

# Development of The Litera Disa Website (Disability Literacy) As A Means of Charactering for Students With Special Needs (Deaf)

Ahmad Fadly<sup>1\*</sup>,Khaerunnisa<sup>2</sup>, Lutfi Syauki Faznur<sup>3</sup>, Wika Soviana Devi<sup>4</sup>, Ratna Dewi Kartikasari<sup>5</sup>, Aida Sumardi<sup>6</sup>

1,2,3,4,5,6 6Universitas Muhammadiyah Jakarta, Indonesia

\*Corresponding Email: ahmad.fadly@umj.ac.id

#### Abstract

This development research is motivated by the obstacles faced by deaf students in accessing literary references. The availability of references is important in the continuity of learning so that the competence of literary subjects can be achieved. This study also aims to support the Learning Innovation Program and Assistive Technology (Assistive Technology) for Students with Special Needs designed by the Ministry of Education and Culture of the Republic of Indonesia. Through the development procedure, this service activity produces a product in the form of the Litera Disa Website. A website that contains teaching materials that are deaf-friendly, contains literary materials and examples of their application. Both content and product specifications have gone through the stages of expert assessment and testing to users. With the Litera Disa Website that can be accessed and transmitted via mobile devices, it is hoped that deaf students who study literature can be helped in understanding literary subjects.

Keywords: character; deaf students; development of the litera disa website; literary subjects

#### Abstrak

Penelitian pengembangan ini dilatari oleh kendala yang dihadapi mahasiswa tuna rungu dalam mengakses referensi sastra. Ketersediaan referensi penting dalam keberlangsungan pembelajaran sehingga kompetensi mata kuiah kesastraan dapat diraih. Kajian ini sekaligus bertujuan mendukung Program Inovasi Pembelajaran dan Teknologi Bantu (Teknologi Asistif) untuk Mahasiswa Berkebutuhan Khusus yang dirancang oleh Kementerian Pendidikan dan Kebudayaan Republik Indonesia. Melalui prosedur pengembangan, kegiatan pengabdian ini menghasilkan produk berupa Website Litera Disa. Website yang berisi bahan ajar yang ramah disabilitas tuna rungu berisi materi sastra beserta contoh penerapannya. Baik konten maupun spesifikasi produk telah melalui tahapan penilaian dari ahli dan uji coba kepada pengguna. Dengan Website Litera Disa yang dapat diakses dan ditransmisikan melalui perangkat gawai, diharapkan mahasiswa tuna rungu yang mendalami sastra dapat terbantu dalam memahami materi kesastraan.

Kata kunci: , karakter; mahasiswa tuna rungu; materi kesusastraan; pengembangan website litera disa

*How to Cite*: Fadly, A., Khaerunnisa., Faznur, L.S., Devi, W.S., Kartikasari., R.D & Sumardi, A. (2022). Development of the litera disa website (disability literacy) as a means of charactering for students with special needs (deaf). *Journal of Disability*, 2 (1), 31 – 38. https://dx.doi.org/10.20961/jod.v2i1.62000.

#### **INTRODUCTION**

Access to education is the right of every citizen without exception. Educational space should be provided, both to citizens without physical limitations and to persons with disabilities at all levels. However, not all educational institutions provide adequate facilities and infrastructure, especially for persons with disabilities. Various efforts have been made to provide decent learning opportunities for persons with disabilities, including the Learning Innovation Program and Assistive Technology (Assistive Technology) for Students with Special Needs in Higher Education by the Ministry of Education and Culture. Through this program, it is hoped that every study program in higher education can organize the lecture process by implementing a disability-friendly curriculum.

Universities play a strategic role in supporting the implementation of Learning Innovations and Assistive Technology (Assistive Technology) for Students with Special Needs. This role is stated in the Regulation of the Minister of Research, Technology and Higher Education of the Republic of Indonesia No. 46 of 2017 concerning Special Education and Special Service Education in Higher Education. In Article 8 Paragraph (1) it is stated that "Universities facilitate learning and assessment according to the needs of Students with Special Needs without reducing the quality of learning outcomes. (2) The learning as referred to in paragraph (1) can be carried out in the form of adjustments to: (a) materials; (b) tools/media; (c) the learning process; and/or (d) assessment".

