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**| RESEARCH ARTICLE**

## **Mapping Analysis of Development of Digital Book History of Dumai Port Based on *Discovery Learning* to Increase Historic Awareness of High School Students at Special Purpose State SMA and State SMA 1 Dumai City**

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**| ABSTRACT**

The purpose of this study is to analyze and map the needs of students and teachers for the development of digital teaching materials, namely the digital book of the history of the port of Dumai City as local history, and see the level of historical awareness of high school students in Dumai City. This research is part of development research (R&D). This type of research is an *expo facto* research where researchers collect data systematically directly from respondents through data collection instruments. The process of data collection is a critical stage in research. The data that has been collected will be used to test the hypotheses that have been proposed in the study, where the data were obtained through interviews, observations, and questionnaires. The data analysis technique was carried out in a quantitative descriptive manner. The results of the study indicate that (1) there is a positive view of the need for the development of this digital book in the significantly Assisted State Senior High School and Dumai City 1 Public High School; (2) students' learning motivation is still relatively low for history subjects, this is due to the limited use of digital media used in the learning process; (3) history learning media is still very conventional; and (4) students' historical awareness of the existence of local history is still low.

**| KEYWORDS**

Mapping Analysis, Discovery Learning

**| ARTICLE INFORMATION**

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### **1. Introduction**

History learning has a general purpose so that it can be meaningful for students, as written by Kamarga (in Hansiswani Kamarga and Yani Kusmarni, 2012:70) that the ideal goal of history learning is to help students achieve the following abilities: (1) understanding the past in the context of the present, (2) arouse interest in the past which is meaningful, (3) help understand the identity of oneself, family, society and nation, (4) help understand cultural roots and their inter-relationships with various aspects of real life, (5) provide knowledge and understanding of countries and cultures of other nations in various parts of the world, (6) train in inquiry and solve problems, (7) introduce scientific thinking patterns from historical scientists and (8) prepare students for higher education. Based on this explanation, the inculcation of historical awareness in such formal education can appear in students if there is meaningful learning in historical subjects.

Increasing historical awareness of local history in the region is very important to high school students, and the reason is that historical awareness has a positive influence on the formation of students' character for the better, one of which is by instilling the values of historical awareness contained in the values in research. This is the history of the port of Dumai City.

Dumai City is one of the administrative cities located in Riau Province. The existence of Dumai City is very strategic because of its location near the east coast of Sumatra Island, so this makes Dumai City the main gateway to Sumatra Island, and Dumai City is

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dubbed the city that has the largest port in Riau Province. Dumai Port is one of the essential and main ports in Riau Province. It has a favorable geographical location because it is a natural port protected by several islands, including Rupert Island, Payung Island, and Rampang Island. Hence, it has deep and calm waters from the waves and the climate. Suitable all year round.

The Port of Dumai City is one of the local histories that must be developed in history learning, namely in the class XI syllabus contained in Basic Competence 3.5 Analyzing the nature of the Japanese occupation and the response of the Indonesian nation and 4.5 Reasoning the nature of the Japanese occupation and the response of the Indonesian nation and present it in the form of historical stories. This connection is due to the history of the formation of the Dumai City Port, which originated during the Japanese occupation. In 1942, the government brought romusha from Java to Dumai to install a water pipe that extended from Duri to Dumai. This connection is undoubtedly the beginning of why the existence of this port can develop. Through this, it is hoped that students will be able to recognize the potential of the area, where the City of Dumai, since the beginning of Japan, has known in advance about good natural gas sources in the Dumai City area so that the history of the existence of this port is essential to study.

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Previous research has been conducted on increasing historical awareness through digital books. Research by Arif Krisna Sudarmaji, Akhmad Arif Musadad, and Hieronymus Purwanta, from Sebelas Maret University in the journal of the National Seminar on History Learning (SNPs), vol.16, No.1 of 2016, entitled "Local History Learning Based on The Struggle Of The Mobrig Troops In Yogyakarta To Increase Students' Historical Awareness." The similarity between previous research and this research provides the same explanation regarding the importance of increasing historical awareness through learning Local History. The difference between the two studies discusses the local history material raised by this research discusses the local history of the Mobridge troops in Yogya against the colonialists. This is different from the research conducted by the author, namely the discussion of local historical material raised regarding values the value contained in the history of the existence of the Dumai City Port.

Further research by In Purnamasari and Wasio, from the Social Sciences Study Program of the UNNES Postgraduate Program, in the journal Paramita, Vol.21, No.2, 2017, entitled "Development of a History Learning Model Based on Local Historical Sites at SMA Temanggung Regency." The first similarity between previous research and the research written by the author lies in Research and Development (R&D) research. Second, this research uses the same research technique, which includes observation, interviews, and documentation. The first difference between the previous research and the research conducted by the author lies in the research location. The previous research's object was SMA Negeri 1 Temenggung, SMA Negeri 2 Temenggung, SMA Negeri 3 Temenggung, and SMA Negeri 1 Pringsurat.

Meanwhile, this research is located at SMA Negeri 2 Dumai City and SMA Negeri 1 Dumai City. Second, previous research used a qualitative approach. Meanwhile, in the research conducted by the author, the author uses a constructivist approach.

