



ENCYCLOPEDIA EDITIONS AVAILABLE TO PERSONS WITH DISABILITIES: THE PAST, PRESENT AND FUTURE

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Abstract

This paper presents a historical overview of encyclopedic works accessible to people with disabilities, the current situation and in-depth comparative analysis to determine which are the modern solutions that can be adapted to the needs encyclopedias such persons.

Encyclopedias are transmitted summaries of knowledge to which the user can access in your home, in the workplace or through the Internet, without having to go to a distant library where you could spend a long time looking for the information.

Throughout history encyclopedias are objedinjavale entire world's knowledge, bringing it in the form of texts rich illustrations, maps, tables and bibliographic references. Consolidated global knowledge written on condensed and printed in several volumes.

By using computers, information and communication technology encyclopedias are becoming more accessible and rich multimedia and interactive content.

People with disabilities, particularly people with disabilities of sight to the emergence of computer, information and communication technology encyclopedias are used only with the help of others or following the intervention of others (printing in Braille).

The first publicly available encyclopedia for the visually impaired is World Book Encyclopedia, published in Braille in 1961, and in 1980 published an encyclopedia in the form of voice recordings on cassette, accompanied by a reproducing apparatus, and indexation in Braille.

New encyclopedic works in Croatia are now available online, published by the Lexicographic Institute "Miroslav Krleža". Proleksis encyclopedia and encyclopedia of Croatia are Croatian general and national online encyclopaedia in the Croatian language. They are available free of charge in the Croatian language, the editorial are monitored and open to external collaboration as well as the possibility of new communication. Besides Proleksis encyclopedias and Croatian Encyclopedia users are available various online encyclopedias, translations of foreign editions and Wikipedia on Croatian language.

Integration of persons with disabilities in Croatia, and all Member States of the European Union, encouraged the lifelong learning. The electronic encyclopedia that is available online, open to external collaboration, allows people with disabilities to propose the necessary changes to current issues in order to appropriate information and accessibility to all users.

Key Words: Encyclopedic editions, electronic encyclopedias, persons with disabilities.



INTRODUCTION

Publishers encyclopedic works throughout history have been allowed to have the same available to persons with disabilities. Printed editions in Braille or recorded audio files of the same. Analyzing the course of history available encyclopedic works and editions currently available to people with disabilities goal is to determine which modern solutions to adapt to their needs.

The word encyclopedia is associated with more sveščano printed work that written word, in a concise way, exposes the entire world's knowledge, and enriched with illustrations, maps, tables, bibliographic referencma and pomogalima to navigate. This encyclopedia consists of a systematic Reduced articles, written by many authors and edited higher education experts.

People with disabilities of sight, hearing, motor, speech, language, communication, attention, concentration or a combination of these difficulties throughout history encyclopedic works are used with the intervention or assistance of another person. Search terms in more sveščanim encyclopedic works require the investment of a lot of effort and time to find the notion of seeking.

Computers, information and communication technology through new media enables all encyclopedic works accessible and searchable to people with disabilities and people without disabilities.

Encyclopedic editions

According to the world's leading encyclopedia term is defined as:

"Work which, in alphabetical or any other sequence of methodical, gather and systematically analyze the facts and knowledge on all human knowledge (general encyclopedia) or all one body of science, art, fields (professional encyclopedias or special encyclopedia)." (Encyclopedia, Croatian encyclopedia, Zagreb, Lexicographic Institute, 1999).

"Reference work that constrains information on all branches of knowledge or that treats a particular branch of knowledge in a comprehensive manner." (Encyclopaedia, Encyclopaedia Britannica, Chicago, Ultimate Reference Suite, 2008).

"... Darstellung des gesamten Wissent (Allgemeinzyklopädie stage Universalenzyklopädie) oder eines Fachgebietes / Realenzyklopädie)." (Encyclopedia, Der Brockhaus multimedial 2008 premium, Mannheim: Bibliographisches Institute & F.A. Brockhaus, 2007).

