



English Language Teaching Digital Module for Android-Based Food and Beverage Services

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Abstrak

Pandemi Covid-19 memaksa sekolah untuk melakukan e-learning. Tantangannya bahkan lebih besar untuk sekolah kejuruan karena siswa melakukan praktik menggunakan instrument khusus. Oleh karena itu, penelitian ini bertujuan untuk mengembangkan modul digital pengajaran bahasa Inggris untuk layanan makanan dan minuman berbasis Android untuk membantu siswa belajar bahasa Inggris secara efektif melalui pembelajaran daring. Penelitian ini mengikuti model penelitian dan pengembangan 4D. Data penelitian dikumpulkan melalui observasi, dokumentasi, expert judgment, dan angket. Data dianalisis secara kualitatif dan kuantitatif. Penelitian ini berhasil mengembangkan format akhir modul berupa buku elektronik yang terdiri dari delapan unit. Selain itu, kualitas modul dapat dikategorikan sebagai materi yang sangat baik berdasarkan hasil angket yang diberikan kepada mahasiswa terkait, dosen, dan juri ahli. Aktivitas yang disediakan dalam modul memberikan banyak kesempatan bagi mahasiswa untuk belajar. Implikasi dari temuan ini memiliki potensi untuk merevolusi cara pengajaran dan pembelajaran Bahasa Inggris. Dengan menyediakan akses ke modul digital berkualitas tinggi kepada siswa dapat membantu siswa untuk mencapai pembelajaran Bahasa Inggris siswa di bidang layanan makanan dan minuman. Penelitian ini hanya mengevaluasi modul pada tahap proses formatif.

Kata Kunci: Modul Berbasis Android, Covid-19, Bahasa Inggris untuk Makanan dan Minuman, Sekolah Kejuruan

Abstract

The Covid-19 pandemic forced the schools to conduct e-learning. The challenges are even greater for vocational schools since the students do practices using specific instruments. Thus, this study aimed to develop an Android-based digital module for teaching English for food and beverage services to help students learn English effectively through online learning. This study followed the 4D model of research and development study. The data of the study were collected through observation, documentation, expert judgment, and questionnaire. The data were analysed both qualitatively and quantitatively. This study successfully developed the final format of the module in the form of an electronic book consisting of eight units. In addition, the quality of the module can be categorized as very good material based on the questionnaire results, which were given to the related students, lecturers, and expert judges. The exercises provided in the module provide many opportunities for students to practice and learn. The implication of this finding has a potential to revolutionize the way that English is taught and learned. By providing students with access to high quality digital modules can help students to achieve the student's English language learning in Food and Beverage Services. This research merely evaluates the module in the formative process.

Keywords: Android Based Module, Covid-19, English for Food and Beverage, Vocational Schools

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1. INTRODUCTION

The learning process of English subjects for hospitality students covers Professional English for Kitchen, Service, Front Office, Housekeeping, and Guiding. English subject, especially Professional English for the restaurant or English for Food and Beverage Service, is also stated in the Indonesian National Work Competency Standards. Professional English subject is made not only by coincidence, but it is permanent and refers to the increase of students' knowledge toward the use of International Language in the industry especially in Hospitality. To support the learning process, the source for learning is needed to support the materials learned. The learning resources are all kinds of materials that can be used to

provide information and various skills to learners and teachers (Lau et al., 2018; Scott et al., 2018).

Languages studied can contribute to the Language Development and another researcher around the world (Anggayana et al., 2020; King & Mackey, 2016). Things that can be used as the source of learning are books, modules, the internet, teachers and lecturers, activities, and environments. Regarding digital module, it is found that digital module can help students in increasing their comprehensive skills (Suantini et al., 2022; Syarofatin et al., 2022). In addition, E-Module is also able to improve students' learning outcomes (Asrizal et al., 2022; Istuningsih et al., 2018). In summary, the urgency of conducting research on English Language Teaching digital modules is driven by the need to adapt to a changing educational landscape, meet demand for English language proficiency, and leverage technology to enhance language instruction. Such research can lead to the development, effective, and inclusive digital tools that benefit both educators and learner in this college.