If you look at the current phenomenon, the following refers to the results of the field observation research conducted in this study by distributing questionnaires via google form in both schools, namely SMA N1 Dumai City and SMA N Special Guidance. Based on the questionnaire distributed at SMA N 1 Dumai City in class XI, in total from 7 classes, there were 28 students from each class, so the total number of students was 196. However, the number of students who filled out the questionnaire was only 133. Meanwhile, at SMA N Special Assistance in class XI, out of 6 classes, there are 29 students from each class, so the total number of students is 174. However, the number of students who filled out the questionnaire was only 125. So overall, who answered the questionnaire, as many as 258 students. The low level of awareness of the local history of students can be seen based on the questionnaire distributed at SMA N 1 Kota and SMA N Binaan Dumai in class XI, as many as 55.8% know about the port building of Dumai City, but do not know that the port of Dumai City is part of history. Local. Then as many as 32.6% did not know about the port building of Dumai City and Dumai City Harbor as local history. Furthermore, students who are very aware of the existence of the Dumai City Port and local history are 10.9%. Meanwhile, those who do not know the existence of the port and the local history of Dumai City are 0.8%.

Based on the background exposure that has been described previously, the problems faced are The 2013 Curriculum is not appropriately implemented, Educators do not develop their materials, and only focus on materials already available in books. The materials used are only LKS (Student Worksheets) and Package Books. So far, the learning methods have only been fixated on a few methods, and educators are more likely to use the lecture method. In the teaching and learning process, the educators in the classroom have not applied the syntax correctly. The learning resources used are Package Books and LKS (Student Worksheets). The two learning resources are less able to facilitate students in increasing historical awareness. The need for additional textbooks that can facilitate students to be able to increase students' History Awareness. Almost 90% of schools in Dumai City do not facilitate local history learning.

## 2. Research Methods

This research approach is part of development research. Borg & Gall (2003), in their book entitled "Educational Research," explains that "Research and Development" in education is an industry-based development model in which research findings are used to design learning products, which are systematically tested in the field, evaluated, and refined, so that the results produced will become a learning product that meets specific standards, namely effective, efficient, and quality.

This type of research is *expo facto* research, where researchers collect data directly from respondents through data collection instruments. The process of data collection is a critical stage in research. The data being collected will later be used to test the hypotheses proposed in the study, where the data were obtained through interviews, questionnaires, and observations. The data analysis technique used was descriptive quantitative. The samples in this study were students of class XI SMA Negeri 1 Dumai City and SMA Negeri 1 Dumai. The sample was selected using a purposive sampling method.

## 3. Literature Review

### 3.1 Teaching materials

Teaching materials are an essential component that can improve the quality of learning. Therefore, it is necessary to develop teaching materials adapted to teachers' and students' conditions and use the correct teaching materials. Quoting the notion of teaching materials from Nasution (1992: 2015), teaching materials are a set of materials and substances in learning that are systematically arranged and have a complete appearance of competency that students in the learning process must master.

In line with Nasution's opinion, Ika Lestari revealed that teaching materials are a set of tools or tools in learning that contain learning materials, methods, limitations, and methods of evaluating, which are arranged systematically and attractively to achieve the expected goals, namely competencies or sub-competencies with all their complexities. (Ika Lestari, 2013:1). Another opinion about teaching materials was also expressed by Akhad Sudrajat. Teaching materials are a set of materials that are systematically arranged, both written and unwritten, to create an environment or atmosphere that allows students to learn. (Akhmad Sudrajat, 2008). According to Opara & Oguzor (2011), teaching materials are "Instructional materials are audiovisual materials (software/hardware) which can be used as alternative channels of communication in the teaching-learning process," meaning that teaching materials are learning resources in the form of audio materials. Visual (software/hardware) that can be used as an alternative in communicating in the teaching and learning process.

Based on the above opinion, it can be concluded that teaching materials are one of the essential factors in addition to the factors of educators, students, facilities, and other components in the learning process because suitable teaching materials will be able to motivate students to study harder and be able to develop their potential of students. Teaching materials assist teachers/instructors in carrying out teaching and learning activities in the classroom. They are systematically arranged according to and can be used as an alternative in communicating in the teaching and learning process, which broadly consists of knowledge, skills, and attitudes that students must learn to achieve predetermined competency standards.

Based on the literature review, experts suggest several types of teaching materials, as revealed by Prastowo (2013), teaching materials according to their form, are divided into four types, namely:

- a) Printed materials, what is meant by printed materials are teaching materials in the form of visual teaching materials, including handouts, books, modules, student worksheets, brochures, leaflets, wallcharts, booklets, photos or pictures, and other materials. non-print teachings such as models or market.
  - b) Teaching materials with audio programs: These teaching materials are listening teaching materials, including cassettes, radios, LPs, and audio compact disks.
  - c) Hearing teaching materials (audiovisual), these teaching materials consist of, Compact Disks and film.
- Interactive (interactive teaching material), which includes this teaching material, consists of CAI (Computer Assisted Interactive) and web teaching materials (web-based learning materials).

### **3.2 Digital Book**

Digital books are publications in the form of text and images in digital form that is produced, published, and can be read through computers or other digital tools (Andina, 2011, p. 83). Digital books make it easier for readers to access books and literacy resources. The advantages of digital books are that they are easy to carry everywhere, efficient, attractive, inexpensive, and easy to store. The development of digital books is currently more advanced and attractive with various views. The digital book display design that is now in great demand by the public is a digital book with three-dimensional e-book technology known as a flipbook which pages can be opened like reading a book on a monitor screen (Riyanto, Subagyo, 2012: 7).