The Indonesian Language and Literature Education Study Program, Faculty of Education, University of Muhammadiyah Jakarta (PBSI FIP UMJ) supports the Learning Innovation and Assistive Technology program (Assistive Technology) for Students with Special Needs by developing a website learning media named "Litera Disa (Disability Literacy)". Website which stands for Ipod broadcasting is a monologue activity between two or more people who talk about certain topics in episodes (Sucin and Utami, 2020). Websites can be developed as learning media in universities (Hutabarat, 2020).. Website content can be made into a narrative or some kind of story that is delivered chronologically to make it easier for listeners to understand it (Asmi, 2019). On that basis, the PBSI FIP UMJ Study Program developed a website as a tool for students with special needs. The website that was developed was named the Website Litera Disa (Disability Literacy) which is defined as a learning media with technology that can optimize the sense of hearing (audio) which contains prose study subjects. Media is almost the same as YouTube, but more like online radio. To use the media, students can listen to or understand the content or material contained in it more easily in each episode and play back the recording to strengthen understanding.

Website media development is intended to facilitate students with special needs in the PBSI FIP UMJ Study Program in understanding lectures. The development of the learning media Website is based on the needs of students with special needs in the PBSI FIP UMJ Study Program who experience problems in attending lectures. They cannot access various literary readings and their various analyses, while the content in some literature is very important. Literary works, which are often mandatory references in the PBSI FIP UMJ Study Program, contain cultural backgrounds, historical facts, ideologies, moral values, and even national characters that can shape the attitudes of readers.

In developing the Website media, the PBSI FIP UMJ Study Program integrates it with prose studies courses. Through this course, students are expected to have basic communication skills, both receptively and productively. This course uses literature as the main object of study. On the other hand, many literary works are not audio-documented. This fact is a barrier to access for deaf students. With the development of the Website media, which is named "Litera Disa (Disability Literacy)", it is hoped that it can become a tool for students with special needs for the deaf. This website contains hearings or voice recordings from the websiteer or narrator, ranging from lecture materials to evaluations (mid and final exam). The voice recordings are grouped by episode so that they are more frequent than the number of meetings or lectures. Many researchs on disabilities (Rasyidah, 2000; Permatasari and Aditjipto, 2015; Adawiyah, 2017; Maulipaksi, 2017; Oulton *et al.*, 2019; Richards, Lawthom and Runswick-Cole, 2019; Wiseman and Watson, 2021)

### **METHOD**

The development of the Litera Disa website is carried out in several steps. First, the PBSI FIP UMJ Study Program analyzes the needs of students with special needs in the PBSI Study Program. Based on interviews conducted with the four students with special needs, it was concluded that they needed a tool that made it easier for them to understand literary material or reading. The unavailability of media which is a tool for deaf students encourages the PBSI FIP UMJ Study Program to develop a website with literary content, both in terms of work and analysis. On that basis, the PBSI FIP UMJ Study Program took the second step, namely the development of Website media.

Second, the development of Website media which includes the preparation of materials and recording. In compiling the material, the PBSI FIP UMJ Study Program held a Focus Group Discussion (FGD) by involving several experts in the field of inclusive education and the field of literature. The FGD, which was held on Tuesday, October 27, 2021, involved various elements to provide input and suggestions related to the development of the Litera Disa Website. The experts involved in the FGD are (1) Prof. Munawir Yusuf, M.Pd. (Inclusion Expert from Sebelas Maret University); and (2) Dr. Hj. Herwina Bahar, M.A. (Education expert from Muhammadiyah University, Jakarta). The discussion was also attended by the Principal of the Lebak Bulus Special School, South Jakarta.

Third, audio recording. At this stage, the servant records the material that has been prepared and adapted to the prose study course. The various materials consist of literary works and analysis of literary works. Fourth, expert validation. At this stage, experts in the field of inclusive education and experts in the field of linguistic and literary materials are involved, and experts in the field of learning media to validate the Website media products developed. Fifth, limited testing. At this stage, the servant offers a media website to deaf students in the PBSI FIP UMJ Study Program. After listening to and listening to the material and using the Litera Disa Website, the students with needs gave an assessment and input on the website's media. Sixth, product improvement. At this stage, the servant improves and refines the product based on input from experts and users (deaf students).

#### **RESULTS AND DISCUSSION**

Manuscript should be typed using word processors (Microsoft Word or Open Office) software. The font used throughout the paper is Times New Roman. The paper size is A4 (i.e., 210 x 297 mm), one-column format with a 2.5 cm margin at the top, a 2.5 cm margin at the bottom, 2.5 cm margin on the left, and 2.5 cm margin on the right. Lines are one-half spaced, justified. Page numbers should be included in the text located in header section of each page. Use of pronouns such as I, we etc is to be avoided.

