Artikel JIK Via

by Via Luviana Dewanty

Submission date: 22-Aug-2023 05:55PM (UTC+0700)
Submission ID: 2149382775
File name: Article_JIK_UPI_Rev_Via.docx (1.02M)
Word count: 5189
Character count: 28502

Inovasi Kurikulum I p-ISSN 1829-6750 e-ISSN 2798-1363 I Volume 20 No 2 (2023) 01-14

Inovasi Kurikulum
https://ejournal.upi.edu/index.php/JIK/

Development of Digital Modules to Optimize Basic Japanese Online Learning

Via Luviana Dewanty

[1]**Universitas Pendidikan Indonesia**
Jl. Dr. Setiabudhi No. 229
Bandung
Indonesia
luvianadewanty@upi.edu

Submission date: **21 February 2023**
Acceptance date: **1 June 2023**
Publication date: **2 July 2023**

How to cite (in APA Style)
Gumelar, M. R. M., Dwiyanti, G. P., & Hadiapurwa, A. (2021). Efektivitas penggunaan kuis interaktif berbasis video conference terhadap pemahaman materi pada mahasiswa. *Inovasi Kurikulum*, *18*(2), 166-177. https://doi.org/10.17509/jik.v18i2.36211

Peer review
This article has been peer-reviewed through the journal's standard double-blind peer review, where both the reviewers and authors are anonymized during review.

*Corresponding author: angga@upi.edu

Open access
Inovasi Kurikulum journal is a peer-reviewed open-access journal.
DOI: https://doi.org/10.17509/jik.v20i2.00000

Abstract

Many Japanese language learning modules have been prepared or developed independently by each department or study program. Most of these modules are only PDF versions of PPT made by lecturers, or printed modules with material that is not up to date and full of text without illustrations or photos. Print modules are considered less able to support the learning process, especially in the era of online and hybrid. To get a new Japanese learning experience, students need learning media that present interesting and up-to-date, which can be accessed online anytime, anywhere. Interactive online modules are one of the media that can make this happen. Students can download and access The online module as an ebook via their respective PCs, laptops, or devices. The materials in the online module have links that are directly connected to explanation videos related to basic Japanese, and in each chapter of the material, there are also interactive quizzes that can test students' insights. The method used in this research is Reeves' DBR (Design-Based Research) model which consists of four phases. Phase 1 is in the form of identifying material, media, and module needs through interviews. Phase 2 is the creation and preparation of online modules in accordance with the syllabus for the basic Japanese course material. Furthermore, in phase 3, the module was tested twice on students who chose the basic Japanese courses. In phase 4, the trial data will be analyzed and then it will be explained whether the online module that has been developed can be used in learning Basic Japanese. The results of the questionnaire in the trial showed that all aspects of the assessment received good responses and were included in the "high" category so that the module could be used in online elementary-level Japanese learning. Even so, it still needs several revisions and refinements related to evaluation questions and the content of the module's material before it can be implemented in learning in the following years.

Keywords: Digital module; Japanese language; Online learning.

Abstrak

Banyak modul pembelajaran bahasa Jepang yang telah disusun maupun dikembangkan mandiri oleh tiap jurusan atau program studi. Modul-modul tersebut kebanyakan hanya berupa versi PDF dari PPT buatan dosen, atau modul cetak dengan materi yang tidak up to date dan penuh teks tanpa ilustrasi maupun foto. Modul cetak dirasa kurang dapat menunjang proses pembelajaran, terutama di era pembelajaran daring dan hybrid. Untuk mendapatkan pengalaman belajar bahasa Jepang baru, pemelajar memerlukan media pembelajaran yang menyajikan materi-materi menarik dan up to date, yang dapat diakses secara daring kapan saja, di mana saja. Modul digital interaktif adalah salah satu media yang dapat mewujudkan hal tersebut. Modul digital berupa ebook dapat diunduh dan diakses pemelajar melalui PC, laptop, maupun gawai masing-masing. Materi-materi dalam modul digital memiliki tautan-tautan yang terkoneksi langsung ke video-video penjelasan terkait bahasa Jepang dasar, dan di tiap chapter materi terdapat pula kuis-kuis interaktif yang dapat menguji wawasan pemelajar. Metode yang digunakan dalam penelitian ini adalah DBR (Design Based Research) model Reeves yang terdiri dari empat tahap. Tahap 1 berupa identifikasi kebutuhan materi, media, dan modul melalui wawancara. Tahap 2 adalah pembuatan dan penyusunan modul digital sesuai dengan silabus materi mata kuliah-mata kuliah bahasa Jepang dasar. Selanjutnya pada tahap 3, modul diujicobakan sebanyak dua kali pada mahasiswa yang mengontrak mata kuliah-mata kuliah bahasa Jepang level dasar. Pada tahap 4, data uji coba akan dianalisis dan kemudian akan dipaparkan apakah modul digital yang telah dikembangkan dapat digunakan dalam pembelajaran bahasa Jepang dasar. Hasil angket pada uji coba menunjukkan bahwa semua aspek penilaian mendapat respon baik dan termasuk kategori "tinggi", sehingga modul dapat digunakan dalam pembelajaran daring Bahasa Jepang tingkat dasar. Meski begitu, masih perlu beberapa revisi dan penyempurnaan kembali terkait soal-soal evaluasi dan isi materi pada modul sebelum dapat benar-benar diimplementsikan dalam pembelajaran di tahun-tahun berikutnya.