Publications in flipbooks commonly used are .exe, so users must install supporting software in the form of Adobe Flash Player. Integrating digital books with subjects at school can be an innovative solution to increase student interest in learning. In particular, digital books will be good if used as a medium for teaching history. Historical material is synonymous with abundant literacy resources and is sometimes boring for students to read. Using conventional methods, we need to buy and store many history books as capital for mastering historical material. With the development of the latest teaching materials, many history books have been digitised. This certainly impacts the efficiency and ease of obtaining historical learning resources.

The development of digital teaching materials in this study combines elements contained in printed and non-printed teaching materials. The scope of digital teaching materials includes audio, audio-visual, and interactive videos. This follows the opinion of Prastowo (2013) that teaching materials combine several learning media (audio, video, text, or graphics) to control a presentation's command or natural behavior. Based on this description, the manifestation of the development of digital teaching materials is presented in the form of a CD (Compact Disc). Digital teaching materials are developed in line with innovations in education and following the current digital era.

### **3.3 Learning Model Discovery Learning**

According to Schunk (2008: 11), Discovery Learning is a learning model that involves students to be able to gain knowledge by involving all kinds of testing in the form of hypotheses, which is done by passively reading and listening to presentations from the teacher. Meanwhile, according to Gilakjani (2012: 2), the meaning of discovery learning is to teach students to make structures and to transform this information from their findings and also students' estimates in formulating a hypothesis based on inductive and deductive processes. Sani (2014: 98) has the same opinion, and Discovery Learning is a learning model that serves to direct students to be able to find a concept by going through various kinds of data information that has been obtained from experimental results and observation.

Discovery Learning is also referred to as a learning method that will always require a teacher to think creatively to create a vibrant learning atmosphere so that students can become individuals who can know their abilities, which is also called part of the inquiry process (Sani, 2008). 2014: 100). The discovery learning model is one of the best models that can be used to implement learning in the form of a digital book related to the history of the Dumai City Port as local history.

Through the Discovery Learning learning model, the teacher acts as a facilitator to learn to study the knowledge possessed to solve an abstract and complicated material concept. Based on this statement, it can be concluded that Discovery Learning is a model that always directs students to be motivated in analyzing their abilities to the material provided by the teacher. So, through this model, students' enthusiasm for learning will continue to be motivated and motivated to learn. Teachers in schools must understand before implementing the Discovery Learning model in the classroom, so they must first accurately understand the characteristics of the learning model. The aim is to encourage the achievement of the local history learning process in the classroom to be more conducive. Thus, the values of the historical material of the Dumai City port are conveyed to the maximum.

The Discovery learning model also requires four indicators that support the realization of students' mindsets who think creatively and innovatively. Thus, the delivery of life values implemented in the history of the Dumai City Port can be maximally conveyed in the daily learning process. Similarly, what was conveyed by Silver, there are four indicators created from the results of creative thinking in the Discovery Learning model, namely:

- (a) Ability to generate valuable ideas ( fluency ).
- (b) Ability to generate varied ideas ( flexibility ).
- (c) The ability of students to produce all kinds of new ideas that have never been produced before ( originality ).

Students must have the ability to develop and also add existing ideas so that students can create their ideas that are more detailed and detailed ( elaboration).

### **3.4 Historical Awareness**

According to Literally, the word consciousness comes from the word conscious, which means knowing, remembering, feeling, and understanding. In line with this, Sujarwa quotes that awareness that comes from the word conscious means understanding, remembering, understanding, and having an open mind in doing something according to one's conscience (Sujarwa, 2010, p. 134). Awareness is also defined in the Cambridge International Dictionary of English (1995) as a state of being awake or able to understand what is happening. Building one's awareness of one's history is a priority in knowing oneself. This means that all events in history teach something that exists today and is a form of legacy from our predecessors. Because history is not only about the past and can be forgotten, but it also concerns the issue of awareness of past events that contain meaning. Based on this, through historical awareness citing the views of Jorn Rusen, you will be able to interpret a past event to understand the present and plan and anticipate the future (Purwanta, 2019, p. 30).

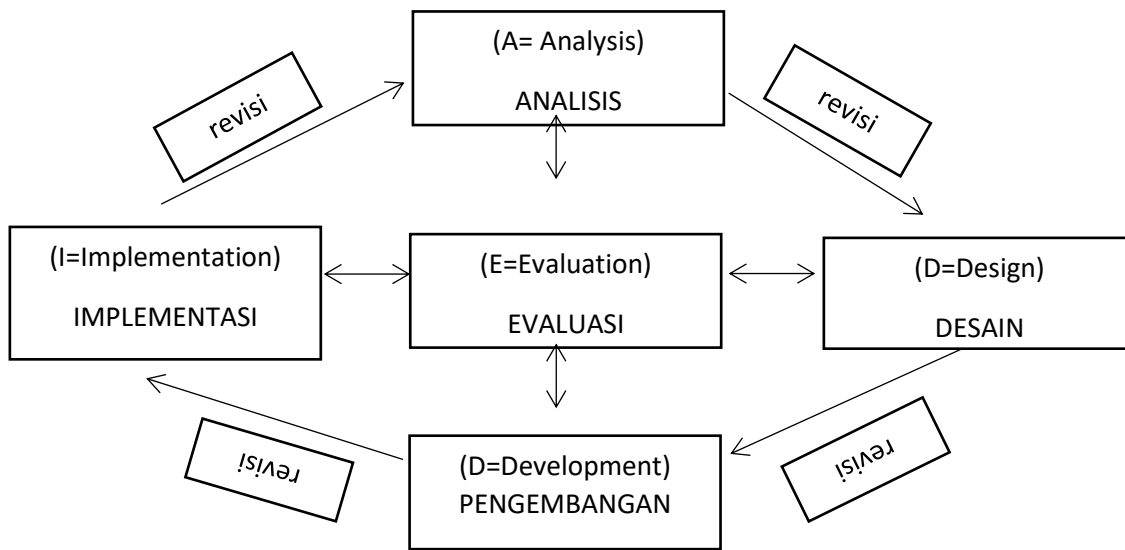
Another interpretation of historical awareness is, according to Kartodirjo (1989: 7), expressing the awareness that humans have is essential in fostering the nation's culture. Because historical awareness is not just knowledge but leads to an appreciation of the nation's relevant cultural values and can be applied in present and future life, Suharso reinforces that historical awareness is a conscious attitude of love for the homeland, reflected in aspects of nationalism and patriotism. Suharso et al. (2017: 11) argue that history is an essential discipline to shape the character of students so that they have the ability and awareness of the importance of the time and place of an event that occurred in the past, present, and future, with a way of thinking critically and deeply, to be able to understand historical events that can happen factually, based on approaches and methodologies.

