Role of Multimedia in Depicting the Social Issues of People with ID

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Abstract: This research paper discusses the role of multimedia journalism in depicting the social issues of people with intellectual disabilities (ID) and how modern multimedia supports them.

This study aimed to examine how multimedia supports people with intellectual disabilities and how it helps people cope with this problem. The survey covered the year 2017.

The purpose of this qualitative study was to produce an overview of topics and practical recommendations that have been presented for multimedia journalism students to cooperate with the problem of people with ID, how to conduct assistance and highlight their issues in media.

The topic was widely studied, and the outline was made by focusing on the practical implications of research articles. The implications for practice and research are presented based on the findings of this study

Keywords: Social issues, multimedia journalism, media, new technology, Genesis, specification, special needs, ID.

INTRODUCTION

On the base of an analysis of the Kazakhstani news media, actively using new technologies, we would like to focus on how multimedia journalism and multimedia by itself, supports people with intellectual disabilities (ID). Multimedia journalism firstly supports by describing social issues, which helps people with ID. We investigated how multimedia supports people with ID to learn and to be more socialized in everyday life, and how are they being treated [1].

Through multimedia journalism, one could better describe all aspects of the life of people with ID such as education, social events, health problem, their needs, makes the promotion of their law regulation about protection [2].

The use of multimedia systems for education and training is rapidly increasing — much emphasis is on the technological advancements of these systems.

Few studies, however, have ventured to examine the ability of multimedia systems to transfer knowledge or skills to the learner especially for people with ID, where there is little empirical research being conducted. This study, explores the method of multimedia on learning for people with ID; recognizing the importance of evaluating multimedia as a method of instruction.

These measures of learning, retention and comprehension were investigated using a pre-test/post-test method after website instruction, were performed. The results from the pre- and post-test knowledge quiz to assess learning were analyzed along with semi structures interviews gathering evidence from people's perspective to determine which, if any, of the two instructional methods produced superior learning outcomes.

It was hypothesized that the multimedia would prove successful in superior knowledge gain, and this was indeed a finding. There was a significant statistical difference in the mean scores of the two website pre- and post-test scores, and this was further engrained through people's experience and perception of multimedia as a positive learning experience [3].

METHODS AND INSTRUMENTS

This part provides a description of the methodology used in this research study to explore multimedia as a method of improving learning for people with an intellectual disability. Information on the research design, procedure, instrumentation, data collection, data analysis, and limitations are included in this part.

The aim is to study the effectiveness of specific types of website designs; multimedia and text only by testing participants for both retention and comprehension from an online presentation. The researcher hypothesizes that the video-based (multimedia) presentation of an exercise video would emerge as the most effective and provide a significant increase in retention and comprehension.

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RESEARCH QUESTIONS

1. How well Does Multimedia Support People with ID?

In order to answer to this question, it is necessary to determine how the accessible (multimedia) website can effectively improve learning by outscoring the inaccessible (text) website on memory and comprehension through the analysis of at-test. Also, during the research, it was identified the challenges and opportunities presented by multimedia for learning of people with ID.

2. How Does Multimedia Journalism Support People with ID?

As it was mentioned before multimedia journalism supports people with ID, firstly it highlights their problem in media, which receives a lot of feedback, and by media, people with ID can get a lot of information quickly. Especially in this case study, we studied the effects and outcomes of multimedia, which was useful and practical to make the process of education more manageable. And now it is understandable how multimedia can be used to make information more accessible to people with ID.

CASE STUDY

We investigated how multimedia supports people with ID to learn and to be more socialized in everyday life, and how are they being treated.

We discuss different life aspects of people with ID, and in this case study, we specifically research how multimedia helps and makes the learning process easier for people with ID.

METHODS

The research study used paper and pencil questionnaires and semi-structured interviews to investigate the effectiveness of multimedia in improving learning for people with ID. The researcher used her personal computer with two types of a web application, designed by the researcher.

The qualitative component of the study involved semi-structured interviews. Six students initially responded to the letter of invitation and volunteered to be interviewed. One student withdrew from the study, reducing the number of interviewees to five. A digital recorder recorded each interview in its entirety. Student interviews ranged from 7 to 25 minutes in length. The

interviews conducted to obtain more productive and more detailed information about both websites, such as participant's attitudes towards technology and the use of multimedia for learning.