***Kata Kunci**: Bahasa Jepang; Modul digital; Pembelajaran daring.*

INTRODUCTION

In the era of revolution 4.0, Information and Communication Technology (ICT) has been embedded in our daily lives. With existing technological advances, it makes it easier for us to do various things, especially in studying science. The use of technology has an impact on all aspects of society, such as economic activities, technology changes the way a person does business, how a person learns, how to use their free time and so on (Chapelle & Sauro, 2017; Røpke, 2009; Ameliola & Nugraha, 2013). Along with the development of technology, learning media is increasingly innovative and varied, not only glued to books (Daheri, Juliana, Deriwanto, & Amda, 2020; Dewi, 2017; Rahayu, 2019).

Technological developments in learning also have an impact on foreign language learning (Al-Ansi, Garad, &; Al-Ansi, 2021; Bahmani, Hjelsvold, &; Krogstie, 2019; Basri &; Paramma, 2019; Hidayah, 2022) especially Japanese in college. The pre-research questionnaire revealed that the issue of not optimal online lectures was ranked first. Most still use the same platform (Whatsapp and Email) to teach, not maximizing other platforms that should be able to facilitate lecturers and students in the learning process. Based on the results of the level of urgency analysis that has been carried out at the Department of Japanese Language Education FPBS UPI, the issues in online lectures are quite urgent to discuss because they are hot issues and will continue for some time to come. Although online lectures have been going on for quite a long time, the implementation is considered not optimal. If this is left unchecked, it will affect the smooth process of online learning (Alkaromah, Fauziati, & Asib, 2020; Budiman, 2020; Wicaksana, et al.,2020). Based on questionnaires related to online learning distributed to students of the Department of Japanese Language Education FPBS UPI, in Japanese language lectures, the issue related to online lectures is that online lectures in Japanese are not optimal related to available media that can be used. Most of the lecture process still uses the same platform (Whatsapp, email, ZOOM) and media in the form of PPT for teaching, not maximizing other platforms and media that should facilitate lecturers and students in the learning process.

Japanese learning modules that have been compiled or developed independently by each department or study program (Noverisa, Setiawati, &; Prasetio, 2022) are mostly only PDF versions of PPT made by lecturers, or printed modules with material that is not up to date and full of text without illustrations or

https://doi.org/10.17509/jik.v20i2.00000

photos. It is feared that it will not be able to attract learners to understand and deepen the material (Kusrini, Dewanty, Putri, &; Putri, 2021; Haristiani, Dewanty, &; Rifai, 2022), because in learning a foreign language, the learning experience will be more enjoyable and the material is easy to understand when accompanied by illustrations, images, photos, and videos (Rahayu, 2019; Guillén-Gámez, Lugones, &; Mayorga-Fernández, 2019; Kusrini, Dewanty, &; Hidayat, 2020). Although the content and material presented are of high quality and in accordance with Japanese cultural materials, the type of media in existing Japanese learning modules is considered unsuitable if applied to online or hybrid learning. Learners need material that is poured in interesting media, which can be accessed anytime, anywhere (Bucur & Popa, 2017; Tømte, Enochsson, Buskqvist, & Kårstein, 2015).

To overcome this, textbooks in the form of interactive digital modules can be the solution (Benmisa, Amir, & Sudjani, 2022; Pratiwi, Yulianeta, & Mulyati, 2020; Noverisa, Setiawati, & Prasetio, 2022). Modules are teaching materials that are packaged as a whole and systematic, contain a set of planned learning experiences, and can be selected for more efficient, relevant, and effective learning (Guillén-Gámez, Lugones, & Mayorga-Fernández, 2019). Modules combined with digital technology give birth to digital modules, in the form of teaching materials that are packaged in a modern, concise, easily accessible, and offer interesting features to increase learner interest (Djafri, 2017; Kartika, Astuti, Bakar, & Mardius, 2017; Rahayu, 2019; Guillén-Gámez, Lugones, & Mayorga-Fernández, 2019). It is hoped that the digital module can present Japanese cultural materials more interesting and fun so that learners can understand the material more deeply.