The importance of historical awareness is to be increased in high school students, namely because it will help provide awareness to these students so that they can reflect on the nation's true identity. (Kartodirdjo, 1992, page: 248). Historical awareness is the level of awareness possessed by students to see the historical conditions around them factually, based on the aspect of love for the homeland and nation, which is implemented through a sense of patriotism and nationalism in the student, which is elaborated in detail and can be translated in depth. Beckett, 2007, pp: 112). Historical awareness is about the importance of increasing awareness for students to strengthen national identity and cultivate the character of national civilization to form a human person who has a sense of nationality towards the homeland. Historical awareness can be interpreted as " Histories make man wise," i.e., history has the meaning of wisdom for humans who study it (Sam Wineburg, 2006, pp: 102).

The benefit of improving historical awareness is that historical awareness can be a source of aspirations and inspiration for students to generate a sense of responsibility and pride in historical sites and cultural values contained in historical events so that they can be implemented in everyday life. (Subagyo, 2011, pp: 290). The explanation of these benefits is in line with the Regulation of the Minister of Education No. 22 of 2006, the purpose of history learning is to shape the character and civilization of a more dignified nation to form Indonesian people who have a sense of nationality and love for the homeland. The reason is that the values in history contain the following. (1) contains the values of heroism, exemplary, patriotism, nationalism, pioneering, and the spirit to never give up, (2) contains the treasures of national civilization, (3) instills awareness of the importance of unity and integrity in the form of solidarity so that it binds the bonds between nations so that regardless of the threat of national disintegration, (4) full of daily life, (5) helpful in instilling and developing a responsible attitude in maintaining balance and environmental sustainability.

### **3.5 ADDIE Development Model**

The ADDIE model combines Analysis, Design, Development, Implement and Evaluate. Quoting Personal (2009: 128-132), the development of ADDIE is a systematic learning model. The ADDIE model becomes a guide in forming efficient training program tools and infrastructure that function and supports the ability of the training itself. The result of each phase is the beginning of the next phase. The ADDIE model is an instruction-based development model. This model was introduced by Dick and Carry in 1978 and revised by Russel Watson in 1981. The development of this ADDIE model can be used in various products, such as learning strategies, teaching materials, learning models, learning methods, and even learning media (Lee & Owen, 2004, p. 93). The following is the cycle of the ADDIE development model.



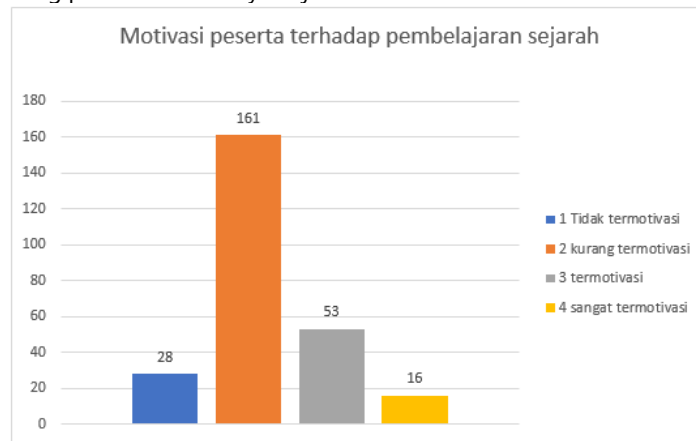
**Figure 3.1 ADDIE Model Development Design Cycle**

**4. Discussion**

The results of the study through 4 aspects that were assessed on a needs analysis questionnaire. Field observations were carried out in this study by distributing questionnaires via google form in both schools, namely SMA N 1 Dumai City and SMA N Special Guidance. Based on the questionnaire distributed at SMA N 1 Dumai City in class XI, in total from 7 classes, there were 28 students from each class, so the total number of students was 196. However, the number of students who filled out the questionnaire was only 133. Meanwhile, at SMA N Special Assistance in class XI, out of 6 classes, there are 29 students from each class, so the total number of students is 174. However, the number of students who filled out the questionnaire was only 125. So overall, who answered the questionnaire, as many as 258 students. The following is described and shown in the bar chart some aspects of special needs that have been carried out.

