

DEVELOPING DIGITAL WORKSHEETS BY USING WIZER.ME FOR TEACHING VOCATIONAL SCHOOL IN MEDAN

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ABSTRACT

This study aimed to develop an appropriate media for applying job chapter. This study was carried out at SMKS Karya Bunda Mandiri Medan. This research was conducted by using Research and Development (R&D) Method. The research of Research and Development contained six stages; gathering information and data, analyzing data, designing the material, validating by the experts, revising material, and creating the last was the final product. The data was gathered by distributing questionnaires to students and interviewing an English teacher to get the students' needs. The study's conclusion resulted in developing

the Interactive E-Book, which may be used as a teaching medium for students to learn writing descriptive text. The product has been validated by two experts in percentage terms; the average score of expert validations was 87.6% in the content aspect, the presentation aspect was 84.9%, the language aspect was 90.6%, and the layout was 90%. The average score was 88.275% which was categorized as very good, and it was suggested to use it in English class, especially for applying for job chapters at the Vocational School level.

Keywords:

Digital Worksheet, Wizer.me, Vocational School

INTRODUCTION

Education is a vital and intentional endeavor to create an enriching learning environment and process. Its purpose is to empower students to develop their spiritual-religious, self-control, personality, intelligence, noble character, and essential skills that benefit not only themselves but also society, the nation, and the state. In line with this definition, the Indonesian government has been diligently working to further develop its education system, particularly after the COVID-19 pandemic, which accelerated the transition to a digitalized world.

The digitalized world has emerged as a prominent global issue, demanding a shift in routines and practices to adapt to the digital age. According to Hofacker (2019), the next generation of digital technologies and software will profoundly impact markets, societies, and everyday life, fundamentally altering how we live and work. In education, this digital transformation has led to a paradigm shift, with conventional offline learning transitioning to a fully online format through web meetings, E-learning platforms, and the integration of

Virtual Reality (VR) and Augmented Reality (AR) to augment learning experiences. With this digitalization, classrooms have become virtual spaces accessible anywhere and anytime, providing an internet connection.

Recognizing the importance of staying abreast with technological advancements, educational systems have sought to incorporate digital technologies to keep pace with the evolving world. As Hofacker (2019) suggests, students must be equipped to navigate and thrive in the digital age. Consequently, the Indonesian government is endeavoring to establish regulations to facilitate technology implementation in education, aiming to create an enjoyable and effective learning experience for students. This regulatory framework would encompass various aspects of the learning process, including the roles of both students and teachers.

In this rapidly evolving educational landscape, teachers are pivotal in navigating digital transformation and effectively utilizing technology to enhance learning. As such, teachers must possess additional skills to leverage the potential of technology and integrate it seamlessly into their instructional practices. Engaging in technology learning programs becomes a pathway for teachers to bolster their abilities, particularly in developing educational media that align with digitalization.

One critical aspect of the learning process is the development of effective learning media. As experts have opined, media in education can encompass graphic, photographic, or electronic tools that capture, process, and rearrange visual or verbal information (Arsyad, 2005). They were learning media bridges teachers and students, facilitating effective communication and comprehension of learning materials (Musfiqon, 2012). Using diverse tools in the learning process can inspire students to engage more deeply with the subject matter and gain a comprehensive understanding.

Among the essential tools for learning is the student worksheet. A student worksheet serves as a guide for research and problem-solving exercises, contributing to developing cognitive skills and overall learning proficiency (Trianto, 2008). It typically includes assignments that students must complete, comprising instructions, learning objectives, problems, answer sheets, and more (National Department of Education, 2004). Worksheets play a particularly significant role in language learning as simulators, enabling students to practice and enhance their language skills.

Amidst the COVID-19 pandemic, digitalized student worksheets have emerged as a valuable resource, allowing for flexible and interactive learning experiences. Adopting online interactive worksheets has been shown to boost students' learning independence, stimulate their interest in studies, and foster enthusiasm among teachers (R. Priyanda et al., 2021). Social media platforms have also been integrated as learning tools, with Instagram successfully improving students' comprehension of descriptive text (Warda & Armeria, 2019).

To address the evolving needs of the education system and leverage the benefits of digitalization, this study aims to develop digital student worksheets for the chapter "Applying for a Job" in grade 12 English language learning at SMKS Karya Bunda Mandiri. Utilizing the Wizer.me platform, which offers audio, picture, and text integration, this

research endeavors to enhance students' proficiency in transactional and specific functional texts within the context of Problem-Based Learning.

METHOD

A. Research Design

This study adopts an educational research and development (R&D) model based on the framework proposed by Borg and Gall (1983). The R&D method encompasses six essential steps: data and information gathering, data analysis, product design, product validation, product revision, and the final product creation. This systematic approach allows for creating innovative and effective learning media by iteratively field-testing, assessing, and refining the products until they meet the required effectiveness and quality standards.

B. Research Participants:

The research participants are grade 12 students from SMKS Karya Bunda Mandiri, located in Tembung, Percut Sei Tuan, Deli Serdang, Sumatera Utara. Specifically, the study focuses on 22 students enrolled in the OTKP (Otomatisasi et al. or Automation and Office Governance) program.