There is quite a lot of research on digital modules as learning media (Mahadiraja &; Syamsuarnis, 2020; Kamalasaria, Sukestiyarno, &; Cahyono, 2019; Hadiyanti, 2021), but in basic Japanese language learning, there has been no research related to the development of digital modules. Research for basic Japanese language learning is limited to digital media or online media only. Therefore, this research will develop digital modules that can be used in learning Japanese, especially basic Japanese. What the development of interactive digital module drafts for basic Japanese learning looks like, as well as what the quality of interactive digital module drafts developed in basic Japanese learning looks like, will be discussed in detail in this study. It is hoped that with the digital module, online lectures for basic Japanese can be more optimal than before.

This research will develop a basic Japanese digital module in the form of a PDF/e-book containing 10 units of learning material. Shokyu Japanese Language Lectures (Elementary Level) Each unit contains materials that can be used for all Shokyu courses (elementary level) and is integrated with learning videos on the Japanese Language Education Department youtube channel. The exercises in the module are also integrated with quiz applications such as Google Form, Kahoot, and Quizziz which have been input questions from lecturers. Thus, students can enjoy a new multimodality learning experience for 5 Japanese language proficiency courses through one learning module only.

LITERATURE REVIEW

ICT in Language Learning

Language learning requires creativity from teachers to be able to carry out learning activities effectively (Constantinides, 2010; Richards & Cotterall, 2016) because creativity in the development of teaching materials and media can increase motivation in learning (Kohnke, 2018; Kusrini, Dewanty, &; Putri, 2022), especially the use of visual-based creative media can support the delivery of material in language learning. Zagkotas & Fykaris (2017) explained in their research that visualizations such as images can facilitate the process of delivering material, as well as make the learning process more interesting. The use of images, photos, and videos as teaching media can be developed into more interesting teaching materials. Images, photos, and videos as ICT (Information and Communication Technology) products in language learning are proof of the use of ICT in learning.

https://doi.org/10.17509/jik.v20i2.00000

Lim, Rosenthal, Sim, Lim, and Oh (2020) state that technological advances have changed the way people communicate and disseminate information. These developments and changes always have an impact on all aspects of life, including the way of communicating and disseminating information so as to give birth to ICT (Information and Communication Technology). The rapid development of ICT also has an impact on the development of the use of ICT technology in education and learning (Mahini, Forushan, &; Haghani, 2012). In addition to the use of ICT products in the form of photos, audio, or video, ICT products in the form of digital quizzes, online assessments, and games can also be used in language learning (Hafifah, 2020; Sangeetha, 2016; Mulatsih, 2020). These ICT products can be arranged and integrated with each other in the form of integrated teaching materials and media in the form of digital modules that are online.

Modules and e-Modules

Modules are systematic teaching materials, containing a set of planned and selected learning experiences to deliver material to be more efficient, relevant, and effective (Mahadiraja & Syamsuarnis, 2020). Modules with various materials, exercises, and media are said to be well integrated if 1) Contain general learning objectives; 2) Learning topics and activities in the module according to the learning material; 3) Contain specific learning objectives; 4) Encourage teachers to play an active role in learning; 5) Contains worksheets, exercises, and assessments (Setyawan & Nawangsari, 2021; Gonzalez-Llorente, Lidtke, Hatanaka, Kawauchi, & Okuyama, 2019). Along with the development of ICT and distance learning conditions, Inanna, Nurjannah, Ampa, and Nurdiana (2021) said that one of the learning media that can be used is the use of digital modules (e-modules) which are present as adaptive form of printed modules. E-modules can control the content learned by students because they are designed by the teachers themselves, so they can adjust to the curriculum that was compiled previously (Tsai, Lin, & Lin, 2018). E-modules in language learning can increase learner motivation and improve learners' critical thinking processes so that they are suitable for use as learning media in language learning (Belanisa, Amir, & Sudjani, 2022; Pratiwi, Yulianeta, & Mulyati, 2020; Noverisa, Setiawati, & Prasetio, 2022; Zainul, Oktavia, & Putra, 2018).

e-Modules in Japanese Language Learning

Nowadays, Japanese language learning which is included in foreign language learning has also been rife using ICT in the teaching and learning process (Febrianty & Ricardo, 2019; Firmansyah, Rahmawati, & Tanzil, 2018; Ge, Leng, & Baharudin, 2022). ICT involvement in Japanese language learning is generally done through the use of various digital platforms such as Google Classroom and other various LMS (Huang, Chueh, Ho, & Kao, 2021). In addition to using the platform in the form of LMS, the creation of teaching and assessment materials also involves ICT such as materials in the form of e-books, powerpoints, audio-visual media in the form of youtube videos, audio that can be accessed from popular applications such as podcasts, Spotify, iTunes, and assessments through the Google Form and Digital Quiz platforms (Ayub, Talib, & Siew, 2018; Brata, Brata, & Lukman, 2019; Ge, Leng, & Baharudin, 2022). The materials and assessments in ICT-based Japanese language learning can be integrated into an e-module, so that similar to the use of e-modules in language learning in general, teachers and learners can control learning content, motivate learners, and improve Japanese language skills (Tsai, Lin, & Lin, 2018; Belanisa, Amir, & Sudjani, 2022; Damayanthi, 2022; Pratiwi, Yulianeta, & Mulyati, 2020; Noverisa, Setiawati, & Prasetio, 2022; Zainul, Oktavia, & Putra, 2018).

