DIGITAL LITERACY USING PROTEXAN TO DETRACT HERD STUPIDITY IN THE ERA OF FREEDOM TO LEARN

*AHMAD MUHID, 2ACHMAD BAHTIAR EFENDI
1Universitas AKI
2STMIK Himsya
*ahmad.muhid@unaki.ac.id

DOI: 10.35473/po.v5i2.1955

First received: August 12, 2022
Final proof received: October 20, 2022

Abstract
The urgency of this research is to provide education on digital literacy learning in English subjects through the Protexan application to detract the herd stupidity in society through students as agents of change in implementing health protocols in the era of freedom to learn. The method used in this research is the Research & Development (R&D) method. The research was carried out in several stages such as preliminary, prototype creation, expert validation, and media testing. The design and teaching media materials are matched through sorting the data processing at an early stage. This Protexan was tested on educators and students with satisfactory results above 70%. The material is in the form of procedural texts in English following the curriculum in high schools in the independent era of learning. Protexan can be used for detracting herd stupidity so that students know what actions need to be taken in the environment to avoid COVID-19.

Keywords: Android, Freedom to Learn, Literacy, Protexan

INTRODUCTION
The policy of Merdeka curriculum (or called freedom to learn) is one of the government’s mandates for a better education system. Freedom to learn is seen as a bridge to achieving the National Long-Term Development Plan and the National Research Master Plan. However, the COVID-19 pandemic is not over yet. People who do not implement health procedures properly are one of the causes of this virus spreading faster in early 2022. The media call it “herd stupidity” to lead to people who are ignorant and indifferent to the implementation of health procedures. The term has been mentioned in western media and scientific articles. In addition, herd stupidity is motivated by the lack of public literacy so that they are more easily lulled by hoax news. Specific information needs to be provided to the community, for example through school students as agents of change. Students as agents of change can educate themselves, their families, and the surrounding environment as a positive impact of learning.

With the Freedom of Learning, teachers can be more flexible in carrying out creative and innovative learning, for example by utilizing Android technology.
However, several other researchers have stated that *Merdeka* Learning has not been fully implemented (Hendri, 2020). There will be new problems that will arise in the goals of education, students, and educators (Nasution, 2020). It is a free choice for students to match their interests and character and is carried out in the form of Work From Home during the pandemic (Saleh, 2020). Various programs have been launched to adapt learning technology, prepare creative and innovative teachers through teacher drive programs (SL, Sugiyarta, Prabowo, Ardhi, Ahmad, Tsabit A., Purwinaarko, Aji., & Siroj, 2020), and strengthen literacy and numeration learning. This technology adaptation has been carried out since the Covid-19 pandemic in early 2020 where teachers must conduct online learning or technology-based distance learning (Herliandy et al., 2020).

When compared to countries in Asia, the literacy of students in Indonesia is in the lowest category in many studies and surveys conducted by researchers, agencies/institutions, to UNESCO (Rachmawati et al., 2019). Understanding literacy is not only limited to reading and writing. New literacy in the current era is divided into four, namely data literacy, technological literacy, and human literacy (Yamin & Syahrir, 2020). In its implementation, creating works from reading results is the next process that is identical to literacy transformation in the context of renewable innovations. This literacy is a starting point in the formation of human civilization. Digital literacy is form of the ability to understand and use information in various forms and comes from various sources, it can be with other media. Digital literacy is not just a technical ability to operate digital equipment adequately. Moreover, digital literacy includes a variety of cognitive skills needed to utilize and complete work in the digital field. Examples of the application of digital literacy are internet browsing, working with databases, and chatting using social media. Digital literacy has become entrenched in the world of education. It is proper for the community through students to get adequate literacy education. The reason is, that with sufficient literacy they will have critical and creative thinking patterns and are not easily influenced by negative news (Latifah, Ayu., Waladia, Seli., & Hidayatullah, 2020). Literacy in research on civic is also able to overcome hoax news (Suryaningsih, 2020).

A lot of hoax news, both conspiracy, and hoaxes about Covid-19 drugs/prevention on the internet cause unrest and even ignorance in the community (Juditha, 2020). To prevent massive Covid-19 due to herd stupidity, scientific literacy is needed with topics related to Corona Virus (Setiawan, 2020). Health topics need to be included in the literacy materials (Akhmad & Suyadi, 2021). For example, religious topics that are in line with the eradication of Covid-19 (Agusta & Laugu, 2020), socio-cultural (Syafrida & Hartati, 2020), language politics related to Covid, procedural texts in English and Indonesian subjects, health/physical education, patterns of clean life, etc. Android-based literacy has also been carried out based on HOTS (Nursyamsiyah, 2020). There have been many studies on literacy to increase critical and creative students and communities (Widiyanto, 2017). It’s just that, Android-based student literacy is integrated with Covid-19 prevention regarding the impact, and handling procedures, strict procedures have not been found.