C. Data Collection Techniques

1. **Observation:** Direct observations were conducted in the school environment to systematically record observable behaviors and phenomena related to the scientific preparation of real-world problems and the teacher's approach to English language material preparation—observations aimed to maximize media development by gaining insights into the students' learning processes and classroom environment.
2. **Interviews** were employed as a data collection technique, facilitating direct interaction between the researcher and the participants. The researcher gained valuable insights into the students' English language learning needs and requirements through deliberate discussions with the teacher.
3. **Questionnaire:** Questionnaires were utilized to gather data from both experts and students. The teacher and experts completed questionnaires to provide valuable feedback on the product's suitability, while students filled out questionnaires after the learning process to express their needs and preferences. The questionnaires served as essential instruments for understanding the teacher's requirements and assessing the effectiveness of the learning material.

D. Data Collection Instruments

The study employed questionnaires and observation as data collection instruments. Observations allowed in-person assessments of the educational setting, while questionnaires provided comprehensive insights into the students' English language demands. The multidimensional approach, combining observation, interviews, and questionnaires, enabled a holistic evaluation of the student's needs and informed the development of specialized and efficient English language learning media.

E. Procedures of Media Development

The research commenced by identifying the learning and target needs of the 22 SMKS Karya Bunda Mandiri students. Data collection involved observations, interviews, and questionnaires to gather essential information about the student's goals and educational requirements. Based on the collected data, the development of speaking media was meticulously planned to align with the student's needs.

The six-step R&D model guided the media development process:

1. Information and data collection: Observations and surveys provided valuable data.
2. Data analysis: Observations and surveys were analyzed to inform media design.
3. Media design: Following the student's needs, speaking media was designed.
4. Product validation: Expert validation ensured the quality and appropriateness of the media for the students.
5. Product revision: In consultation with experts, the English teacher at Karya Bunda Mandiri refined the media to meet the students' requirements.
6. Final product: The result was creating a video on transactional text as the final product, catering to the student's specific learning needs.

Following the R&D approach and leveraging multiple data collection techniques, this research aimed to develop engaging and effective English language learning media tailored to the grade 12 students' requirements at SMKS Karya Bunda Mandiri.

RESULTS

This study sought to understand students' preferences and needs for English language learning media among grade 12 students at SMKS Karya Bunda Mandiri. Data was collected through questionnaires, interviews, and observations to analyze students' attitudes toward different learning media and their effectiveness in learning English.

1. English Language Learning Preferences: Most students (86.4%) expressed a strong affinity for learning English, with 50% strongly agreeing and 36.4% agreeing. However, a small percentage (13.6%) disagreed or strongly disagreed with this statement.

2. Preference for Technology in English Learning: An overwhelming majority (90.9%) of the students showed a positive inclination towards using technology for learning English. Among them, 54.5% agreed, and 36.4% strongly agreed. Only 9.1% disagreed or strongly disagreed with this preference.

3. Interest in Listening to Learning Videos: A significant number of students (86.4%) preferred learning through videos, with 36.4% strongly agreeing and 50% agreeing. A minor portion (13.6%) disagreed or strongly disagreed with this preference.

4. Interest in Using Audio Media for Learning: Most students (90.1%) showed a positive inclination towards using audio media to learn English, with 45.5% agreeing and 45.5% strongly agreeing. A small fraction (9.1%) disagreed with this preference.

5. Enthusiasm for Using Digitalized Media in Listening Skills: A substantial proportion (86.4%) of students showed interest in using digitalized media to enhance their listening skills, with 50% agreeing and 36.4% strongly agreeing. Only 9.1% disagreed or strongly disagreed with this statement.

6. Understanding Job Vacancy Announcements: Most students (77.3%) expressed confidence in understanding job vacancy announcements, with 32% strongly agreeing and

45.5% agreeing. Approximately 22.7% of students disagreed or strongly disagreed with this statement.

7. Preference for Smartphone Use in Listening Efficiency: An overwhelming majority (90.1%) of students acknowledged that using a smartphone could enhance their listening efficiency in learning English. Only 9.1% disagreed with this statement.

8. Interest in Technology-Based Media for Reading: Most students (90.9%) showed enthusiasm for reading with technology-based media, with 40.9% strongly agreeing and 50% agreeing. A small portion (9.1%) disagreed or strongly disagreed with this preference.

9. Interest in Using Online Worksheets for Reading: An overwhelming majority (86.4%) of students expressed interest in using online worksheets for reading, with 36.4% strongly agreeing and 50% agreeing. A small percentage (13.6%) disagreed or strongly disagreed with this preference.

10. Use of Smartphones to Enhance Reading Efficiency: An overwhelming majority (90.9%) of students agreed that smartphones could enhance their reading efficiency, with 40.9% strongly agreeing and 50% agreeing. Only 9.1% disagreed with this statement.

11. Preference for Using Digitalized Media in Writing: Most students (86.4%) showed a positive inclination towards using digitalized media for writing in English, with 45.5% agreeing and 40.9% strongly agreeing. A small percentage (13.6%) disagreed or strongly disagreed with this preference.