METHODS

This research lasted for approximately 1 month with the subject of the study being a basic Japanese language learner of the University. Stenhouse (1975) and Postholm (2014) emphasize that the ability to research and develop is a way to show an increased understanding of the material and how to teach learning. This study used Reeves' DBR (Design-Based Research) model. Wang and Hannafin (in Bergroth & Seppala, 2012) define DBR as a systematic but flexible methodology that aims to improve educational

https://doi.org/10.17509/jik.v20i2.00000

practices through iterative analysis, design, development, and implementation. The DBR consists of four phases, as illustrated by Reeves (2006) in the chart below.

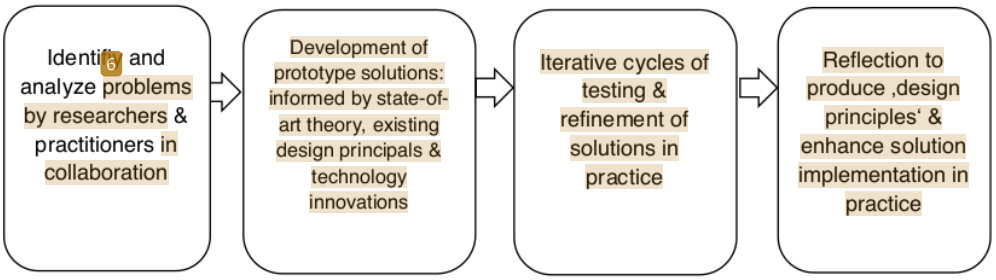


Figure 1
DBR phases of Reeves model
Source: Reeves (2006) and Mamolo (2019)

In more detail, based on Reeves (2006), the stages of DBR applied in this study are as follows (Štemberger & Cencič, 2016).

In phase 1, problem identification is carried out by means of ultrasound and SWOT analysis to find out solutions to online learning problems related to variations in materials and media used in Japanese cultural learning, difficulties faced in learning, and what kind of teaching materials or teaching media are needed in learning.

In phase 2, the step of selecting the digital module design and adjusting the theme of each chapter digital module with basic Japanese material is carried out by collecting references from books, videos, and illustrations. The process of creating and preparing digital modules is also carried out at this stage. The designs and illustrations on the modules are drawn digitally using Clip Studio Paint and Adobe Photoshop CS6 software. The illustrations are then combined together with the text of the material, then arranged according to the theme of the teaching material. Links to learning reference videos are collected and then inputted into the module according to the theme of the material. Simple games related to the material are also made to find out the learner's understanding. The game link is also inputted in each chapter. After that, validation from material experts and media experts is carried out to find out whether the digital module has shortcomings or requires improvement before testing.

The digital module was then piloted in phase 3, on a limited scale to 20 basic Japanese learners using samples of two material themes. At this stage, learners will also be given a questionnaire to find out their responses to the digital modules used.

This research did not conduct stage 4 DBR because of limited time and place to reflect in the form of PDG with lecturers who teach Basic Japanese courses. It is expected that phase 4 can be carried out as a follow-up to be carried out in the next research.

RESULT

Phase 1 Identify the Problem

Based on the level of urgency, the issues in online lectures are quite urgent to discuss because they are important issues and will still last for some time to come. Although online lectures have been going on for 4 semesters, the implementation is considered not optimal. If this is left unchecked, it will affect the smooth process of online and hybrid learning later. In Japanese language lectures, issues related to online lectures that are not optimal can be re-identified into several sub-problems such as the following.

https://doi.org/10.17509/jik.v20i2.00000

1. Online lectures on *Shokyu* Japanese (elementary level) that are not optimal.
2. Online lectures on *Chukyu* Japanese (intermediate level) that are not optimal.
3. Online lectures in *Chujokyu* Japanese (upper intermediate level) that are not optimal.

The three sub-problems above were analyzed using USG (Analisis Urgency, Seriousness, Growth) criteria based on the order of problem priority, with a score of 1-5. The results of the analysis are presented in Table 1 below.

Table 1
USG analysis of online lecture sub-problems

No	Problems	Score
1	Online lectures on *Shokyu* Japanese (elementary level) that are not optimal	5
2	Online lectures on *Chukyu* Japanese (intermediate level) that are not optimal	4
3	Online lectures in *Chujokyu* Japanese (upper intermediate level) that are not optimal	4

Source: 2020 Research

From the results of the analysis, the adjustment of material in the digital module for lectures at the *Shokyu* Japanese level (elementary level) received the highest score. The Japanese course consists of 5 courses, namely *Shokyu Bunpo* (Basic Japanese grammar), *Shokyu Hyoki* (basic Japanese kanji), *Shokyu Chokai* (basic Japanese listening), *Shokyu Kaiwa* (basic Japanese conversation), and *Shokyu Dokkai* (Basic Japanese reading). These five courses are considered to require more special attention for online lecture activities. Students at the elementary level are still not familiar with Japanese so they need to be given teaching materials and media with detailed, interesting, and easy-to-understand explanations (Kusrini, Dewanty, Putri, & Putri, 2021; Haristiani, Dewanty, & Rifai, 2022).

