# Lectora Inspire Interactive Media Based on Android on Class VI Elementary School Proclamation Event Material

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**A B S T R A K**

*Pendapat siswa mengenai muatan pembelajaran IPS pada materi makna proklamasi kemerdekaan menjadi muatan pembelajaran yang prosais, serta kurangnya bentuk model pembelajaran yang disampaikan kepada guru kurang menarik. Seringnya penggunaan metode bacaan saja yang juga menjadi kendala dalam penyampaian materi terhadap siswa. Hal ini yang memicu hasil belajar siswa rendah. Tujuan penelitian ini yaitu mengembangkan media Lectora Inspire berbasis Android pada materi makna proklamasi kemerdekaan serta untuk pengaruh dari hasil belajar siswa di kelas VI SD. Jenis penelitian ini yaitu pengembangan dengan menggunakan model ADDIE. Metode yang digunakan dalam mengumpulkan data yaitu, observasi, wawancara, tes, angket. Instrumen pengumpulan data menggunakan kuesioner dan soal tes. Subjek yang digunakan dalam penelitian ini yaitu, guru, siswa, ahli media pembelajaran, dan ahli materi pembelajaran. Teknik analisis data menggunakan deskriptif kuantitatif, kualitatif, serta satistik inferensial. Hasil yang diperoleh dari penelitian ini yaitu siswa uji kelompok besar 84%, kelompok kecil 90%, uji coba guru 96% uji ahli media 76%, uji ahli materi 95%, serta hasil dari uji keefektivitas melalui pretest dan postest yang memiliki peningkatan secara signifikan dari kelompok kecil maupun kelmpok besar. Disimpulkan media Lectora Inspire berbasis Android pada materi makna proklamasi kemerdekaan sangat baik digunakan, efektif, serta sangat layak digunakan pada proses pembelajaran juga meningkatkan hasil belajar siswa.*

**A B S T R A C T**

Students' opinions regarding the content of social studies learning regarding the meaning of the Proclamation of Independence are prosaic learning content, and the lack of learning models presented to teachers is less interesting. The frequent use of reading-only methods is also an obstacle in delivering material to students. It is what triggers low student learning outcomes. This research aims to develop Android-based Lectora Inspire media on the meaning of the Proclamation of Independence, as well as the influence of student learning outcomes in Class VI elementary schools. This type of research is developed using the ADDIE model. The methods used to collect data are observation, interviews, tests, and questionnaires. Data collection instruments use questionnaires and test questions. The subjects used in this research were teachers, students, learning media experts and learning material experts. Data analysis techniques use descriptive quantitative, qualitative and inferential statistics. The results obtained from this research were that students tested in large groups 84%, small groups 90%, teacher trials 96%, media expert tests 76%, material expert tests 95%, as well as the results of effectiveness tests through pretest and post-test which had a significant increase from small groups to large groups. It was concluded that the Android-based Lectora Inspire media on the meaning of the Proclamation of Independence was very good to use, effective, and very suitable for use in the learning process and also improved student learning outcomes.

## 1. INTRODUCTION

Education plays an important role in character formation. Education can provide knowledge and foster students' behavior, morals and character through the potential they have (Gazali, 2016; Syahrial et al., 2021; Wiguna, 2017). Education in elementary school is very important, because it can develop the potential of a developing elementary school child (Arifah et al., 2019; Djabba & Ilmi, 2022). This causes

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learning activities to provide quality learning so that this learning can run ideally. One way of quality learning is the development of innovation in technology, namely learning media (Arimbawa et al., 2017; Devi & Bayu, 2020). The innovation provided in education is very necessary so that it continues to develop and is not left behind by world education (Bayu & Wibawa, 2021; Shalikhah, 2017).

An educator or teacher within a school plays a very important role in the students' learning process (Aryana et al., 2022; Hartanti & Yuniarsih, 2018; Salmawati et al., 2017). Previous research findings also confirm that teachers must be able to design learning well and appropriately (Asih & Nilakusmawati., 2017; Herdiansyah et al., 2019). Teachers must be able to improve all aspects starting from knowledge, critical thinking abilities, skills and attitudes possessed by students. The need for a means of conveying information between teachers and students is very necessary, namely the use of media. Media has many functions, namely, it can motivate students in learning, increase students' interest in learning, foster student focus, learning is not boring, and can improve students' memory in capturing material (Fisnani et al., 2020; Kuswanto & Walusfa, 2017; Munandar et al., 2021). One of the lessons that requires learning media is social science content.