Manuscript submitted to this journal should follow the heading below, except for the review article: *Title; Authors Name; Authors Affiliation; Abstract; Keywords; Methods; Results and Discussion; Conclusions; Acknowledgments;* and *References.* 

By taking the six steps, as explained in the section on implementation methods, the devotee describes them as follows.

### 1. Needs Analysis

Students with special needs are limited to students who experience obstacles in terms of physical, emotional, mental, or behavioral conditions (Feby Artwodini Muqtadiroh, 2018). All students with special needs who are in the PBSI FIP UMJ Study Program have visual problems. So far, their learning is combined with other students who do not have special needs. Meanwhile, no media or learning tools are available to help them understand the material, which is generally in the form of reading. As a result, readings, both theoretical and literary works, cannot be accessed by them. Based on the interviews conducted, they need such a medium. Therefore, the PBSI FIP UMJ Study Program has developed a media website that can contain literary material as well as contain literary works that contain character values.

#### 2. Development of the Litera Disa Website: Preparation of Materials

After determining the type of media to be developed, the PBSI FIP UMJ Study Program prepares material that will be the basis for reference to the content or content of the media. The prose study course is used as a pilot and the first development because through this course students are expected to be able to enjoy literary works as well as be able to analyze literary works. To finalize the materials and media models developed, the PBSI FIP UMJ Study Program held a FGD on Tuesday, 27 October 2021 by involving inclusive education experts, literature experts, and graduate users. The experts involved in the FGD are (1) Prof. Munawir Yusuf, M.Pd. (Inclusion Expert from Sebelas Maret University) and (2) Dr. Hj. Herwina Bahar, M.A. (Education expert from Muhammadiyah University, Jakarta). Meanwhile, the graduate users who were presented in the discussion were the Principal of the Lebak Bulus Superintendent School, South Jakarta. The material compiled and the media developed are adapted to the characteristics of deaf students who rely on the sense of hearing. The following are the details of the material on the Litera Disa Website.



Picture 1. Litera Disa Website

After arranged by episode, the next step is to record audio and video:

1. Litera Disa Website Development: Audio Recording

The material that has been compiled is read out for audio recording. The recording was carried out during the period from April 28 to November 20, 2021. For the voice filling of the literary work content, it was done by theater practitioners so that the sound produced was more stable and articulate. The voices for the content analysis of literary works were carried out by 6 lecturers of the PBSI FIP UMJ Study Program to provide variety or variety of voices so that they were not boring. After audio recording, the editing process is carried out to avoid errors in recording while adjusting the duration.

2. Expert Validation

Expert validation was carried out by involving three experts in the field of inclusive education, the field of linguistic and literary materials, and the field of learning media. In the field of inclusive education, the expert who validates the Website media is Mrs. Dr. Erni, M.Pd., while the expert who validated in the field of linguistic and literary materials was Ms. Didah Nurhamidah, M.Pd. The assessment of the inclusive education expert validator is based on the suitability of the Website media for people with hearing impairments. The aspects of the assessment are described in the following table.

Aspect	Indicators
Inclusive Education	Media Suitability with Characteristics of Students with Special Needs
	Media can motivate students with special needs
	Media can improve the quality of learning for students with special needs
	Media is easy to use by students with special needs
	Media sustainability

Table 2 Indicators of Inclusive Education	Expert Assessment
---	-------------------

The assessment of the aspects of linguistic and literary material is described in the following table.

Aspect	Indicators			
Language and Literature Materials	Material Suitability			
	Appropriateness of Material Difficulty Level			
	Material Equipment			
	Material Truth			
	Material Depth			
	Material Benefits			
	Material Structure			
	Submission of Material (Intonation and Articulation)			
	Material Suitability with Evaluation			
	Evaluation Difficulty Level			

Table 3 Material Expert Va	alidator Assessment Indicators
----------------------------	--------------------------------

Meanwhile, the assessment of the learning media aspect is described in the following table.

Table 4 Assessment	Indicators	of I	Learning	Media	Expert ]	Validators

Aspect	Indicators
Learning Media	Media Attractiveness
	Sound Quality
	Sound Match
	Media Practical
	Media Effectiveness
	Website Duration
	Media Benefits
	Media Endurance
	Media Efficiency
	Media Eligibility

The three assessment indicators are stated in the form of a scale of 1-5 as follows.