Following the era's growth, based on the survey conducted by the Association of Indonesia Internet Service Providers in 2017, there were 143 million out of 160 million people using the internet. It is strengthened by the tendency of students who use a smartphone to access information as a source of learning in the education sector. The students majoring in the Management Food and Beverage of Triatma Jaya Tourism College categorized into the millennial generation often access information through a smartphone. The millennial generation is the one who was born between 1989 to 2001 who is identical to communication, media, and digital technology because they were grown up by the development of technology. The millennial generation is creative, informative, passionate, and productive.

In addition, the Covid-19 pandemic also forced the schools to do online learning (Gautam & Gautam, 2021; Mishra et al., 2020). It means that integrating technology is a must to conduct distance learning. Since tourism schools are vocational schools that require the students to practice using particular equipment, distance learning also gives a new challenge for both the students and the teachers. It is not surprising that the tourism industry is an important economic sector, where most people work in the tourism industry (Sharma & Srivastava, 2018; Song et al., 2018). Appropriate technology can help students have authentic and effective learning materials is crucial (Chin et al., 2015; İlter, 2015). Speaking English has become a conversation that is often done by foreign tourists. However, most of the students do not have the equipment they need to do the practices at home. For example, the English for Food and Beverage Service subject requires the students to practice English in a restaurant laboratory using particular chinaware, glassware, and silverware. In addition, limited supporting facilities in carrying out the learning process are experienced by students, including the internet network. The internet network center on campus also frequently has decreased speed and uneven distribution, of course it has an impact on the learning process which results in the internet used by students also being disrupted, especially if students access learning materials from their residence who come from remote areas.

From the phenomenon that happens, it is supposed that the English teachers should assimilate technology in the learning process, especially on English for Food and Beverage Service subject. However, many tourism schools are not ready for this situation. Triatma Jaya Tourism College, for example, did not have English for food and beverage service materials in the form of electronic materials which are suitable to the millennial generation's characteristics. Based on the Kominfo data in 2016, the millennial generation spent about three hours nonstop in a day in front of a smartphone. Therefore, it strengthens the researchers to develop an English for Food and Beverage Service module Based on Digital Android for the Millennial Generation of Hospitality Students. Therefore, the research aims to develop the Android base English for Food and Beverage Service module for hospitality

students and find out the developed module's quality. Previously, 31 students were given a questionnaire to find out the features they wanted to have in this application. The survey results show that the main features expected in this application are: easy to use, does not use a lot of computer code, able to evaluate the tasks given directly, and can attract students to learn English food and beverage service.

The novelty of this research is limited to the researchers' college, in which, this module is used as a pioneer of digital self-learning to create more engaging and interactive self-learning experience for the students as a collaboration learning. Regarding to the learning module in this research module is a means for students to achieve learning goals based on the basic competency or indicators of competency achievement, self-learning activity guidance, and to give room for the students to test themselves through exercises provided in the module (Hernández-de-Menéndez et al., 2019; Mirkouei et al., 2016). In addition, the module organizes learning materials that considers education functions. This module is dedicated to English for Food and Beverage subject in which, English is used as the main language of the module.

The English language is taught in Elementary School until Higher Education that aims to help students have skills of listening, reading, and writing materials in the effort of using English skills. The skills and components of the language contained in them are still general and less relevant to the needs of student (Bueno-Alastuey & López Pérez, 2014; Darancik, 2018). An English subject that focuses on service is a subject that is specifically given to the students who are majoring in Restaurant Service. A restaurant is a food service operation that gives profits, in which the main business is selling food and beverage toward individuals and guests on a small scale (Polynskaya, 2021; Yerdavletova & Mukhambetov, 2014). A service is an act or performance offered by a party to other parties, which is intangible and does not cause ownership of something. Based on the explanation above, the English for Food and Beverage Service subject is a compulsory subject that needs to be understood and mastered by the students majoring in restaurant service.