**4.1 History lessons so far**

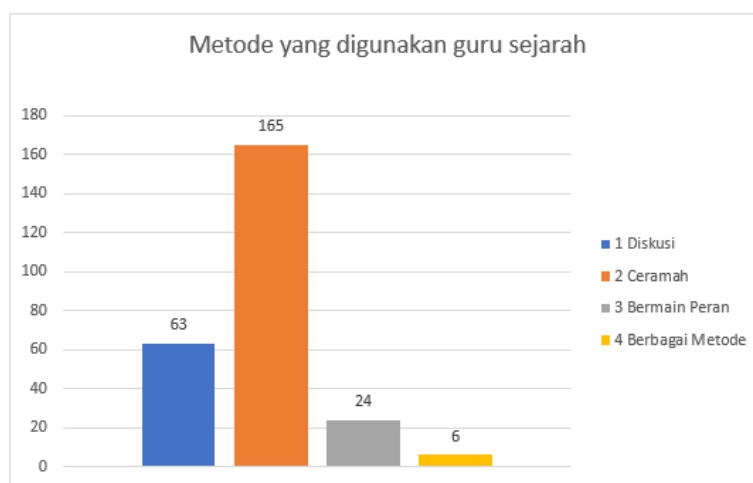
The results of identifying the questionnaire needs of 258 students showed that 28 were not motivated, with a percentage of 10.8%. One hundred sixty-one students were less motivated, with a percentage of 62.4%, motivated students 53 students, with a percentage of 20.5%, and highly motivated students amounted to 16 students, with a percentage of 6.2% of the history learning process. This shows that the learning process on history subjects that have been carried out in schools does not motivate students.



**Figure 4.1 Student Motivation Against History Learning**

Based on the explanation above, it can be concluded that the use of learning strategies is not under the principles of the 2013 curriculum. The use of learning strategies in SMA N 1 and SMA N Special Guidance in Dumai City is dominated by the lecture method with a *teacher-centred approach*. The following is the identification of the results of the questionnaire on the needs of students with a total of 258 students showing the application of learning methods by history teachers so far in the learning process,

answering using the discussion method with a total of 63 students with a percentage of 24.4%, the lecture method with a total of 165 students with a percentage of 63.9%, the role-playing method with a total of 24 students with a percentage of 9.3% and students who answered using various methods in learning amounted to 6 students with a percentage of 2.3%. Based on the data above, it can be seen that the method teachers often use in the history learning process in high school uses the lecture learning method, with a percentage of student responses of 63.9%.



**Figure 4 . 2 Methods Used by History Teachers**

Using this strategy impacts students' low activity, creativity, and criticality, causing a lack of learning motivation. When viewed based on the ideal conditions of the history learning process, according to Aunurraman (2010:17) emphasizes the ability of students to construct their knowledge. Each student must be able to use their psychological and mental functions. The experience that a person has is significant in forming knowledge. Thus, the teacher's learning process must provide a good learning experience for students. This study using a scientific approach, namely the discovery learning model, has been recommended by the 2013 curriculum as an effective strategy in history learning.

This technique allows students to find themselves or experience their mental processes. The teacher only guides and gives instructions. Thus the discovery approach is learning that involves students in the process of mental activities through the exchange of opinions by discussing, reading for themselves, and trying on their own so that children can learn on their own and find their problem-solving.

#### **4.2 History books used so far**

Textbooks or history teaching materials have an essential role in the learning process. Based on the needs analysis from observations, questionnaires, and interviews, it can be concluded that the history textbooks used in the learning process are not maximally useful. The teacher has not integrated local history as an enrichment program for students in history learning. According to Oguzan (2015), local history provides opportunities for students to get first-hand experiences by increasing historical awareness.

The teacher's opinion regarding using teaching materials for teaching history so far in schools is based on interviews conducted. Mrs. Yus, a history teacher at SMA N 1 Dumai City:

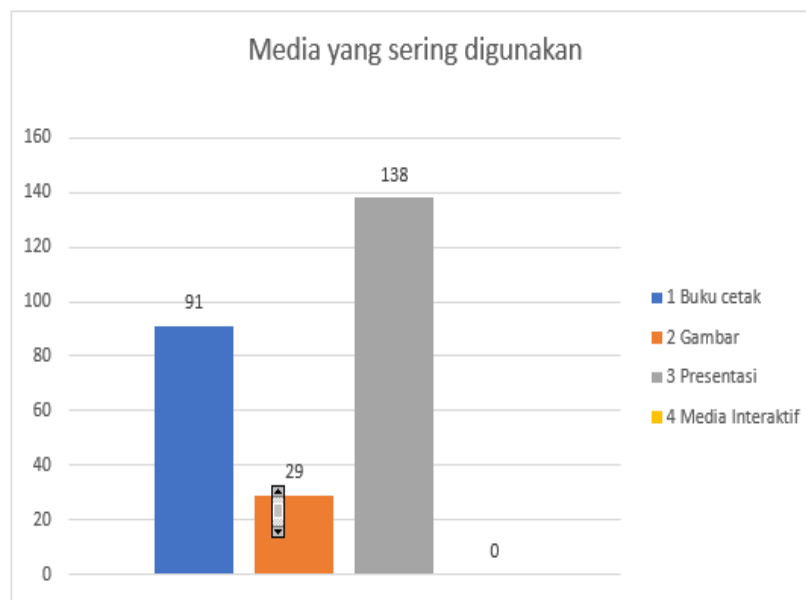
*"So far, history books at schools are in the form of textbooks from the government. Schools always select these textbooks to update information and add references to learning. As for local history, it has not been implemented as fully as possible. Because time and written sources are limited, local history is not yet complex."*

Based on the interview results, schools in Dumai have used history textbooks for years by always selecting the quality of books based on their truthfulness, suitability, and usefulness of learning materials. Because the use of textbooks for history classes assists teachers in the history learning process, assists teachers in the process of finding additional information or references, and assists in the evaluation process of student understanding by working on the questions provided in the textbook.