Social sciences are one of the learning content at elementary school level. Social studies learning in elementary schools aims to understand themselves, environmental life, and develop good individuals as Indonesian citizens (Dharma et al., 2019; Rando & Wali, 2018; Widodo et al., 2020). With this, as a teacher, you must be able to prepare students as good citizens, such as providing knowledge or insight, skills, behavior and good values to solve personal and community problems (Alfianti et al., 2020; Permatasari et al., 2019; Wira Dharma et al., 2018). Through this social studies learning content, it is hoped that it can improve or improve students' thinking patterns, in-depth knowledge, skills, and attention to the social environment in their lives.

However, according to several studies, the current problem is that many students are less active in learning social studies (Apriliani et al., 2020; Budiyono, 2018; Fatmawati et al., 2021). Other findings also state that the cause of this is due to a lack of media or inappropriate learning models (Arianti, 2018; Vannisa Aviana Melinda et al., 2017; Widnyani et al., 2015). Based on the results of interviews and observations made with class VI teachers at SD N 2 Gaden, Klaten Regency, it was found that innovation in developing learning media was still not effective, especially in social studies learning on the history of the proclamation. This makes it difficult for students to describe what has been told in understanding historical material. In social studies learning, especially regarding the meaning of the event of the proclamation of Indonesian independence, there are obstacles in which learning is passive, which results in boredom experienced by students. In learning this material there are more activities in reading and memorizing only through books. Therefore, there is a need for collaboration or involvement in the use of media in the learning process. This can be proven by the learning results of 20 students, 13 male students and 7 female students, with the results of 40% of students completing and 60% of students not completing social studies learning in accordance with the KKM (Minimum Completeness Criteria).

The solution that can be used to overcome this problem is by using learning media in historical material so that learning is not passive. In social studies learning, teachers or educators are really required to play an active role, where students can have creative skills and think critically, sometimes in social studies learning there are still students who tend to be passive (Arsyad et al., 2020; Mistina et al., 2022). In learning activities, media is a tool that provides effectiveness in the learning process (Athifah et al., 2022; Riyanto et al., 2019). By using learning media, the material information conveyed by a teacher is easily accepted and well digested by students (Arimbawa et al., 2017; Melinda et al., 2018). The selection of media must be in accordance with what is needed, not only the characteristics of the media but also the characteristics of the students (Prehanto et al., 2021; Yanto et al., 2023). There are several things that need to be considered in the optimal learning process, such as the characteristics of the students, the media and material that will be presented by the students, and the time in the learning process. In optimal learning, it can make it easier for teachers to distribute material to students, one of which is using the interactive media Lectora Inspire based on Android (Mahliatussikah, 2022).

Interactive media is a type of learning media that allows students to participate actively in learning (Fathoni et al., 2021; Panjaitan et al., 2020; Prahesti & Fauziah, 2021; Simbolon et al., 2021). Interactive media combines audio, visual, text and interactivity elements to provide an engaging experience (Santoso, 2019; Sanusi et al., 2015). Educators must always follow developments in learning technology in the world of education (Febiharsa & Djuniadi, 2018; Mahliatussikah, 2022). When using interactive media, there is a lot of software that can help create interactive media, one of which is Lectora Inspire. Android-based Lectora Inspire media is designed to be easy, so this software can be used in learning. Lectora Inspire learning media can also be used offline or there is no need to install it first (Hafni et al., 2022). So, it can be concluded that Android-based Lectora Inspire is one of the software to improve

E-learning. This media is very easy to use because it is easy to understand and also has a sophisticated program.

Previous research findings also state that interactive media can improve student learning outcomes (Kartini & Putra, 2020; Suryadi et al., 2020). Other findings state that the Android-based Lectora Inspire learning media is suitable and effective for use in the learning process (Iqbal et al., 2020). Using the Android-based Lectora Inspire learning media is very useful for developing student learning to be more active and able to motivate students to improve their learning (Dahlia et al., 2022; Kayal et al., 2022; Shalikhah, 2017; Wiwit, et al., 2022). Based on this, it can be said that interactive media can improve students' learning understanding. The advantage of Android-based Lectora Inspire Media is that it is easy to modify according to our wishes to make it interesting and easier for students to learn. In developing Android-based Lectora Inspire learning media, it can have a positive impact and motivate students in learning. Based on this, the aim of this research is to develop Android-based Lectora Inspire media on the meaning of the proclamation of independence as well as the influence of student learning outcomes in class VI elementary school.

## 2. METHOD

This research uses the Research and Development (R&D) method. Development is an action or process that can create a product in the form of learning media in education. In this research, we develop a media that has the aim of solving problems and can improve the teaching and learning environment (Permatasari & Hardiyan, 2018). The model used in this research is the ADDIE model with stages of analysis, design, development, implementation and evaluation. This research was conducted at SDN 2 Gaden, Klaten Regency in class VI. Then, the study tool or instrument used in this research is a validation sheet in developing the Android-based Lectora Inspire interactive learning media. The validation sheet was carried out by two experts, namely media experts and material experts. Furthermore, the subjects in this research were class VI students. The first thing that must be done is in the initial stage of analysis, this is done to identify the results of observations, interviews, as well as data on grades from class VI.