Based on the results of USG analysis, the issue set by the author for actualization activities is that online learning activities are not optimal, especially for *Shokyu* Japanese lectures (elementary level). Furthermore, the determination of the roots of the problem has been carried out using fishbone method analysis (fishbone diagram). The results of the analysis are presented in Figure 2.

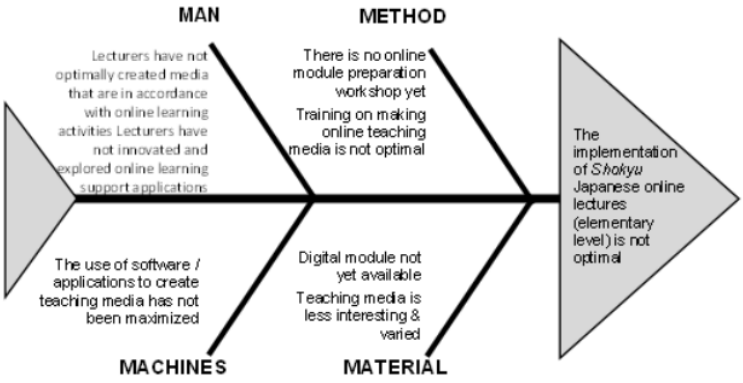


Figure 2
Root cause analysis using fishbone diagrams
Source: Author Documentation 2021

From the results of the analysis based on the 4 root problems in the fishbone diagram above, there are several solutions that can be applied to optimize the implementation of online lectures.

https://doi.org/10.17509/jik.v20i2.00000

1. Digital version module creation
   Teaching materials and media can be poured into a digital module (Dewi, 2007; Mustofa, Chodzirin, &; Sayekti, 2019) which will later be accessible digitally to all new students at the basic Japanese level. Digital modules can be PDFs or interactive e-books.
2. Workshop on making teaching materials/media
   Training on making interesting and contemporary teaching materials/media in the form of animated videos/podcasts/PPTs using certain software and applications.
3. Learning management system application workshop
   The university has official Learning Management System (LMS) facilities such as SPOT UPI and SPADA UPI which can actually be used by all lecturers who teach courses. But in fact, only a small number of lecturers in the Japanese Language Education department use the LMS facility because its operation is not user-friendly. Therefore, it is necessary to socialize or train on the procedures for using UPI LMS facilities in each program study.

Of the three solutions that the author offers, the best solution to overcome issues in beginner-level Japanese online lectures can be known by analyzing these solutions using methods with SMART criteria (Specific, Measurable, Achievable, Realistic, Timely). Details can be seen in Table 2 below.

Table 2
USG analysis of online lecture sub-problems

No	Problems	Solutions	S	M	A	R	T	Conclusions
1	There are no modules available in each course for online learning	Making digital versions of modules by the teaching team	✔	✔	✔	✔	✔	This solution meets all SMART criteria. The author and the teaching team teach 4 *Shokyu* Japanese courses and already have materials, media and evaluations for several meetings so that they can be compiled and poured in the form of digital modules.
2	Course lecturers do not make learning materials/media that are in accordance with online learning activities	Workshop on making teaching materials/media in the form of videos/podcasts / animated PPTs using certain software and applications.	✔	✔	✘	✔	✘	Training for the beginning of odd-numbered semesters has been carried out, but there is no real output yet. If you want to do training again, it can only be done at the beginning of the even semester.
3	Lecturers do not innovate and explore online learning support applications	Workshop on the use of learning management system applications	✔	✔	✘	✔	✘	The training has been carried out last year, but UPI's LMS facility apparently does not support Japanese fonts so it cannot be used optimally for Japanese online lectures.

Source: 2020 research

https://doi.org/10.17509/jik.v20i2.00000

After defining solutions and drawing conclusions from several existing issues using SMART criteria, it can be seen that issues related to digital modules in lectures meet all criteria. Compared to the other 2 solutions, the digital module creation solution can be solved by making digital modules. This research will develop a basic Japanese digital module in the form of a PDF/e-book containing 10 units of learning materials. *Shokyu* Japanese Language Lectures (Elementary Level) Each unit contains materials that can be used for all *Shokyu* courses (elementary level), and is integrated with learning videos on the Japanese Language Education Department YouTube channel. The exercises in the module are also integrated with quiz applications such as Google Form, Kahoot, and Quizziz which have been input questions from lecturers. Thus, students can enjoy a new multimodality learning experience for 5 Japanese language proficiency courses through 1 learning module only. It is hoped that with the digital module, online and hybrid lectures for basic Japanese can be more optimal than before.