Traditional encyclopedic works contain summaries transmitted knowledge to which the user can access in your home, at work or on the Internet. The development of information and communication technologies through the new media has affected the way of issuing encyclopedia. Encyclopedic works are available in electronic form, added to them is the possibility of multi-media, interactivity and search ability. The new media have enabled encyclopedias become more available, widely used, free and publicly available.

The development of encyclopedic works from traditional to electronic throughout history encyclopedias are uniting with the entire world's knowledge is enriched with illustrations, charts, tables, bibliographic references. Consolidated global knowledge written on condensed and printed in several volumes.

Traditional encyclopedic works, published in several volumes. To print encyclopedia could be updated with new knowledge, and to renew their data, editors and authors have their work organized in cycles, i.e. through new releases or annual additions in separate volumes. Increasing the number of volumes with a newer edition or supplement encyclopedic issues did require additional financial allocations and in need of additional space to accommodate them.

The traditional (printed) encyclopedic works focused particular type of user (e.g., children, adolescents, experts) and therefore the same material presented in varying degrees, in different ways in different editions



(for example, children's encyclopedia, general lexicon, professional lexicon, general encyclopedia, Encyclopedic Dictionary).

By using computers, information and communication technologies were created electronic encyclopedias. Electronic encyclopedic work more accessible to the users of traditional works, organized in hypertext form with text as the primary encyclopedic information, contains a photo, a drawing (charts, tables, maps), record sound (sounds, music, speech, etc.), Video or animation in a variety of combinations. The scope of materials that can be placed on an electronic medium is virtually unlimited, with minimal costs of its reproduction.

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Historical Review of encyclopedic works accessible to people with disabilities the first publicly available encyclopedia for the visually impaired is World Book Encyclopedia, published in Braille in 1961, and in 1980 published an encyclopedia in the form of voice recordings on cassette, accompanied by a reproducing apparatus, and indexation in Braille.

The first multimedia encyclopedia was Compton's Multimedia Encyclopedia, published in 1990, is owned by the Encyclopaedia Britannica. The content of the included 26 volumes of text and 15 000 illustrations and its printed version, and is enriched with additional multimedia content that includes 60 minutes of recording time and 45 animation. Equipped with the patented and advanced search engine. In this way the visually impaired with the use of adapted computer via search engines can access content and sound tracks.

In 1992 Grolier Encyclopedia Electronic issued a media release published earlier that with ilustracion includes audio and video recordings (50 short film clips).

People with disabilities by using adaptive technology, adapted computers or Braille line enabled application electronic editions and significant representatives of electronic encyclopedic works of general type as: Britannica, Blockhouse, Encarta. This works by e printed on the DVD in 2004 and 2008, and in relation to the publication of the extended additional multimedia content (videos, audio files, animations ...).

New media and computer programs for word processing, production and processing of an illustration, computer database enabled easier, faster and more economical production of encyclopedic works. One of the hallmarks of modern encyclopedia and search ability. Search content in traditional issues that make entries arranged usually in alphabetical order, whereas the new media to the search term arrive via a search engine database of the entire contents. Search engines offer the possibility of a complex search and sequencing of



search results according to their relevance. In this way it is possible to people with disabilities who use voice commands to search the contents of easier access to a search term.

The study was based on the comparison, that is the comparative analysis of characteristics of individual representatives of traditional and virtual encyclopedia, expressed descriptively.

According to media publishing encyclopedias can basically be divided into printed (paper) and not printed encyclopedias. No printed encyclopedias can be spoken (audio) recordings on magnetic tapes or other recordings for the visually impaired and blind, and electronic (digital), which consist of one or more computer files. Electronic encyclopedias are published on an information network - a network or online encyclopedias, or a material storage medium. Online encyclopedia by type communication network may be the Internet, mobile and encyclopedias on Videotex.

