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Development of interactive e-catalog for history education laboratory in efforts to improve student's digital literation

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Article Info

ABSTRACT

The History Education Laboratory is part of the history education study program, which functions as a learning medium and resource that accommodates the learning process or lectures. The historical education laboratory has a collection of labs that are aimed at helping students' learning process. The existing collections are historical objects from various time periods and historical types, namely local, regional, and international history. This interactive catalog can be accessed virtually by students to help better learning. In addition, the use of this e-catalog also refers to an effort to improve the digital literacy skills of history education students which is still rather minimal. This study uses a development research method with stages, namely, NeedAssessment, Literature Review, Planning, Develop Preminarry Forms of Products, Product Revisions, Preminnary Field Test, and product revisions. In this e-catalog prototype, it is created using a power point and converted to iSpring Suite 8 and website 2 APK Builder. Divided into 4 major groups of collections, namely 1. Praaksara Period, 2. Hindu-Buddhist Period, 3.Islamic Period and 4.Colonial Period. Validated by 3 experts in the field of educational media, language and history education. And tested in a small group of 10 students from the 1st to 2nd and 3rdyears. The e-Kalalog is considered communicative and user friendly. Colonial Period.Validated by 3 experts in the field of educational media, language and history education.And tested in a small group of 10 students from the 1st to 2nd and 3rd years. The e-Kalalog is considered communicative and user friendly. Colonial Period.Validated by 3 experts in the field of educational media, language and history education.And tested in a small group of 10 students from the 1st to 2nd and 3 years. The e-Kalalog is considered communicative and user friendly.

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Introduction

Changes in times and advances in communication technology are things that humans cannot avoid. If you don't want it, we have to adapt and immediately adjust to it. In this 4th generation revolution or more familiarly known as revolution 4.0, the development of digital data has penetrated almost all lines life, not only the economy with its e-commers, the political sector that carries out campaigns using social media to socialize their work programs. Education also continues to make adjustments by utilizing technology as a medium to help the educational process and minimize existing problems.

According to Wikipedia **Laboratory** (abbreviated as lab) is a place research scientific, experiment, measurement or scientific training is carried out. Laboratories are usually created to allow these activities to be carried out in a controlled manner. Scientific laboratories are usually distinguished according to their scientific discipline.

The historical education lab at PGRI Palembang University was established with the aim of meeting the needs of the learning process, as a learning resource, as a place of practice and to produce new knowledge by conducting research.

In the history lab, there is a collection of historical learning media that takes up a lot of space and is difficult to carry if learning outside the laboratory room. Therefore, researchers will carry out a collection of historical objects in the laboratory into digital form. Namely in the form of an interactive e-catalog. This e-catalog can provide more information about lab collection objects independently.

The use of this interactive catalog is expected to be able to help students' learning process, selecting materials related to their own course materials. Through this interactive e-catalog, students can also improve their digital literacy. For this reason, researchers are interested in developing this interactive e-catalog design.

1. Digital Literacy

The idea of digital literacy was popularized by Gilster in 1997 as quoted in Belshaw (2011) which states that "Digital literacy is the ability to understand and use information in multiple formats from a wide variety of sources when it is presented via computers". According to Gilster, digital literacy is the ability to understand and use information in various formats that come from various digital sources displayed on computers [1].

Digital literacy can be defined as an individual's ability to apply functional skills to digital devices so that he or she can find and select information, think critically, be creative, collaborate with others, communicate effectively, and continue to ignore electronic security and the developing socio-cultural context [2]

[3] Digital literacy is the interest, attitude and ability of individuals to use digital technology and communication tools to access, manage, integrate, analyze and evaluate information, build new knowledge, create and communicate with others in order to participate in an online manner effective in society.

[4] there are 5 types of skills covered in general digital literacy, including:

a. Photo - visual literacy is the ability to read and infer information from visuals;
b. Reproductive literacy is the ability to use digital technology to create new works of work;
c. Branching literacy is the ability to successfully navigate non-linear media of digital space;
d. Information literacy is the ability to search, find, assess and critically evaluate information found on the web;

Socio-emotional literacy refers to the social and emotional aspects of being present online, whether it is possible through socialization, and collaborating or simply consuming content.

2. E-Catalog of Historical Education Laboratory

To support the lecture process of the history education study program, PGRI Palembang University has a historical education laboratory as one of the media and sources of history learning by students. This laboratory has a collection of historical objects that are used as sources and media of learning in lectures. However, not all of them can be accessed directly because of limited collections and these collections must be treated more carefully.

Historical Education laboratory collection consists of, replicas and original objects findings. The collection is categorized into several safe periods to facilitate learning, namely prehistoric categories, Classical Hindu-Buddhist, Islamic Period, Colonial Period, Early Independence-national movement. Local, national and international history.

According to the Big Indonesian Dictionary, the catalog is cscrambled cards, lists, or books containing the names of certain objects or information to be conveyed, arranged in a sequence, orderly, and alphabetically. According to Wikipedia (2017) Catalogis a listcollectiona documentation center or several documentation centers arranged according to a particular system. The list can be in the form of cards, sheets, books or other forms, which contain information about libraries or libraries contained in the library or information unit.