According to Soebandrio (Soebandrio et al., 2021), there is a lot of information to prevent COVID-19. It’s just that the message was not conveyed properly. The lack of information and literacy that
causes herd stupidity can be overcome by the educational environment. One of the subjects at school that can increase literacy is English subjects with procedure text material. These materials should be updated according to the latest developments. For example, when we are invited to have snacks, cycle, or play soccer in the field where the area is categorized as a covid-19 red zone without a mask or using a mask incorrectly and what is the right and wrong attitude in responding to it. However, not a few people are ignorant to see such conditions. Even some of them still do not believe that COVID-19 exists. The media called this community herd stupidity. The term herd stupidity has become a trending thing in various media and social media such as Twitter. Media Forbes America and The Australian mentioned that herd immunity is killed by herd stupidity and herd immunity is hard to achieve. Herd stupidity is a phenomenon in that people are ignorant of the COVID-19 outbreak with many people not wearing masks, crowding around, and not following strict health protocols. This is due to economic factors where they inevitably have to work in crowds while the other factor is the lack of literacy. In terms of education, it is the same, many parents complain that their children need to hasten face-to-face learning because of the waste of internet data costs and not being able to care for or educate their children at home because of work (Purwanto et al., 2020). Various counseling for the new normal era has also been carried out (Yulianti et al., 2021). Some people also welcome the new normal era of Work From Home (Mungkasa, 2020).

Technology has had an impact on many things in education and should be able to build education for Indonesia’s 2045 golden generation that is tough, advanced, and has good character in the face of global competition (Abi, 2017). One of the technologies used by the community is Android. The Android operating system is still the mainstay of the community and students as the operating system on their cell phones. Learning through Android has long been initiated as a flexible form of learning (Martono & Nurhayati, 2014). There are many ways to construct android applications, namely with android studio, adobe flash (Kodri, 2020). It is necessary to use minimalist media such as android applications as a form of adaptation or technological adaptation that does not consume a lot of internet data but can meet learning objectives (Ramdani et al., 2020). A simple android application consists of at least navigation, search menu, or categorization. Substantive materials can be included in the application so that students do not need to look for references from books or internet sources that can be unreliable to their literacy. The application should be simple but complete. If students are entertained, then learning outcomes will be obtained to the maximum. That way, the application can be used as a medium or teaching material in distance learning as a physical distancing effort (Firman & Rahayu, 2020). Distance learning in other research can also be used as an effort to prevent COVID-19 (Sadikin & Hamidah, 2020). We are now living using smartphones. Learning to use smartphones such as Android has become a new culture for people in learning, especially students. Students can use android in learning, especially in digital literacy.

The Covid-19 socialization integrated with the learning application is used as additional information for students to carry out strict health protocols (Kurniadi & Suprapto, 2021a). Therefore, the students understand what actions need to be taken in their family, friendship, and social life to avoid Covid-19. In addition to user satisfaction,
faction (students and teachers), android-based applications in learning English also show results in improving student learning.

Using technology especially android in TEFL is important to help both teachers and students. Therefore, they can do technology adaptation and become more flexible. It can make them attentive and engaged in a lesson without books. Moreover, applying the application can solve the problems of how the procedure keeps our health. It can motivate the students to take care of their health. This study enriches the previous studies by providing the learning material in an android application to be connected to the current program from government, technology adaptation, and literacy including health issues post Covid-19. The objective of this study is to provide education on digital literacy learning in English subjects through the Protexan application to detract herd stupidity in society through students as agents of change in implementing health protocols in the era of freedom to learn.

METHODS

The method used in this research is the R&D (Research & Development) method. This method is suitable to be used in product development for learning with small-scale, simple steps and only requires several stages in testing (Kurniadi & Suprapto, 2021a). The stages that will be carried out are needs analysis, pedagogical and contextual realization, product creation, development, and evaluation. Data collection will use data from the syllabus, lesson plans, and other instruments (Kurniadi & Suprapto, 2021b).