Phase 2 Adjustment of Digital Module Material and Digital Module Design

Digital Module Material

At this stage, discussions were held with the teaching team for the *Shokyu* Japanese course (elementary level) to determine the program units that would be used as the boundaries/scope of the online module, study online lesson plans that had been prepared, identify and analyze competency standards for the material to be studied, and arrange units or units of learning material that can accommodate the material to be studied. Furthermore, the preparation of the 10 study unit material texts was carried out by referring to the basic grammar material for the *Shokyu Bunpo* course (basic grammar) and selecting Japanese reading material texts from various sources for the *Shokyu Dokkai* course (basic grammar). For the preparation of *Shokyu Dokkai* material (basic grammar), For the preparation of *Shokyu Chokai* material (Beginner level listening), the steps for making materials and media are as follows.

1. Select audio tracks from various sources for the *Shokyu Chokai* course (Beginner level listening)
2. Make a Google Form for the listening question form
3. Upload the audio track to Google Drive.
4. Setting up the Google question sheet link to be inserted into the module.
5. Setting up the audio link to be inserted into the module.

The steps for making materials and media can be seen in Figures 3 and 4 below.

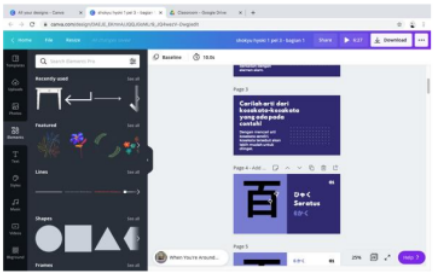


Figure 3
Setting up the audio link to be inserted into the module
Source: Personal documentation

https://doi.org/10.17509/jik.v20i2.00000

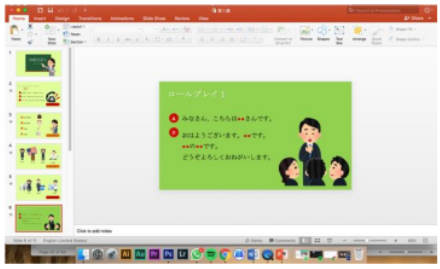


Figure 4
Making material using PowerPoint
Source: Personal documentation

In addition to materials in the form of text or audio, teaching media is also prepared in the form of videos for *Shokyu Bunpo* (Basic Grammar), *Shokyu Hyoki* (Basic Kanji), and *Shokyu Kaiwa* (Basic Conversation) courses. The steps taken are as follows.

1. Make narrative text for teaching videos
2. Filming and editing teaching videos
3. Make teaching videos in the form of simple animations
4. Upload videos to Google Drive
5. Prepare the video link to be inserted into the module.

Figure 5 below shows the steps for making a learning video.

Figure 5
Making learning videos using Zoom Meeting
Source: Personal documentation

The last step is the stage of creating and compiling evaluation questions for 5 *Shokyu* courses. The stage begins with compiling evaluation questions for 5 *Shokyu* courses, then inputting the questions that have been compiled into the Google Form, Kahoot, and Quizziz. The questions are converted into short links to be inserted into the module.

Digital Module Design

After determining the material, media, and types of evaluation that will be included in the module, the design theme for the entire module is determined. The module content layout process uses Canva.com, Microsoft PowerPoint, and Adobe Photoshop. After 1 theme is determined, then enter the materials according to the theme and learning chapter, then insert audio links, videos, and online quizzes into each lesson unit. The process of designing and compiling the contents of the module can be seen in figure 6.

https://doi.org/10.17509/jik.v20i2.00000

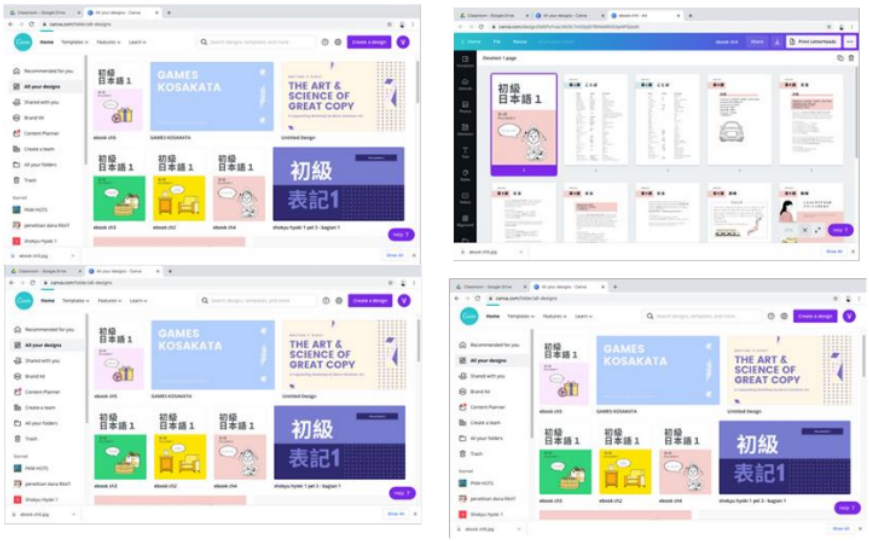


Figure 6
Compilation of digital module contents from Lesson 1 to Lesson 10
Source: Personal documentation

Digital modules that have been designed and filled with materials, learning media, and evaluation are then converted into PDF and e-book forms using the Kotobee software. The process of converting into an e-book can be seen in Figure 7 below.