The novelty of this research is that this research introduces innovations in the use of technology with modules specifically designed for the Android system. This subject is used as the module in which the module is dedicated to Android system. Android is a stack system connected and distributed in open source, consisting of an operating system, middleware, and key application. Android is an operating system based on Linux, specifically designed for mobile devices such as smartphones and tablets. This research aims to develop more relevant and specific English learning materials for students majoring in Restaurant Service. This is done by creating Android-based learning modules designed to support English language skills needed in the restaurant industry.

2. METHODS

Based on the research background, this research used development research. Therefore, the research model was the 4-D model consisting of Define, Design, Develop, and Disseminate. This study was conducted at Triatma Jaya Tourism College on the Hotelier Study Program with a Major in Management of Food and Beverage with 31 students. The quality of the product is also seen from the response of the expert judgment, English teacher, and students. The collecting data techniques were observation, documentation, expert judgment, and questionnaire. The observation was conducted to determine the teaching and learning process before applying the English for Food and Beverage Service module. The documentation technique was conducted to gather data related to the research's preparation, such as the applied policies used in the English for Food and Beverage Service subject. Finally, the expert judgment was conducted to identify the module content validity. In

comparison, the questionnaires were used to determine the students' and lecturers' responses toward the quality of English for the Food and Beverage Service module, which was being developed.

Data from product field test was analysed using questionnaire quantitatively. After the data had been analysed quantitatively, then the results described. The quality of the product is also seen from the response of the expert judgment. Data from the observations and documentation were analyzed qualitatively using an interactive analysis model by previous research (Miles & Huberman, 1994; Paloma de Aro et al., 2018). This analysis model consists of three cyclical steps, data reduction, data display, and conclusion drawing/verification. First, the expert judgment sheet was analyzed using the inter-rater agreement model analysis. Then, its result was classified using a set of criteria. Finally, the module was considered valid if the content validity coefficient is $\geq .78$ (Miles & Huberman, 1994; Paloma de Aro et al., 2018).

The researcher quantified and found out the mean score of the questionnaire results. Then, in Table 1 presented the average values categorized based on the theory of theoretical ideal reference assessment by previous studies.

Table 1. The Theoretical Ideal Reference Assessment Criteria

No.	Interval	Category
1	$(MI + 1.5 SDI) < X$	Very Good (VP)
2	$(MI + 0.5 SDI) \leq X < (MI + 1.5 SDI)$	Good (P)
3	$(MI - 0.5 SDI) \leq X < (MI + 0.5 SDI)$	Fair (SP)
4	$(MI - 1.5 SDI) \leq X < (MI - 0.5 SDI)$	Poor (N)
5	$X < (MI - 1.5 SDI)$	Very Poor (VN)

Note: $MI = \frac{1}{2}$ (ideal maximum score + ideal minimum score); $SDI = \frac{1}{6}$ (ideal maximum score - ideal minimum score)

The questionnaire consisted of 55 items, the minimum score for each item is one, and the maximum score is five. Using the theoretical ideal reference assessment theory, the criteria to classify the category of the questionnaire result can be seen in Table 2.

Table 2. The Categories for the Results of the Questionnaire

Category	Interval
Very Good	$X \geq 247.5$
Good	$192.5 \leq X < 247.5$
Fair	$137.5 \leq X < 192.5$
Poor	$82.5 \leq X < 137.5$
Very Poor	$X < 82.5$

3. RESULTS AND DISCUSSION

Result

The development process of the English for Food and Beverage Service module was conducted through four phases. Those phases are explained below. There were five steps in the Define Phase, and they were: initial analysis, students' analysis, tasks analysis, concepts analysis, and specification of learning aims. In the initial analysis, the students' needs and behaviors were observed in English for Food and Beverage Service subject. In the students' needs analysis, it was found out that some of the students tended to spend their time using their smartphones for social media and for finding materials or presentations which were

required for the English for Food and Beverage Service subject. Moreover, it was strengthened in March, and the pandemic has caused the teaching and learning process to be conducted from home. Thus, many students looked for learning materials from their smartphones.