The research and development method carried out is formative research because it is still at the stage of improvement and development (Sagala & Andriani, 2019). The tools needed in this research are hardware (Computer & Smart-Phone Android) and software such as OS Win 11, Android Studio, Android Emulator, etc. (Aisa & Akhriana, 2019). The stages carried out in this development research are based on the Tesmer design which contains self-evaluation, prototyping, and field tests that consist of two stages, namely preliminary and formative evaluation.

For the current research, the researcher tries to apply the research to the android platform. The first thing (preliminary) to do is to create a material design.

![Figure 1. Research Framework](image-url)
that contains procedure texts related to COVID-19 in English from various trusted sources, suitable for learning English for students, and collect application design data from various sources. The researchers are tasked with examining materials, adapting them to current curriculum developments, and collecting data regarding their design and feasibility. They are in charge of surveys, administration, data collection, and reporting. Interviews with various sources, such as teachers, are also needed to determine the feasibility. If there are deficiencies, the researcher revises the prototype and makes a second prototype. At this stage, experts are asked to provide input and perceptions related to the application. After validation by the experts, the researchers replace the second prototype draft to make prototype 3. At this stage, the researchers test the 3rd prototype on students. The researchers instruct the students who are sampled about understanding the material provided through the application. Next, students are asked to answer several questions that are shared via a google form. The results of the evaluation and input from various parties are reviewed to improve the application. The results of the validity of the product are then tried again for a larger number of students. Testing is done to determine the optimization of the prototype. Finally, the final prototype becomes a valid and suitable application for digital literacy learning.

Protextan stands for Procedure Text Android Application. The urgency of this research is following the previously mentioned background, namely language learning to implement freedom to learn. Specific specifications are following the focus areas of social humanities, and English education and under the university’s research strategic plan, one of which is technology-based. In addition, this research is under an Indonesian national research focus called technology adaptation or digital technology. This research seeks to be a solution to this.

DISCUSSION

From several interesting topics to discuss and the stages of research methods mentioned in the method sub-chapter, there are interesting findings. From the stage of collecting data from interviews and FGDs, there were some significant inputs. The topic of the interviews and FGDs is that face-to-face learning has been going on long enough so that they are getting used to doing learning at school with the health protocol. Protextan is considered helpful as one of the media for teaching materials so that teachers and students have a variety of other materials. Also, procedural materials are found in the high school syllabus and are still relevant today. The procedural text material for English subjects was combined with how to keep healthy. The trick is to sort the material that contains informative news about how to be healthy from various trusted sources so that students can learn and understand more about the importance of not being part of herd stupidity. With the initial stages mentioned in the method sub-chapter, the researcher made a prototype of the Android application for teaching materials for the Covid integrated procedure text so that the application was truly effective and suitable for use as teaching materials. The application design and materials were prepared by the researcher and the research assistant team based on the results of the FGD and interviews.

In the figure above, it can be seen that the research team is trying to socialize the dangers of COVID-19 and how to properly implement health protocols in teaching materials. It can be seen that the research team used the background of the home
with the environments containing many viruses outside the home. There are several images inserted at the beginning of the application. The first is an image related to procedure text as a form of describing the topic being studied, namely Procedure Text with the theme of COVID-19. Then the image of the dictionary and android phone is representative of the Android-based English language map. In addition, Kemdikbudristek logo is also installed as the highest body that supports the education process in Indonesia. The last is the start symbol as a button to start this learning application.

In the Figure above, there is a menu (navigation) that can direct students to the learning material. The first is the menu “what is procedure text?” which leads to the theory of Procedure Text. The display shown is the understanding of the procedure text, the purpose of the procedure text, the characteristics of the procedure text, the generic structure of the procedure text, examples of procedure text, and other structures. Displaying the main menu, there is also a background sound of nature that allows students to learn more relaxed. Users can also adjust the volume or mute the background. In the next navigation, the sample & exercise menu is the core of the material which is expected to be able to train students’ English skills to achieve learning outcomes. The “examples & exercises” menu consists of several examples of procedural texts on the topic of COVID-19, practice questions (pronunciation, multiple choices, short & long answers), as well as instructions that allow students to work in groups despite remote conditions. The material is following the high school syllabus designed by the government because English education in senior high schools in Indonesia is based on the text genre including procedure text. Procedure

![Figure 2. Inside of Protexan Android Application.](image-url)
text is a type of text that provides instructions for doing or using something with sequential steps. The communicative purpose of procedure text is to make its readers understand and know how to make or operate something through successive steps. There are several linguistic text structures from procedure texts, namely containing titles, objectives, tools, materials, steps, and closings. The linguistic element of procedure text is the use of numbering, words that indicate commands, and words that describe conditions. The linguistic features of procedural texts are using command verbs, using conjunctions, using technical words, and there is a purpose for the activities discussed. There are tools and materials used to make the activities discussed.