Figure 7
Making digital modules in e-book format using Kotobee software
Source: Personal documentation

Before the module was trialed out, coordination and validation were carried out with the teaching team for the *Shokyu* course first. Coordination and validation is carried out to check whether the learning objectives, material descriptions, forms of activities, assignments, exercises or other activities contained in the module are effective for use.

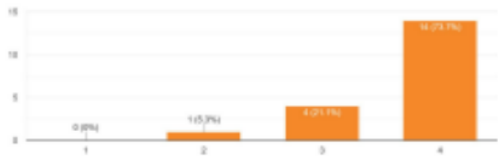
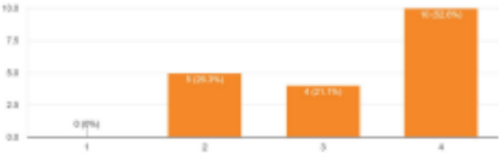
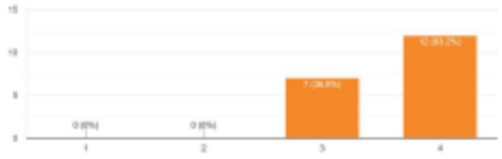
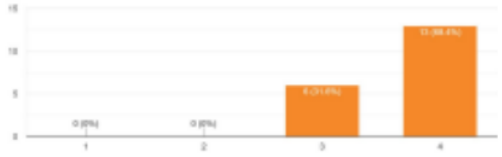
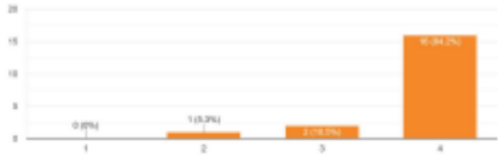
Phase 3 Implementation

The initial implementation was carried out after coordinating with the teaching team for the *Shokyu* course and compiling a questionnaire on the Google form based on the instruments described in the methods section. Trials of two study units on digital modules were carried out in 3 *Shokyu* classes. Responses were

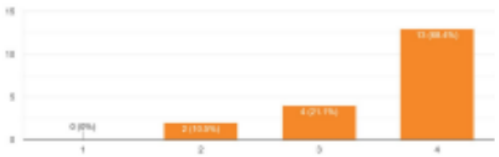
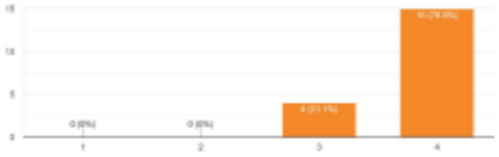
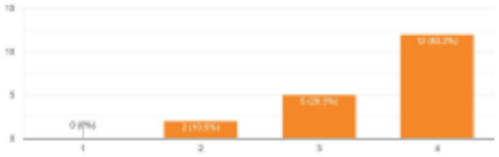
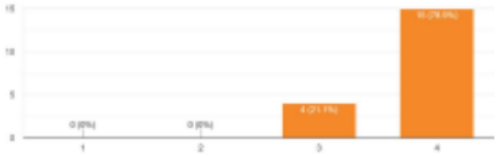
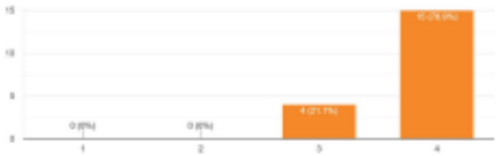
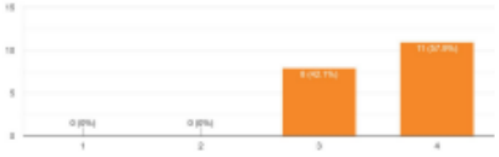
https://doi.org/10.17509/jik.v20i2.00000

collected by giving questionnaires in the form of a Google form to students in 3 *Shokyu* classes regarding the digital module being tested. From the temporary implementation process, trial results were obtained with an average rating of very good on the aspects in the questionnaire. The trial results can be seen in Table 3 below.