12. Interest in Online Speaking Worksheets: A significant proportion (90.9%) of students expressed interest in using online worksheets, with 40.9% strongly agreeing and 50% agreeing. Only 9.1% disagreed with this preference.

Based on the questionnaire analysis, students at SMKS Karya Bunda Mandiri overwhelmingly prefer using Wizer.me as the worksheet media for English learning. The expert rating for the interactive worksheet was very good, with an average score of 88.275%. Therefore, the developed online worksheet using Wizer.me is highly suitable for English language teaching at the grade 12 level in the school. These findings highlight the significance of integrating technology-based media into English language learning, which can enhance students' engagement, comprehension, and overall learning outcomes. As the educational landscape evolves, incorporating digitalized and interactive resources can provide students with a more engaging and efficient learning experience.

DISCUSSIONS

This research aimed to develop interactive student worksheets using Wizer.me as the platform for English language learning. The study followed the educational research and development (R&D) approach proposed by Borg and Gall (1983), consisting of six systematic steps: information and data collection, data analysis, media design, expert validation, product revision, and the final product.

In the first step, data were collected through questionnaires, observations, and interviews with 22 grade 12 students at SMKS Karya Bunda Mandiri. The data was essential for conducting a need analysis to understand the students' preferences and requirements for interactive worksheets.

Data analysis was performed using Likert scales to gauge the students' responses. The analysis revealed that students were strongly interested in using interactive worksheets for English learning. The media design was then tailored based on the student's needs, following

the guidelines of the 2013 Curriculum, project-based learning, and relevant learning materials.

Wizer.me, a user-friendly platform, was selected for creating interactive worksheets. Teachers could access the website, create worksheets with various question formats, and share them with students through links or other platforms.

Expert validation was crucial to ensure the quality and appropriateness of the developed worksheets. An expert reviewed the initial product and provided feedback on content, language features, presentation, and layout. The necessary revisions were made based on the expert's comments.

The final product was then produced, achieving an average score of 4.41, which falls within the "very good" range on the Likert scale ($4.05 \leq x \leq 5.00$). This outcome indicated that the developed worksheets were suitable for implementation in the school and effectively met the students' needs.

The findings of this study align with previous research conducted by Nasution (2020) and Kaliappen et al. (2021), which also emphasized the positive impact of digital worksheets and the Wizer.me platform on student engagement, comprehension, and learning outcomes. Implementing the 2013 Curriculum and incorporating problem-based learning techniques proved highly successful in this context.

These findings highlight the significance of integrating technology-based media, such as Wizer.me, into English language learning. Interactive digital tools have been shown to enhance student engagement, motivation, and subject understanding. This study further emphasizes the importance of embracing technology and innovative teaching methods to create stimulating learning environments and expedite concept assimilation.

In conclusion, developing interactive worksheets using Wizer.me for English language learning is a valuable addition to the educational landscape. By catering to students' preferences and leveraging technology effectively, educators can foster a more engaging and effective learning experience, ultimately leading to improved learning outcomes and student success.

CONCLUSIONS

This study aimed to develop interactive worksheets using Wizer.me as the platform for learning English, specifically focusing on job application materials. The research followed the educational research and development (R&D) approach proposed by Borg and Gall (1983), consisting of six systematic steps: information and data collection, data analysis, media design, expert validation, product revision, and the final product.

Upon data collection and analysis, the interactive worksheets were tailored to meet the specific needs of grade 12 students at SMKS Karya Bunda Mandiri. The data-driven approach ensured that the worksheets aligned with the student's preferences and learning requirements. The worksheets encompassed various formats, ranging from fundamental tasks like fill-in-the-blanks and multiple-choice questions to more advanced exercises like IELTS-level true/false/not given tests.

Expert validation was conducted to ensure the quality and effectiveness of the developed worksheets. Industry professionals, acting as validators, thoroughly examined

the initial product. The experts assessed the worksheets' content, language, presentation, and layout aspects. The first validator provided scores of 4.38 (87.6%) for content, 4.16 (83.2%) for language, 4.47 (89.4%) for presentation, and 4.6 (92%) for layout. The second validator scored content at 4.38 (87.6%), language at 4.33 (86.6%), presentation at 4.59 (91.8%), and layout at 4.4 (88%). The average overall rating based on the Likert scale was 4.41 out of 5, or 88.2 out of 100, which falls within the "very good" range.

Based on these conclusions, the interactive worksheets developed in this study are considered reliable and suitable for teaching job application materials. The study suggests that interactive worksheets can be a valuable instructional tool, particularly for enhancing students' proficiency in English language skills relevant to job applications.

In conclusion, this research contributes to English language learning by offering innovative and engaging teaching materials through interactive worksheets. The integration of technology, represented by the Wizer.me platform, effectively meets students' learning needs and advances their language abilities, specifically in the context of job application materials. As technology evolves, incorporating interactive digital tools like Wizer.me into language learning pedagogy holds great potential for creating dynamic and impactful learning experiences. Future studies could further explore using interactive worksheets and other digital platforms in different educational contexts to broaden the understanding of their benefits and applications.

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