Moreover, in doing a presentation, many students used smartphones instead of laptops or computers. The task analysis identified that the students tended to have time-limit assessments or tasks, in which most of the students browsed the internet using their smartphones. The analysis of the concepts identified that online learning had created higher expenses for the students. All of the learning processes were done online, which covered regular online classes, online seminars, and online socialization. Based on the described analyses, the concept of the English for Food and Beverage Service module based on digital android was designed specifically. The application was designed to ease the students to study offline. Based on the results of the documentation analysis presented in Figure 1, the materials for the English for Food and Beverage Service module should consist of Restaurant Service Information, Handling Reservation, welcoming guest, Dealing with Payment, Room Service, Handling Complaint, Restaurant Staff, and Giving Direction.

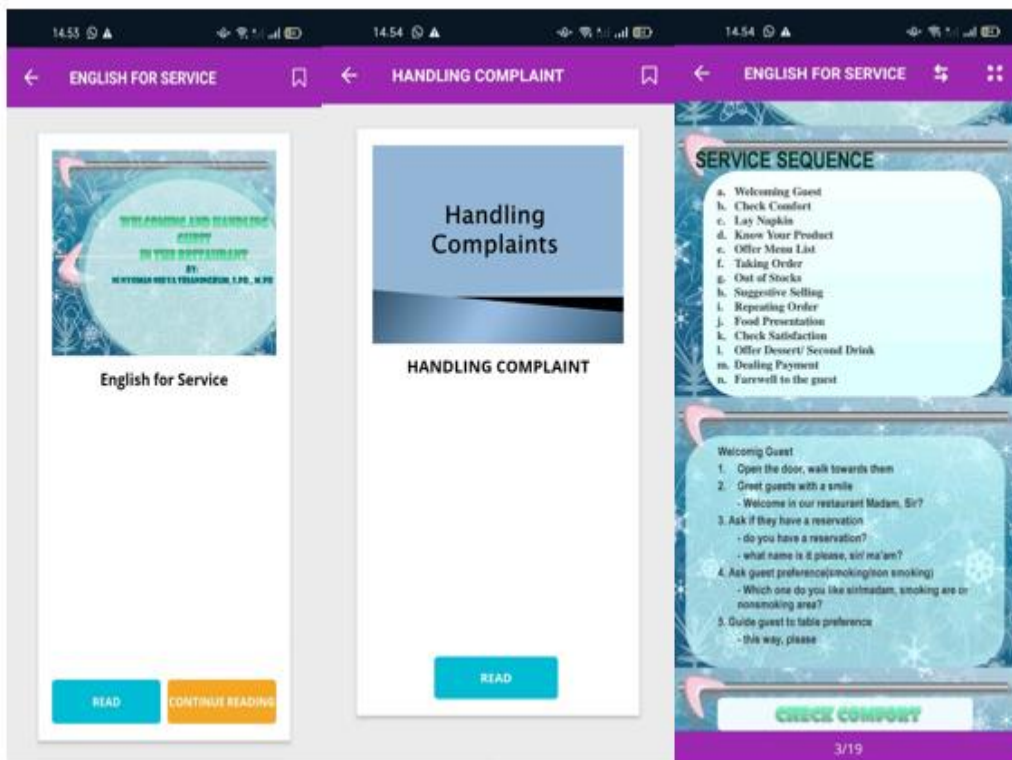


Figure 1. Apps Geyser Interface

The Design Phase covered the process to determine the suitable learning media, media format, and initial design of the English for Food and Beverage Service module. The chosen learning media was in the form of the AppsGeyser android application. The application was chosen considering that the students spend much internet data to join the online classes, especially in this pandemic. Therefore, this application was chosen to reduce students' expenses from a cost aspect because this application can be used offline. AppsGeyser is an application system that is designed to resemble an electronic book. The format which is used by the application is resembling PowerPoint format. Thus, the students are expected to learn English for Food and Beverage Service subject directly to its learning core.