PARTICIPANTS

11 participants with ID were found using a non-probability convenience sampling method. Table **1** presents the gender characteristics of the sample. Out of the 11 participants in the study, 5 were females, and 6 were males. The age range was from 20 to 47 years, with an average of 30.7 years.

Table 1: Gender Characteristics

	Frequency	Percent
Valid Male	6	54.5
Female	5	45.5
Total	11	100.0

RESULTS

The results are shown in Table **2**, which represents the breakdown of the target and comparison groups.

5 students in total from a third level education programmed (3 males and 2 female) completed both the quantitative and qualitative components of the study.

3 students were assigned to the target group (2 males and 1 female) while 2 students were assigned to the comparison group (1 male and 1 female).

6 people in total from a day service (3 males and 3 females) completed the pre-/post-test component only. From the 6, 3 were assigned to the target group (2 males and 1 female) while 3 were assigned to the comparison group (1 male and 2 female).

Inclusion criteria for the study included willingness to provide written consent for the research and desire to complete the quantitative data collection instrument. Previous computer usage was also a criterion. Participants unwilling to do either of the above were excluded from the study.

A mixed-method research design is used in this study — this design based on a pre-test/post- test quasi-experimental design with a comparison group. A mixed-method design was considered appropriate for the study, as the combination of quantitative and

Table 2: Group/Gender Frequency

	Target (Multimedia)	Comparison (Text)	Pre/Post Test	Interview
Education/ Service				
University	3	2	5	5
Gender M/F	(2)M/(1)F	(1)M/(1)F	(3)M/(2)F	(3)M/(2)F
DayService	3	3	6	0
Gender M/F	(2)M/(1)F	(1)M/(2)F	(3)M/(3)F	
Total	**6**	**5**	**6**	**5**

qualitative approaches offers a deeper understanding of the research.

The quantitative component incorporated an 8-item multiple-choice quiz (designed by the researcher) before and after the website application. Participants also completed a demographic and computer usage multiple-choice questionnaire before pre-test/post- test [4].

One advantage of the mixed-method approach is greater researcher confidence in the findings generated by the study. For example, if scores collected from a questionnaire are consistent with interview data gathered on the same phenomena, the researcher can be more confident about the findings.

The relevance of this study is apparent in an era where digital and multimedia technology represents one of the largest growing sectors within the computer industry. The results of this study can provide practical benefits for people with ID. Understanding how well designed experiences can have positive outcomes on people's knowledge can encourage Web designers and indeed, educators to include accessibility for ID in the design of more websites to ensure better preparation for accessible information. Besides, understanding how learning is aided through multimedia can have a significant impact on how people with ID can be supported in the communication of knowledge [5].

For most of the questions to assess learning of this specific content, this study found that a multimedia website, with spoken word, audio, text and video appears to be the most effective, which supports the researcher's hypothesis predicting that the multimedia website would enhance learning by providing a significant boost in retention and comprehension. [6].

The text website scores in the knowledge quiz were the lowest overall. This applications apparent ineffectiveness is likely due to an overload of the learner's cognitive processing abilities, presumably overwhelming the learner's visual processing channel. The text application reduced scores for memory and comprehension may be caused by the distraction of the participant's focus due to the application's design. The idea that our mind's processing channels can be overloaded and lose much of their functionality is not new. Much research has been done on cognitive load theory, based on the assumption that the mind's working memory has limitations. Consequently, results, as seen in the text group participants, would be typical. [7].

CONCLUSION

One conclusion drawn from this study is that a well-produced accessible video segment can be a powerful learning tool that provides users with a rich and rewarding experience when incorporated in the right multimedia design. As new technology influences educational multimedia designs, what will remain relevant is the ability to control the learner's or end-user's focus. A successful multimedia model using video as the primary design component is one that creates an environment that connects with the viewer on an emotional level, includes related information woven into the experience visually, and is careful not to overload the viewer with too much information [8].

There have been differing views concerning whether multimedia is a similar method for learning compared to traditional methods using text. Consequently, with further innovation and more multimedia websites produced, it is essential to assess their influence on learning appropriately. This study looked at the effects of multimedia on both retention and comprehension in the hopes of increasing further knowledge in this newly developing field. While this study brought to light some of the possible positive effects of multimedia on retention, future research is still needed. Due to the increasing prevalence of multimedia, researchers, educators, and Web designers should work with one another to explore their effects on learning [9].

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