Even so, the teacher admitted that textbooks could not meet students' needs thoroughly. This is because the provision of material is often still general and does not provide space for student participation.

### 4.3 Learning media used so far

Based on the results of the questionnaire identification of student needs with a total of 258 students stating that teachers use printed books in learning with a total of 91 students with a percentage of 35.3%, picture media with a total of 29 students with a percentage of 11.2%, media presentations amounted to 138 students with a percentage 53.5%. None of the students answered the use of interactive media with a percentage of 0%. These results indicate that teachers in the history learning process at the high school often use the media of printed books, pictures, and presentations. This causes students to lack understanding of history learning material because printed books and presentation media are less effective in motivating students' interest in the historical events being studied.



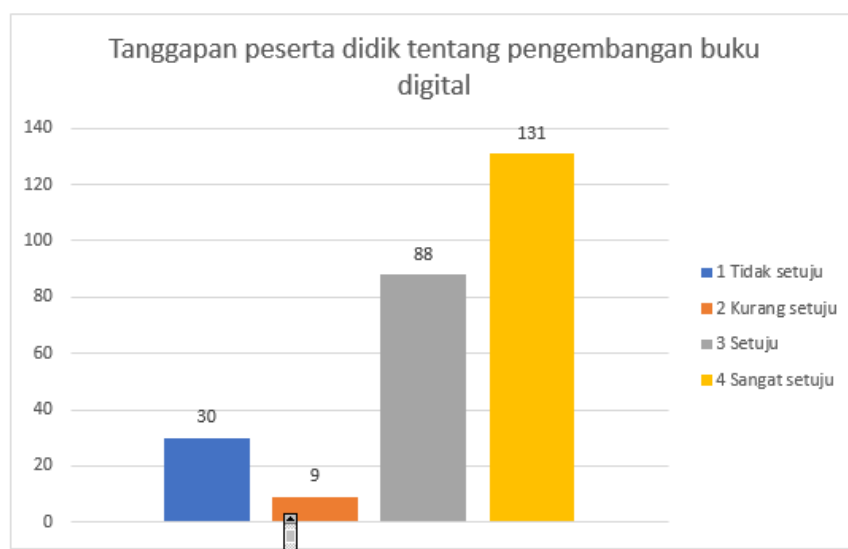
**Figure 4 . 3 Media Often Used by Teachers**

Based on an interview with a history subject teacher, Mr. Azmi, a history teacher at the Special Assisted High School of Dumai City, stated:

*"The media used so far are the existing textbooks, but this book is not enough to meet the material needs of students because of its limited information. Then, in this case, it was developed in the form of presentation media, but still, this is not enough to support effective learning with limitations. Use of this presentation."*

Based on this, innovative learning media in the form of interactive media are needed by teachers and students. This is because of the advantages of interactive media that can facilitate the delivery of material clearly so that history learning is more exciting and meaningful. In addition, teachers' ability is still limited in developing innovative digital media such as interactive multimedia. Teachers still use learning methods that seem monotonous with methods of discussion, lectures, and role-playing in the history learning process. Indeed, interactive multimedia as a learning medium can facilitate students in understanding historical material because of the two-way learning interaction and the teacher as a facilitator under constructivism theory (Wang et al., 2018). In this study, the learning media in digital books is suitable to support the primary source (textbooks) in history learning. This product is believed to be able to help students to learn independently, critically, and actively. This can be seen from the results of the identification of the questionnaire on the needs of students, with a total of 20 students responding to the development of interactive multimedia, namely digital books, including 30 students answering disagree with a percentage of 11.6%, nine students answering disagree with a percentage of 3.5%, 88 students answered agree with a percentage of 34.1%, and 131 students answered strongly agree with a percentage of 50.8%.





**Figure 4 . 4 Student Responses About Digital Book Development**

Teaching materials in the form of digital books that will be developed are equipped with the following parts: 1) learning instructions, allowing students to learn independently: 2) completeness. The materials contained in the modules are designed in such a way that they can provide sufficient information for participants. Students: 3) adaptive, adapted to technological developments: 4) easy to use, every instruction and providing information can help students respond and access knowledge based on their wishes. Based on interviews with the two history teachers at the two high schools, they agreed with the use of the Dumai City port history digital book additional material that integrates local historical sources as additional material for the history of the Japanese occupation in Indonesia. The Port of Dumai City is one of the local histories that must be developed in history learning, namely in the class XI syllabus contained in Basic Competence 3.5 Analyzing the nature of the Japanese occupation and the response of the Indonesian nation and 4.5 Reasoning the nature of the Japanese occupation and the response of the Indonesian nation and presenting it in the form of historical stories. This connection is due to the history of the formation of the Dumai City Port, which originated during the Japanese occupation. In 1942, the government brought romusha from Java to Dumai to install a water pipe that extended from Duri to Dumai. This linkage is undoubtedly the beginning of why the existence of this port can develop. Through this, it is hoped that students will be able to recognize the potential of the area, where the City of Dumai, since the beginning of Japan, has known in advance about good natural gas sources in the Dumai City area so that the history of the existence of this port is essential to learn. The students also stated that they agreed with the development of this book to find in-depth information and make Diwa more aware of the benefits of studying history in the area closest to the students.