Develop Phase. In this phase, the researchers used help from expert judges and English subject lecturers. The expert judges were asked to fill in expert judgment sheets to check and revise the content of the English for Food and Beverage Service module. Based on the questionnaire result, it was found out that the designed and the developed materials were suitable for adult students and following the required standard. Suggestions and critics from the English subject lecturers and the students through the questionnaires were used to revise the product design. After the teaching materials and the application used to develop the English for Food and Beverage Service module were identified, the next step was conducting a module trial. The researchers collected the questionnaire results from the students and the English subject lecturers based on the module trial. The questionnaires were then being developed following the criteria of a good teaching book. There were 55 statement items of the questionnaire for the English subject lecturers.

In the Disseminate Phase, the researchers disseminated the English for Food and Beverage Service module based on digital android to the students' English subject lecturers. In addition, the android-based English for Food and Beverage Service module was developed and revised based on the inputs from the questionnaires, which were distributed to the English lecturers. The quality of the module was seen from its content validity based on the results of the expert judgment sheets and the lecturers' responses based on the results of the questionnaires. The result of the quality assessment of the English for Food and Beverage Service is as follows:

The expert judgment sheets results were analyzed using the content validity formula, in which the results showed that the coefficient of the content validity was 1.00. Based on the experts' judgment analysis, it was found out that the English for Food and Beverage Service module based on Digital Android could be stated as valid. The two experts agreed that the materials on the eighth unit of the module were strongly relevant to the students' needs and the requirements of the curriculum. Since $1.00 > 0.78$, it means that the content of the materials in the module was valid. Considering the result of the questionnaires on the quality of the module, it was found that the quality of the module was categorized as very good. The English lecturers gave a positive response toward the 55 items of the questionnaires. Those 55 items covered the content, appearance, instruction, illustration, exercises, language, and practical aspects. The mean score of the questionnaire results was 249. Thus, based on the criteria in Table 2 above, it was classified as very good.

Discussions

This study found that the students at Triatma Jaya Tourism College did not have any electronic modules that support the online learning for English for Food and Beverage subject. Therefore, they agreed that they need a specific module to help them study English for Food and Beverage service through online learning. If we see globally, the need for specific materials for online learning becomes a crucial problem for vocational schools during the Covid-19 pandemic (Iqbal et al., 2022; Muthuprasad et al., 2021). Since Balinese people conduct many cultural and religious activities. It is because vocational schools need specific tools and equipment to run their instruction, and it becomes a major challenge during distance learning through online learning (Ali, 2020; Kinnula et al., 2021). Using technology, especially the android application, the module can be equipped with a tutorial video representing authentic activities that can guide the students to learn better.

The grid instruments were analysed and filled by two expert judgments. It was found that, in relevance of material with basic competency, students' development and needs, the judges agreed that all English material in this digital module had been suitable with the syllabus analysis. Thus, the expert judgments argued that the first point was very agreeable. The experts said that, the syllabus was as a guideline in developing English digital module.

Therefore, if all the contents in syllabus analysis had included in the English material, thus it definitely would not turn a side.

In the second point, which was about graph component the experts argued that the graph component that was designed still need to be added by characteristics of a good graph such as, appropriate layout and design, the physical size, font, and it more attractive. The third point was about scientific substance. The experts argued there are some materials which should be developed related to the ability of the student's majority. The fourth point was about practical consideration. The experts stated that there were activities which have to support the need of learners which will be applied in the college with the teacher or by themselves.