Method

2..1. Types of research

This research is planned to use the research development method, or Research and Development (RnD) where this research aims to produce a prototype of a product and test the effectiveness of the product. In this study, five stages of research were carried out by adopting the research method proposed by Borg and Gall, namely:

a. *Need Assessment* or needs analysis, a needs analysis is carried out on historical education students of the PGRI Palembang University for learning resources that are integrated with the internet which has become a necessity today and to support the needs of increasing digital literacy.

b. *Literature Review* or literature review, in this stage, the literature material studied is information and further information from laboratory collection objects. Collecting data and photos of collection objects and supporting material videos for e-catalog.

c. *Planning* or planning, at this stage the researcher will organize the material that has been collected in the literature review, select material to be included in the e-module, learning and evaluation activities that will be carried out to measure mastery of the material that has been studied through the e-module.

d. *Develop Preminarry Form of Product*or compiling materials, learning strategies and learning evaluations poured into e-modules. In this stage, the first stage of the e-module product prototype is produced. Experts who will conduct an assessment on this e-module consist of educational technology experts and experts in the field of historical education. Testing consists of legibility testing and product appearance. Test the content of the material content, and instructional testing.

e. Product Revisions, Revisions are made based on the results of testing by experts

f. *Preminnary Field Test* and Product Revisions, the results of product revisions based on expert suggestions will then be tested on history education students. This test was carried out in small groups consisting of five students.

g. Product Revisions, Revisions are carried out based on the results of testing in small groups.

2.2 Research Subjects and Data

This research was conducted at the PGRI Palembang University. The object of research in this study is the e-module in the history teaching and learning strategy course. Namely students of semester 3 of the history education study program.

Results and Discussions

1. Product Description Prototype

E-catalog collection of the History Education Laboratory of the University of PGRI Palembang carried out a need assessment of history education students at the PGRI Palembang university. This interactive e-catalog is divided into 4 large sections that showcase some of the laboratory collections. This interactive e-catalog is accessed via leptop or smartphone, the sections are:

a. The Prakara Age
b. Hindu-Buddhist era
c. Islamic Age
d. Colonial Age

The following is a description of the parts of this interactive catalog:
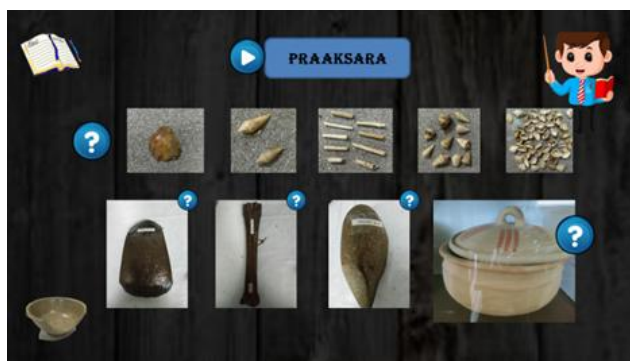
1. Opening:

This opening section will display the initial greeting to the respondent. When the blue play button is clicked, the next page will appear, namely the main menu display.

that they want to view, the first blue button will take the respondent to the pre-literate collection:

will play a video link explaining the pre-literacy period. On the blue button (?), If the respondent clicks on it, it will display further information about these objects, here's an example:


Then it will appear like this:

Clicking on the bowl in the lower left corner will return the respondent to the main menu. Or respondents can press the back button to return to the previous menu

The blue play button will bring up a video about the Buddhist Hindu period in Indonesia, and the question mark button will take the respondent to further information on the object in the photo which is a collection of historical education labs.
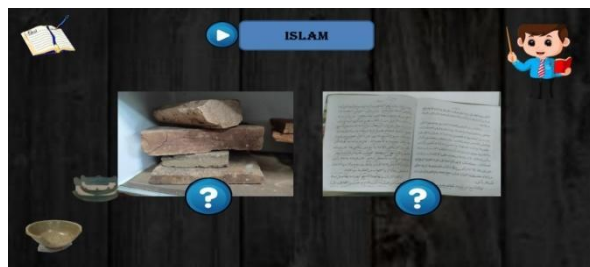
When you click on this ancient bowl image, the interface that will appear is back on the main menu options:

Conclusions

The development of an e-catalog of historical education laboratory collection objects based on the review of experts and small group field respondents, is considered quite attractive and user friendly to meet the needs of students to facilitate them in increasing digital literacy, because more interactions with digital media are now a necessity for humans to facilitate life including learning in it coupled with an interactive way.

References

[1] Nurjanah, Ervina DKk (2017). Relationship between Digital Literacy and Quality of E-Resources Use, Journal of Lentera Pustaka, Vol 3 No. 2 of 2017, p.117-140. https:// ejournal.undip.ac.id/index.php/lpustaka/ artic le / viewFile / 16737/12174. [online] Accessed 24-April 2020.

[2] Akbar, M F, Anggaraini, M.F (2017). *Teknologi dalam Pendidikan: Literasi Digitan dan Self-directed Learning pada Mahasiswa Skripsi*. Jurnal Indigenous, Vol 2 No 1 tahun 2017.

[3] Setyaningsih, Rila, et al. The Model of Strengthening Digital Literacy through the Use of E-Learning. Journal of ASPIKOM. Vol 3 No 6 of 2019. pp. 1200-1214.

[4] Silvana, Hana. Cacep, Digital Literacy Education among Young People in Bandung. Pedagogia: Journal of Educational Sciences. file: /// C: / Users/U ser/Downloads/11327-26069-3-PB.pdf.[on line] Accessed on May 2, 2020