Virtual encyclopedia is divided into open type (Wikipedia), whose contents can be used, distributed or modified anonymous users, semi-open type (Proleksis encyclopedia and Croatian Encyclopedia), whose contents can be used, but the content changes can only propose registered users known statement, so changes respecting final judgment bring forward named beneficiaries, and closed type, in which the entire work on the encyclopedia takes place within previously known associates.

Virtual Encyclopedia through new media allows hyper mediality, hyper textualiti and interactivity. Hyper textuality or non-linear organization of the text make design content in a way most appropriate for users of different interests. The multimedia and integration of text, images, sounds and videos provides instructiveness, attractive, user-friendliness presented lexical contents. The interactivity allows the user grouping content about current areas of interest.

Modern solutions adjustments encyclopedic works of the needs of persons with disabilities

Based on the analysis, we can determine that the necessary transformation of encyclopaedic works from traditional to virtual. Modern solutions to personalize the content resulting from the new media that can be defined through the prism of the preferred characteristics, which today tends encyclopedia, and persons with disabilities, are expected. So encyclopedia that occurs in new circumstances should be: electronic, Internet, hypertext, multimedia, interactive, constantly updated, constantly updated with links to the Internet, free access, searchable, cooperative (semi-open), adaptive, tailored to the needs of each individual user, his ages and levels of knowledge and current information needs.

Encyclopedic work Handicap difficulties of vision, hearing, motor, speech, language, communication, attention, concentration or a combination of these difficulties by using modern adaptive technology enables independent search terms as part of the traditional encyclopedia (printed, multi-volume) could not be used without assistance or intervention of another person.

Encyclopedic work accessible to people with disabilities, adapted to the needs of each individual user acceptance should allow easy search terms through a search engine.

Search ability, quality modern encyclopedia. In the new media to the search term all users; including persons with disabilities come through the search engine's database of the entire contents. Search engines offer the possibility of a complex search and sequencing of search results according to their relevance. People with disabilities who use voice commands to search content in this manner enable easier access to a search term.

Equally encyclopedic work available in the new media should be allowed to increase the font letters or text content, changes the substrate below the text content, it should be compatible with the voice channels and modern adaptive technology used by people with disabilities.

Modern solutions adjustments encyclopedic works of the needs of persons with disabilities are placed in the application of new media, so-called. Hypermedia through hyper textuality, multimedia and interactivity will be the key medium of the future.



Hyper textuality or non-linear organization of the text enables the creation of content in a way most appropriate for users of different interests and difficulties. By using hyper text for presentation of the lexical content is repeated, just follow orders ("clicks" instead of Browse), automatic control orders, modularization lexicographical information, decompression lexicographical tasks, allows you to connect encyclopedic works with external sources.

The multimedia and integration of text, images, sounds and videos provides instructiveness, attractive, user-friendliness presented lexical contents.

The interactivity allows the user grouping content about current areas of interest.

Enrichment of the displayed information or content audio or video affect its user-friendliness so it is recommended that a new encyclopedic works are multimedia. The multimedia and offers the user the opportunity to interact with the content. Interactivity content encyclopedic work unique, gives the media an important psychological dimension in a way that encourages the user by giving him the power of action.

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REFERENCES

Enciklopedija, Hrvatska enciklopedija, Zagreb, Leksikografski zavod Miroslav Krleža, 1999.

Encyclopædia, Encyclopædia Britannica, Chicago, Ultimate Reference Suite, 2008.

Enzyklopädie, Der Brockhaus multimedial 2008 premium, Mannheim: Bibliographisches Institut &F.A. Brockhaus, 2007.

Jecić, Z.: *Virtualna enciklopedija, Redefiniranje zadaće enciklopedijske djelatnosti*, Doktorski rad, Zagreb, 2008.

Jecić, Z.; Boras, D.; Domjan, D.: *Prilog definiranju pojma virtualna enciklopedija //Okrugli stol Leksikografija između znanosti i struke/ Leksikografski zavog Miroslav Krleža, Zagreb, 2008.*