This is also supported based on an interview with a history teacher at the Special Assisted High School in Dumai City, namely Mr. Azmi stated:

*"Local history is important to be developed, especially the history of this port. I strongly agree that it is developed into book form and becomes enrichment material because, through this port, Dumai City is known as a developed city. It is also hoped that this will raise students' awareness of the future in work and life history. Why is that? Because through this port, job opportunities are massively open to residents in Dumai City, and it is necessary for students, especially in Dumai City, regarding the history of the existence of this port which has made Dumai City a developed city."*

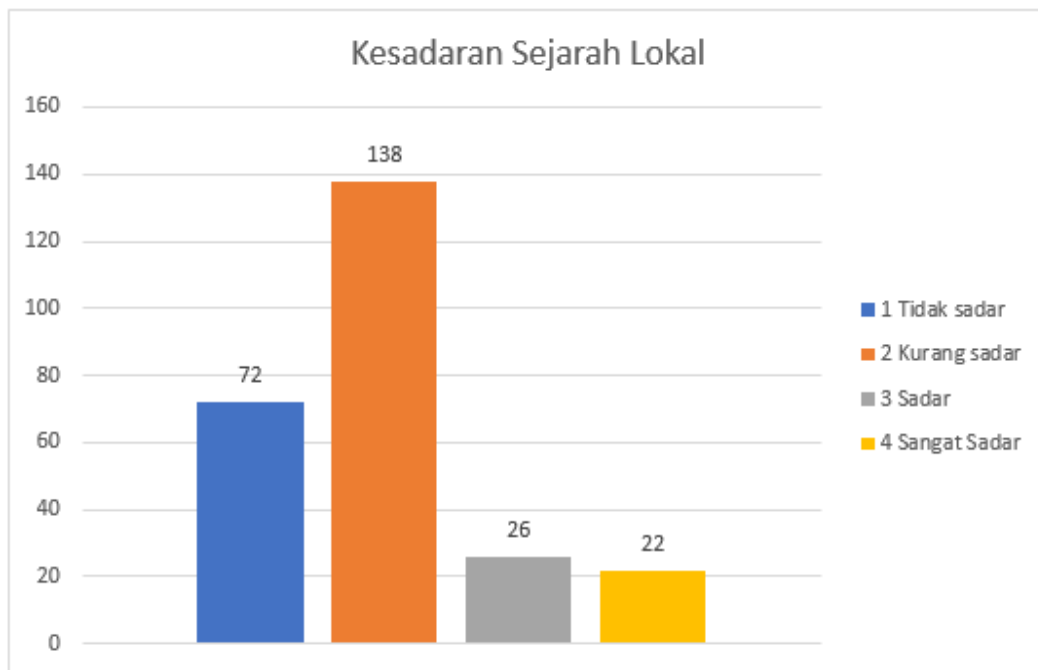
This study utilizes one of the local histories in Dumai City, namely Dumai City Port. The problem that has occurred so far is that the people of Dumai City do not know what the history of this port is, the people know that the port exists because of the government's efforts to promote the economy, but furthermore, it turns out that the existence of this port is not just that. However, a form of cooperation was initiated to explore petroleum and the distribution process as a source of energy. Export-Import. Dumai City became a port city due to its strategic location, which is also an advantage for the community as a form of economic improvement. Therefore students must know this local history to increase historical awareness of local history.

History learning needs to adapt to the current digital era by developing innovative learning media. One solution to answering the problem of learning history is to develop learning media so that history learning is more exciting and meaningful. Based on this, learning innovations using interactive multimedia, namely digital books for students and teachers in high school, are needed to increase motivation, learning outcomes, and awareness of students' local history in historical subjects. The development of this digital book is a solution to the needs of the learning process. This is because the application of digital books has advantages in

creating an effective and efficient learning process, so teachers are expected to be creative and innovative in creating a learning process that can combine text, images, audio, and video in one unit to achieve the objectives of history learning. In addition, the learning process provides more motivation for students and increases historical insight, and then awareness of the history will be created.

#### **4.4 Students' historical awareness level**

The needs analysis of this research is also intended to see the level of historical awareness of the students of SMA N 1 and SMA N Special Guidance for Dumai City regarding local history, namely the existence of the Dumai City port. In the questionnaire given, there are ten questions through the observations of researchers looking at the historical awareness of students from 2 SMAN in Dumai City. The following is the identification of the results of the questionnaire on the needs of students with a total of 258 students showing 138 students with a percentage of 53.5% in the category of being less aware of the existing local history, and this is based on the level of student's knowledge of the existence of this port, a history teacher in learning has never denied this.



