Technology Digital Resources Needs for Japanese Grammar Learning

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Abstract.

This study aims to determine the need for digital technology resources in Japanese grammar classes through student perceptions. The research method uses qualitative descriptions. This study was conducted at a private university in Jakarta in the even semester of 2023-2024. The participants involved were students who received Japanese grammar classes totalling 70 students. The data collection process used observation, interviews, and documents. Data analysis used the stages of data reduction, data presentation, and concluding. The findings concluded that there are four types of digital technology resources needed by students and the most interview answers were university websites (35.7%) and videos from YouTube (35.7%). Other types are websites for downloading books and learning websites from various educational institutions at home and abroad. Overall, it was found that the existence of digital technology resources has a positive impact on learning Japanese grammar. This is also supported by the ownership of smartphone technology devices so that students can access open materials easily.

Keywords: *Digital Technology, Grammar, Japanese and Learning .*

I. INTRODUCTION

Technology as part of the changes in human life and the development of science has also influenced the current education process. This technology has shown a strong impact on the education system. This digital technology has created a paradigm shift in the entire education system. This technology is not only a provider of knowledge but also a creator of information, a mentor, and an assessor. The increase in technology in education has made life easier for students. Instead of using pen and paper, students today use various software and tools to create presentations and projects[1]. It means that every educator and educational institution must consider providing digital technology in teaching and learning activities in the classroom. In other words, digital technology is one of the learning resources (materials) that can be used in class or outside the classroom by students. This condition certainly makes it easier for students to complete assignments or understand the contents of the material being studied. From the results of observations related to digital technology learning resources in Japanese grammar classes for the 2023-2024 academic year, several problems were found, namely 1) student learning resources still depend on lecturers, 2) students have not utilized the technological devices they have such as smartphones as a tool to access learning resources, 3) lecturers have not directed students to the use of digital technology resources as a source of teaching materials in Japanese grammar classes, and 4) the use of digital technology has not been widely used in Japanese grammar classes.

The results of previous studies in Japanese language learning show that the use of Web 2.0 applications such as JING, Screencast.com, YouTube, the OnlineNihongo website, and WordPress are used in teaching and learning Japanese to foster motivation, enthusiasm, and joy during the learning process [2]. Even other studies conclude that the application of basic Japanese language teaching through the Internet and various multimedia technologies provides new ideas and ways for reforming teaching methods [3]. Even information technology can be used as a medium for learning Japanese vocabulary [4]. Computer-assisted multimedia teaching technology has various application values in Japanese language teaching even though there are limitations [5], [6].Online learning media such as Skype and Zoom can be used effectively for learning Japanese grammar and conversation. The advantage of online webinar learning media, such as Skype and Zoom, is its ability to allow participants to interact in writing and orally and share presentation screens through the display-sharing feature[7]. The application of multimedia network-assisted teaching in

basic Japanese language teaching plays a major role in promoting basic Japanese language teaching. In addition, the use of digital technology as a learning resource in the classroom must provide teaching experiences and provide a desire to learn new things.

This means that digital technology is a tool that can change the concept of learning in the global era. Technology can help define and advance the relationship between educators and students, transform our approach to learning and collaboration, narrow long-standing equity and accessibility gaps, and adapt learning experiences to meet the needs of all learners [8], [9], [10]. Digital devices have become an important element in the education system [11]. From the results of discussions with colleagues who teach Japanese grammar courses, it was agreed to further study the need for digital technology resources through student perceptions. The consideration of this study is because the provision of digital technology resources as the main learning resource is a must and the use of technology must be a gateway that delivers student learning opportunities. Therefore, this study aims to obtain the need for digital technology resources in Japanese grammar classes through student perceptions. This research is expected to provide benefits in the provision of digital technology facilities that are by the learning objectives of the course and the needs of students. This means that the provision of digital learning resources must be under the technological devices that students already have so that the learning process can run smoothly.

II. METHODS

The research method uses qualitative description. This type of research focuses on analysis, exploration, and digging deeper into various phenomena or events that occur in society or an environment. This study takes a comprehensive human perspective so that the findings can describe the needs of the focus of the research problem. In this study, the phenomena explored are related to students' perspectives regarding the need for digital technology learning resources for Japanese grammar classes, so that the provision of various technology learning resources can be by the capabilities of the technological devices owned by students [12]. This research was conducted at a private university in Jakarta in the even semester of 2023-2024. The participants involved were students who received Japanese grammar classes totalling 70 students (two courses). Sampling was carried out using purposive sampling. Purposive sampling is the deliberate selection of informants based on their ability to explain certain themes, concepts, or phenomena [13].

The data collection process uses observation, interviews, and documents. Observations were carried out at the beginning of learning before the mid-term exam. Observation activities are to pay attention to digital technology as a learning resource used by students in completing Japanese grammar assignments in class. The documents used were the syllabus and interviews were conducted at the end of the Japanese grammar class with 70 students to ask about their perspectives regarding the need for digital technology resources for grammar classes. The questions were open-ended so that students could give their answers freely and the researcher recorded all student answers. Data analysis used the stages of data reduction, data presentation, and drawing conclusions[14].