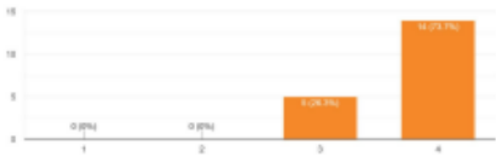
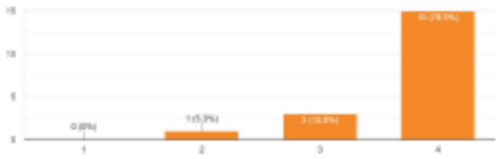
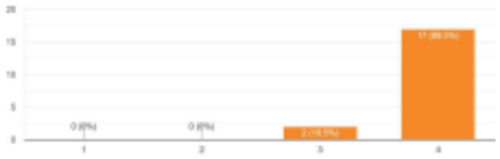
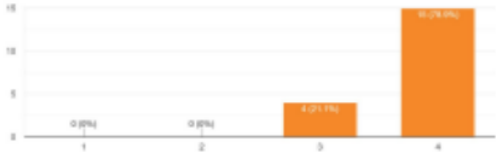
Table 3
The results of the digital module sample trial questionnaire

No	Questions	Result
Writing Language		
1	The title of the module corresponds to the content.	
2	The font size on the module is easy to read.	
3	The vocabulary that appears varies.	
4	Explanation of the material in the module is easy to understand.	
Appearance		
5	Attractive digital module design.	

https://doi.org/10.17509/jik.v20i2.00000

6	The color combination on the module is appropriate.	
7	The suitability of the illustrations and material is good.	
8	The size of titles, subtitles, and text is balanced.	
9	The appearance of the video explanation of the material is interesting and in accordance with the material.	
Material		
10	The sentence patterns in the module are in accordance with the material.	
11	The vocabulary in the module is in accordance with the theme of the material.	

https://doi.org/10.17509/jik.v20i2.00000

12	Sentence patterns according to the material.	
13	The learning videos in this module make it easier for me to learn the material.	
14	The practice questions in this module make it easy to learn the material.	
15	This module facilitates digital learning activities.	

Source: 2020 research

The results of the questionnaire show that in the digital module that was developed, almost all respondents strongly agreed that in the Writing Language aspect, the vocabulary in the e-module varies widely and the explanation of each material in the module is easy to understand, supported by attractive illustrations. However, in this aspect, many respondents disagreed that the letters used in the module were easy to read. This indicates that the Japanese characters in the module are rather difficult to read, due to the inappropriate size of the letters. In the Appearance aspect, the majority of respondents strongly agreed that digital modules have an attractive design, as well as interesting illustrations and learning videos as well. The material aspects of the module were considered very good by the respondents, as evidenced by the fact that almost all respondents strongly agreed that the sentence patterns, exercises, quizzes, and explanatory videos contained in the module were in accordance with the learning material.

CONCLUSION

The development of basic Japanese digital modules is carried out through 3 of the 4 stages of DBR (Design-Based Research). In stage 1, problem identification was carried out by analyzing problems and solutions from online learning related to the variety of materials and media used in learning Japanese culture using USG and SWOT. After that, the selection of digital module designs, adjustment of digital module themes for each chapter with basic Japanese material, and creation of materials in the form of

https://doi.org/10.17509/jik.v20i2.00000

discourses, quizzes, games, PPT, and videos are carried out in stage 2. Stage 2 also contains activities for compiling module content according to the learning theme unit. A trial of the digital module on a limited scale for 20 UPI DPBJ students was carried out in stage 3. The results of the questionnaire on the trial showed that all aspects of the assessment received good responses and were included in the "high" category so that the module could be used in basic Japanese online learning. But even so, it still needs several revisions and refinements related to evaluation questions and the content of the module's material before it can be implemented in learning in the following years.

AUTHOR'S NOTE

The author declares that there is no conflict of interest regarding the publication of this article. The author confirms that the data and content of the article are free from plagiarism.

REFERENCES

https://doi.org/10.17509/jik.v20i2.00000

Artikel JIK Via

ORIGINALITY REPORT

12%	11%	5%	2%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	ejournal.upi.edu Internet Source	3%
2	hipkin.or.id Internet Source	3%
3	download.atlantis-press.com Internet Source	2%
4	www.atlantis-press.com Internet Source	1%
5	ejournal.uin-suka.ac.id Internet Source	1%
6	essay.utwente.nl Internet Source	1%
7	vm36.upi.edu Internet Source	<1%
8	Irnin Agustina Dwi Astuti, Indra Yahdi Putra, Yoga Budi Bhakti. "Developing Practicum Module of Particle Dynamics Based on Scientific Methods to Improve Students'	<1%

Science Process Skills", Scientiae Educatia, 2019
Publication

9	safetyinknowledge.blogspot.com Internet Source	<1%
10	reninoer.blogspot.com Internet Source	<1%
11	Syifauzakia Syifauzakia. "Kebijakan Kurikulum Merdeka dan Perubahan Sosial di Satuan PAUD", Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 2023 Publication	<1%
12	publisher.uthm.edu.my Internet Source	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		