- 1=Very Imprecise/Very Unclear
- 2=Inaccurate/Unclear

3=Hesitating

4=Precise/Clear

5=Very Precise/Very Clear

1. Limited Testing

Limited testing is carried out on students with special needs (deaf). They were heard on the Litera Disa website and then asked to provide feedback and input for the improvement of the media.

2. Product Improvement

Product improvements are made based on input and responses from users. After being perfected, the product can be used by students with special needs by clicking https://literadisa.umj.ac.id/.

## CONCLUSION

The community service program carried out by lecturers of the PBSI FIP UMJ Study Program produces assistive aids for students with special needs who are deaf. The tool, which is named the Litera Disa Website, can be utilized, both by students who are in the PBSI FIP UMJ Study Program, even deaf students outside UMJ who study in the PBSI Study Program. The Litera Disa website is easy to use and transmitted via mobile devices so that it can be used on a large scale.

### ACKNOWLEDGMENTS

PBSI Study Program as servants would like to thank the Directorate General of Belmawa, Ministry of Education and Culture of the Republic of Indonesia for supporting and funding this community service program

## REFERENCES

- Adawiyah, P. R. (2017) 'Persepsi Penyandang Difabel A (Tuna Netra) terhadap Pentingnya Pelatihan Pemilih Pemula di Kabupaten Banyuwangi', *Jurnal Politico*, 17(2).
- Asmi, A. R. (2019) 'Pengembangan Media Pembelajaran Audio berbasis Podcast pada Materi Sejarah Lokal di Sumatera Selatan', *Historia: Jurnal Pendidik dan Peneliti Sejarah*, 3(1), pp. 49–56. doi: 10.17509/historia.v3i1.21017.
- Feby Artwodini Muqtadiroh (2018) 'SAKTI (Sanggar Anak Kreatif dan Teknologi Inklusif): Wadah Pengembangan Potensi Anak Berkebutuhan Khusus melalui Pendekatan Art Theraphy dan Computer Technology', Jurnal Pengabdian Kepada Masyarakat, 2(no 4). Available at: http://jurnal.unpad.ac.id/pkm/article/view/19239.
- Hutabarat, P. M. (2020) 'Pengembangan Podcast sebagai Media Suplemen Pembelajaran Berbasis Digital pada Perguruan Tinggi', *Jurnal Sosial Humaniora Terapan*, 2(2), pp. 107–116. doi: 10.7454/jsht.v2i2.85.

Maulipaksi, D. (2017) Sekolah Inklusi dan Pembangunan SLB Dukung Pendidikan Inklusi,

*Kementerian Pendidikan dan Kebudayaan*. Available at: https://www.kemdikbud.go.id/main/blog/2017/02/sekolah-inklusi-dan-pembangunan-slbdukung-pendidikan-inklusi.

- Oulton, K. *et al.* (2019) 'Learning disability nurse provision in children's hospitals: Hospital staff perceptions of whether it makes a difference', *BMC Pediatrics*. BMC Pediatrics, 19(1), pp. 1–11. doi: 10.1186/s12887-019-1547-y.
- Permatasari, Y. and Aditjipto, M. I. (2015) 'Fasilitas Pendidikan Anak Tuna Netra di Malang', *Jurnal eDIMENSI ARSITEKTUR*, III(2), pp. 825–832.
- Rasyidah, A. N. (2000) 'Kepercayaan Diri pada Tuna Netra (Studi Kasus Pengguna Ilmu Getaran Perguruan Pencak Silat Beladiri Tangan Kosong Merpati Putih)', *Jurnal Indigenous*, 13(1), pp. 51–59.
- Richards, M., Lawthom, R. and Runswick-Cole, K. (2019) 'Community-based arts research for people with learning disabilities: challenging misconceptions about learning disabilities', *Disability and Society*. Routledge, 34(2), pp. 204–227. doi: 10.1080/09687599.2018.1522243.
- Sucin, S. and Utami, L. S. S. (2020) 'Konvergensi Media Baru dalam Penyampaian Pesan Melalui Podcast', *Koneksi*, 4(2), p. 235. doi: 10.24912/kn.v4i2.8113.
- Wiseman, P. and Watson, N. (2021) "Because I've Got a Learning Disability, They Don't Take Me Seriously:" Violence, Wellbeing, and Devaluing People With Learning Disabilities', *Journal of Interpersonal Violence*. doi: 10.1177/0886260521990828.