**Figure 4 . 5 Local History Awareness Level**

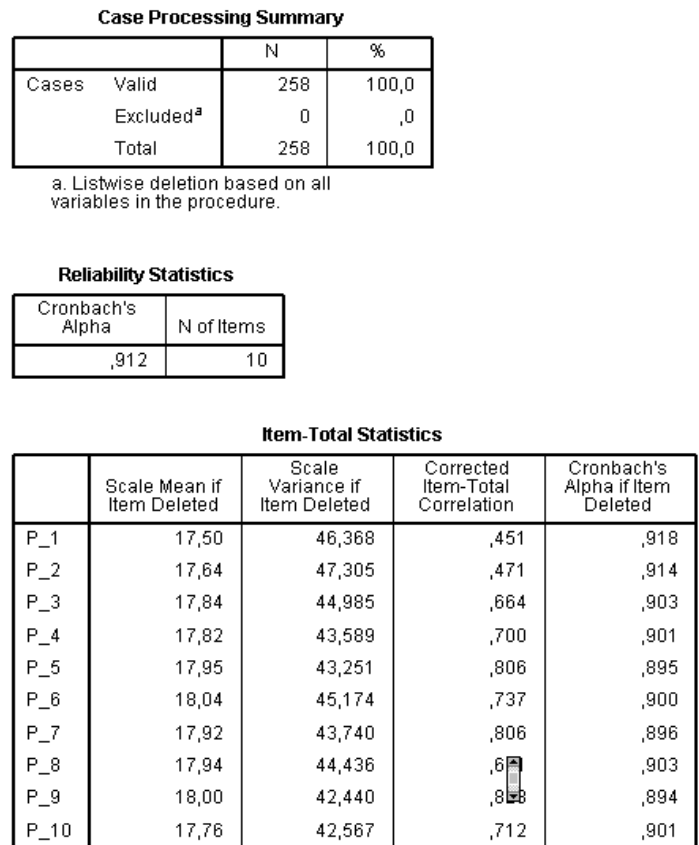
Previously, a statistical test was carried out to see the validity and reliability of the questionnaires that had been distributed. The value (N) of data is 285 students, the results of the validity of the Rater (R) Count on *Product Moment Person Correlation* by comparing the significant value (2-tailed) with a probability of 0.05, i.e., if the value of Sig. (2-tailed) < 0.05, then the item has a positive value in the SPSS 19.0 results, with N (258) being the value of Sig. (2-tailed) all questions are worth 0.00, so all data is declared valid. While the reliability test results were obtained on student data after a reliable test was carried out, *Cronbach's alpha value* was 0.912, meaning that according to what Nurmely had determined, it reads (minimum Cronbach alpha value is data declared reliable if it is above 0.60. So, in this case, it is stated as reliable. Here is the review:

**Correlations**

		P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_10	TOTAL
P_1	Pearson Correlation	1	,299**	,398**	,586**	,423**	,258**	,294**	,245**	,327**	,306**	,565**
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_2	Pearson Correlation	,299**	1	,518**	,450**	,366**	,300**	,353**	,334**	,334**	,325**	,567**
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_3	Pearson Correlation	,398**	,518**	1	,645**	,553**	,484**	,543**	,407**	,489**	,479**	,733**
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000	,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_4	Pearson Correlation	,586**	,450**	,645**	1	,598**	,511**	,581**	,421**	,529**	,420**	,768**
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000	,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_5	Pearson Correlation	,423**	,366**	,553**	,598**	1	,722**	,789**	,578**	,745**	,626**	,849**
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000	,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_6	Pearson Correlation	,258**	,300**	,484**	,511**	,722**	1	,746**	,620**	,745**	,597**	,787**
	Sig. (2-tailed)	,000	,000	,000	,000	,000		,000	,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_7	Pearson Correlation	,294**	,353**	,543**	,581**	,789**	,746**	1	,623**	,809**	,666**	,847**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000		,000	,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_8	Pearson Correlation	,245**	,334**	,407**	,421**	,578**	,620**	,623**	1	,725**	,624**	,742**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000		,000	,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_9	Pearson Correlation	,327**	,334**	,489**	,529**	,745**	,745**	,809**	,725**	1	,791**	,865**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000		,000	,000
	N	258	258	258	258	258	258	258	258	258	258	258
P_10	Pearson Correlation	,306**	,325**	,479**	,420**	,626**	,597**	,666**	,624**	,791**	1	,783**
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	,000		,000
	N	258	258	258	258	258	258	258	258	258	258	258
TOTAL	Pearson Correlation	,565**	,567**	,733**	,768**	,849**	,787**	,847**	,742**	,865**	,783**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	,000	,000	,000	,000	,000	
	N	258	258	258	258	258	258	258	258	258	258	258

\*\* Correlation is significant at the 0.01 level (2-tailed).

**Figure 4.6 Product Moment Person Correlations. Validity Test Output**



**Figure 4 . 6** Cronbach's Alpha Reliability Test Output

Based on the analysis of the need for awareness of the local history of students in SMA N 1 and SMA N Special Guidance for Dumai City, which is still in the poor category, it means that the development of digital books aimed at increasing historical awareness can be developed with the development procedure of ADDIE which includes: 1 ) *Analysis* ) which includes learning needs; 2) *Design*, namely digital books; 3) *Develop* (development); 4 ) *Implementation* (implementation), the application of the product; and 5 ) *Evaluation* (evaluation).

**5. Conclusion**

The results of the study indicate that: 1) there is a positive trend towards the need for developing digital-based teaching materials in SMA N 1 and SMA N Special Assistance in Dumai City. So far, there has not been a single teaching material packaged by the teacher in a digital form related to the local history of the Dumai City Port. The results of the questionnaire to students showed that 90% of students needed teaching materials that they could access anytime and anywhere they were. On the other hand, this product can support the process of inculcating historical awareness in students. 2) learning model based on discovery learning is an effective strategy to support learning activities. This is because this model has learning steps that allow students to develop their abilities by finding facts about local history. 3) the selection of the history of the Dumai City port is very appropriate to be developed because the existence of this port is in the process of development. Until now, it has dramatically impacted the progress of Dumai City to become a Port city, so if it is developed into a digital book, it will add insight and historical life to the city's progress, especially in Dumai City.

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