The fifth point was about aims. The questionnaire result showed that, almost all points in the questionnaire above had been regarded as suitable to the student's needs. The two expert judgments had considered almost all points of how to develop good material. The experts argued that the materials had been quite good, the material also suitable with the students' level. The result of the need analysis also revealed that most of the students at Triatma Jaya Tourism College spend their time browsing information and social media from their smartphones. It means that the students are accustomed to the android-based application. Thus, the module in this study was developed in the form of an android application. This result is supported by the fact that most college students are now the Y and the Z generation interested in technology and known as digital natives (Girven, 2016; Trembach & Deng, 2018). It means that they like an instructional process that integrates technology because most feel they express themselves better using technology (Manu et al., 2021; Shafiq & Parveen, 2023).

The module was developed in the form of an android application because the students are familiar with technology and because the android application can run in offline mode. In other words, the use of the android application can reduce the cost that the students have to spend since they do not need any internet connection (Barteit et al., 2020; Samsuri et al., 2014). Saving cost is crucial during the Covid-19 pandemic since many of the students' parents were unemployed or lost part of their income because of the unstable economic situation (Prochazka et al., 2020; Qian & Fan, 2020; Shafi et al., 2020). Thus, the use of the android offline application can save money.

In terms of its content validity, the result of the expert judgment confirmed that the module's contents were valid. It means that the module's content already fulfills the needs of the students and the learning objective. Ensuring the content validity of learning materials is crucial since it will affect the effectiveness of the lesson in achieving the learning objective (Grudniewicz et al., 2015; Vishnevetsky et al., 2018). In addition, the result of the quality evaluation using the criteria of good learning materials that involved the English lecturers also identified that the module has a very good quality. Since the content validity and the quality of the module have been proven to be valid, it can be said that the module is ready to be used for teaching the students.

General comparison between the findings of this study and previous studies. It is known that previous research was aimed at mathematics subjects in high school, and the method used was ADDIE (Putri et al., 2022; Qomario et al., 2022). Meanwhile, similar research was conducted on high school students in economics subjects and used the Borg and Gall model method (Munir et al., 2023; Saputri et al., 2021). Meanwhile, this research is aimed at professional English courses and the method used is the 4-D model. The similarity between this research and previous research is that they both received positive responses from students.

The implication of using English digital module in education are multifaceted and have a significant impact on various aspects of teaching and learning. Here are some of the

resulting implications of English digital module: enhanced access to learning resources, personalized learning, flexibility in learning, technology proficiency, and cost efficiency. The weaknesses of this module are the digital module doesn't have data driven insight it means that all students activities in doing interaction and performance could not be saved. This digital module cannot be analysed to gain insight into the student's progress.

However, to ensure that the module is effective in helping the students to improve their English mastery, especially in English for Food and Beverage Service, a further field study needs to be conducted. First, a field study that analyzes the problems faced by the students and the lecturers during the real teaching and learning process should be done. Then, after revising the module based on the results of the first field study, the second field study that analyzes the module's effectiveness compared to the previous materials used by the English lecture should be done to ensure that the module is more effective than the previous one. As this as a digital module, thus, it requires to continuous update and maintenance, therefore it is suggested module is digital continuous update and maintenance is suggested to ensure the content remains current and relevant. The implication of this results also showed that teacher can use digital modules to transform the classroom. It means the students can learn the material at the student's own pace and own time outside the class, then the classroom can be used for more interactive and collaborative activities. This study only evaluates the developed module until the formative process, a further study to evaluate the module in summative evaluation is crucial.

4. CONCLUSION

The result of the tryout revealed that the quality of the development of English for Food and Beverage Service module based on Digital Android for the Millennial Generation of Hospitality Students could be categorized as a good material based on the results of the questionnaires which were given to the related students, lecturers, and expert judges. The finding of this study shows that the activities provided in the module gives many chances for the students to study, English teaching digital can be effective tool to improve students' English proficiency in learning food and beverage services, this digital module also can be used to complement traditional classroom teaching and provide students access to study outside the classroom.

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