In this case, the researcher focuses on text procedure material that contains text about how to keep healthy that is actual, educational, substantive, and informative to readers (students) as a form of learning that does not only focus on improving English language competence but is integrated with information to the students not to be part of the herd stupidity.

The application is designed as efficiently as possible so that the memory used is not much for easy access. In addition, this application can be operated offline so it doesn't consume a lot of internet data. The application is checked first by language and IT experts before being tested on students. From the validation process, there were several corrections related to the design and several features that needed to be added, also in terms of language, some errors in writing (typos) were found. After revision and validation from IT and language experts, the application of this teaching material was tested on students and teachers with satisfactory results above 70%. Based on the results of the questionnaire, respondents also think that the application is easy to use. The materials and exercises already represent what the learning objectives are in the curriculum regarding procedures text. The herd stupidity socialization integrated with the learning application can be used as a reinforcement for students to carry out strict health protocols in the era of freedom to learn. So that students know what actions need to be taken in the realm of family, friendship, and social life.

In line with other research, (Firman & Rahman, 2020), it can be used as distance learning which triggers social distancing behavior & reduces student crowds and it helps in preventing COVID-19 transmission, especially in school clusters. Lack of supervision of students, limited signal, and quota rates that are not cheap are problems that often arise in technology-based media. However, increased learning independence, interest, motivation, and courage to argue are the advantages of distance learning. According to Sadikin (Sadikin & Hamidah, 2020), the qualitative research he conducted stated that distance learning could help prevent the transmission of COVID-19. Even in a pandemic, learning outcomes must be following what has been set in the curriculum. This is not contradictory with other research considering that technology has had an impact on various sectors, especially education (Kurniadi & Suprapto, 2021a). Like it or not, technology-based learning should indeed be applied considering the increasingly rapid development of technology. Apart from technology, education does not only transfer knowledge but also must be integrated with character education for the sake of Indonesia’s golden generation in 2045 who is tough, advanced, and has a character facing increasingly fierce global competition (Abi, 2017). To face global competition, students’ English competence needs to be improved. The role of English according to literature studies has
been carried out by many previous researchers, especially in business and marketing. In the literature study, the use of rigid English is not always used in global communication. Therefore, the government through the Ministry of Education and Culture has long established functional, textual, and interpersonal English learning and the researchers support the regulation.

Students now prefer something instant and easily accessible via their mobile phones. The operating system on mobile phones is widely used in Android. With these android phones, they can explore the world. If they learn with pleasure, then the learning achievement is achieved maximally. Books are no longer the only window to the world because they can easily access information through their cell phones. Students can get this access through online and offline browsers and applications. With the help of android-based applications, users can easily access certain news or information. Menu search, navigation, and categorization can be arranged in the application.

The advantage of using applications, especially those that are offline, will save user or student internet data. The android-based procedure text (Protexan) was compiled by researchers as an effort to improve English language competence and participate in the socialization of not being the herd stupidity. This study provides some considerations for teachers about how android applications or technology can be used in the teaching-learning process. However, because the findings are based on a small sample, the findings cannot be generalized to the wider population. Nevertheless, it is beneficial for teachers to do technology adaption in teaching.

CONCLUSION

Understanding of the dangers of herd stupidity still needs to be improved because there are still many people who ignore the appeal from the government to follow health protocols. This is very worrying considering that the COVID-19 pandemic is still considered a world epidemic, which requires the creation of community synergy in dealing with the outbreak. The result is in the design of Android-based Protexan teaching materials that can be used as additional media for teaching materials that are following current circumstances. This application was tested with a percentage rate above 70%. The Protexan android application is one of the solutions for the students not to be one of the herd stupidity.

The content in the application does not only focus on improving literacy in learning English but is integrated with other education such as how to do the health protocol correctly. The research carried out is related to the need for the freedom to learn era in which digital literacy is indispensable. In addition, this learning is considered important because the reality on the ground shows that there are still many people who do not comply with health protocols. It is hoped that the results of this study will have a good impact on students as agents of change in society.

For the next researchers who are interested in the same research area, it is recommended to conduct deeper research than this. After knowing this research, perhaps the next researcher can observe and investigate more advanced technology especially android in the teaching-learning process.
REFERENCES