III. RESULT AND DISCUSSION

The results of interviews with students at the end of the Japanese grammar class are presented in the table below.

Table 1. Technology Digital Resources Needs in Japanese Grammar Class

	Component of Questions	Finding
1	Types of technology digital resource	1. University website containing teaching materials (35,7%) 2. Website for downloading books (14,3%) 3. Videos from YouTube (35,7%) 4. Learning websites from various educational institutions at home and abroad (14.3%)
2	Tools for conducting online discussions	1. Zoom (35,7%) 2. Google Meet (35,7%) 3. WhatsApp (28.6%)
3	Impact on Japanese grammar	1. Students can easily get Japanese grammar

	learning	materials (21,4%) 2. Students can access teaching materials at any time (21,4%) 3. Students can continue Japanese grammar learning activities outside the classroom (28,6%) 4. Students can get a lot of teaching materials other than books through digital resources (18.6%) 5. Students can have group discussions outside the classroom through digital applications (10%)
4	Technological devices owned by students to use digital resources	1. Laptop (42,8%) 2. Smartphone (90%) 3. Tablet (28,6%)

Table 1 summarises core findings related to the need for digital technology resources for Japanese grammar learning. In the type of technology digital resource, four types of digital technology resources were found that students needed and the most interview answers were university websites (35.7%) and videos from YouTube (35.7%). This means that students prefer videos and teaching materials that can be presented on university websites compared to books or other learning resources. Meanwhile, digital technology applications that students can use online for group discussions are Zoom and google meet with a percentage of 35.7% each. Moreover, the current concept of Japanese grammar learning refers to the concept of project-based learning where students are required to be able to create projects in groups Meanwhile, the results of interviews related to the impact of digital technology learning resources on Japanese grammar learning activities concluded that students benefit greatly from the availability of digital technology resources as a source of teaching materials because they can access teaching materials and continue learning outside the classroom at any time (28.6%).

Overall, it was found that the existence of digital technology resources has a positive impact on Japanese grammar learning. This is also supported by the ownership of smartphone technology devices so that students can access teaching materials easily.The results of the syllabus document analysis also found that Japanese grammar learning has not provided learning resources that lead to OER or open educational resources. OER has provided many changes and awareness of the role of technology in the teaching and learning process. OER provides a process of understanding the openness of access to learning resources that are broader and global [15]. From these findings, it can be said that electronic learning resources are the right source of teaching materials in grammar classes because they have adequate competence in using technology [16]. Thus, teachers must be able to use digital technology learning resources optimally in class so that students remain motivated to also access these learning resources outside the classroom. They have time savings in accessing learning resources so that they can improve learning outcomes [17], [18].

OER has made everyone aware that teaching and learning practices must utilize open learning resources by the current level of global technological progress [19]. Students' interest in using technology is interrelated with the availability of various types of digital technology teachers provide. This attitude shows that students as users of technological advances provide convenience for teachers in providing digital technology learning resources. This is also influenced by the positive environment and support of students' parents in providing technological devices as student learning tools [20], [21], [22]. This shows the fact that digital devices have become a necessity for implementing Japanese grammar learning in class and everyone has a digital device for their life, even reading activities are also often done using technological devices [23]. These findings have implications for the concept of understanding the provision of digital technology learning resources in Japanese grammar classes. The existence of the right learning resources has an impact on the right learning outcomes. Moreover, in the era of globalization with the advancement of digital technology, many changes have been made to all aspects of human life, including the process of organizing education.

Therefore, the current learning process must involve the use of digital technology learning resources. However, educational institutions must pay attention to improving teaching skills related to technology so that the provision of digital technology learning resources in the classroom can be used optimally. As previously studied, it shows that basic digital skills of teachers and teaching skills related to technology are

more important than digital technology resources [24]. Thus, the study recommends that teachers and stakeholders in educational institutions pay attention to the development of teaching technology skills, the provision of digital technology learning resources and teaching skills to achieve learning objectives in Japanese grammar courses so students can have qualified Japanese grammar learning performance.

IV. CONCLUSION

The results of the study concluded that the digital technology resources needed for Japanese grammar learning activities are resources that provide teaching materials that are appropriate to the level of learning needs. From the findings, it was concluded that there are two types of digital technology learning resources that are the choice of students for learning Japanese grammar, namely university websites that can be used to provide all Japanese grammar materials and videos that can be taken from YouTube. The findings also concluded that the existence of digital technology resources has a positive impact on learning Japanese grammar. This is also supported by the ownership of smartphone technology devices so that students can access open materials easily.

This study is still limited to the study of student perceptions of digital technology learning resources for learning Japanese grammar, but the impact on improving learning performance or the level of mastery of Japanese grammar has not been studied in more depth. Therefore, further researchers can study the impact of the use of digital technology learning resources on improving mastery of Japanese grammar comprehensively and can be integrated into the mastery of Japanese writing skills. Universities can use the results of this study to provide opportunities for teachers to create digital technology resources that are appropriate to the needs of the learning objectives of the courses being taught.

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