in plain language, but without professional input from accessibility experts the material may be 'too simplistic' or, too complicated for accessibility (See the plain language guide).

Images: The use of images is essential for accessibility. Deaf and HoH individuals have experience in obtaining information from visuals. When they have difficulties in accessing language input, visuals are used for support. However, images should not be presented alone. Information presented only through visuals may be limited. The most appropriate design will be achieved when visual aids are supplemented with written or sign language,

Positioning of elements: Reception habits of end users, especially on screens or interfaces are important considerations. For example, being able to enlarge (make it full screen) every visual element (video, picture, etc.), or enabling simultaneous access to two images through the optimal use of the screen are important considerations. Or for example, if the information is presented in sign language video, image and text formats, the sign language video may placed in a primary position.

Text format: It is important to use accessible fonts and formats. There should be no additional difficulty in accessing the text.

Iconography and images: While widely used images and icons may be familiar to the Deaf and HoH, icons and images frequently used in products designed specifically for these end-users will be more accessible. This facilitates user-friendly design. For example, when information is given under a tab labelled 'info', if this information is provided in sign language, it may be more accurate to use the label info and the signing hands image, whereas if the information provided is written format the label info and a written text icon may be used for good accessibility practice.