The next stage, at the design stage. This stage explains the product development or media used. Next, in the development stage, at this stage the product being developed has been laid out which is then developed in the initial stage, namely the researcher can design and create Android-based Lectora Inspire media. The researcher is able to re-examine and improve the media developed then when it is ready it can be given to the validator or participants. expert. Then the next step is to create a questionnaire for the expert team (2 media experts & 2 material experts), teachers and students as a response to the media being developed. Trials were carried out on a large and small scale, from a large scale with 5 students to a large scale with 15 students. The final stage is the arrangement or verification carried out by experts on interactive learning on the Android-based Lectora Inspire media. At the implementation stage. At this stage the aim is to prove whether the resulting media is a viable product or medium or not as well as the effectiveness of the product being developed. This stage is a place to test the feasibility of products or media produced by researchers carried out by media experts and material experts. Apart from the expert team, the Lactora Inspire media was also tested on large and small groups, the subjects of which were students at SDN 2 Gaden, Klaten Regency in class VI.

At the evaluation stage. This stage is tasked with examining from the results of the implementation stage whether the media product being developed has any existing shortcomings or weaknesses. Existing weaknesses or shortcomings can be corrected, the results of these improvements make the media more effective according to the indicators achieved. If the product being developed has no revisions then the media is suitable for use. The methods used to collect data are observation, interviews, questionnaires and tests. The observation method was used with the aim of collecting various data from Class VI students during the research process using a sheet containing observations as an instrument. The interview method is collecting data with the teacher as a resource. The questionnaire method was used to collect data on the validity of the product being developed. The test method is used to measure product effectiveness. The instrument used to collect data was a questionnaire sheet. The questionnaire grid is presented in Table 1, Table 2, and Table 3.

**Table 1.** The Media Expert Instrument Grid

| Indicator Evaluation | Item |
|---|---|
| Suitability of Media with Materia | 1. Harmony of colour composition in Android-based Lectora Inspire interactive media |
| | 2. Integration of text, images and videos in the Android-based Lectora Inspire interactive media proclamation of |

| Indicator Evaluation | Item |
|---|---|
| | independence in social studies learning content in accordance with the theme so that it can give a good rhythmic impression. |
| | 3. Accuracy of the structure between text components, images, etc. in the independence proclamation material in accordance with the theme. |
| | 4. The combination of background, text colour, and image animation shows contrasting and good colours that suit the material |
| | 5. Android-based Lectora Inspire interactive media can be presented with clear audio and video settings that make it easy to see and hear clear audio. |
| The use of Media can be Done by Students and Teachers | 1. Using Android-based Lectora Inspire interactive media can be used anytime and anywhere |
| | 2. Loctura Inspire interactive learning media based on Android does not occur errors or stops by itself. |
| | 3. The interactive media Lectora Inspire is based on Android with features or characteristics that are easy to use by anyone, especially students. |
| | 4. Access to Loctura Inspire interactive media based on Android can be accessed on an Android smartphone properly. |

**Table 2.** The Material Expert Instrument Grid

| Indicator Evaluation | Item |
|---|---|
| Conformity Between KI, KD, and Learning Objectives | 1. Suitability of material with Android-based Lectora Inspire media with KD, KI, and learning objectives. |
| | 2. Suitability of material to learning objectives. |
| | 3. There is a process for solving problems in social studies learning content which involves systematic procedures in learning. |
| | 4. Delivery of material that is appropriate to the level of student development of logical and critical thinking through learning. |
| Material Complies with Level of Thinking | 1. In the use of language that is appropriate to the particulation of use. |
| | 2. The suitability of the language in the material in the Android-based Lectora Inspire interactive learning media is in accordance with EYD |
| | 3. The use of language in the Android-based Lectora Inspire media is easy for students to understand |
| | 1. The range of information conveyed on the power point-based Lectora Inspire interactive media is appropriat |
| | 2. Presenting material on the meaning of the social science proclamation on the interactive learning media Lectora Inspire based on Android on the meaning of the proclamation can optimize students' understanding of the subject matter |
| | 3. The material presented in the interactive learning media Lectora Inspire based on Android can make it easier for students to learn the meaning of the proclamation in class VI |
| | 4. Accuracy in writing foreign names in the presentation of material on the interactive media Lectora Inspire based on Android makes it easy to understand the meaning of the proclamation of independence |
| | 5. The content of the interactive media Lectora Inspire based on Android does not contain SARA |
| | 6. The interactive learning media Lectora Inspire based on Android can increase students' knowledge of the meaning of the proclamation of independence. |
| | 7. Include material that can be conveyed in students' daily lives |

**Table 3.** The Teacher and Student Response Instrument Grid

| Aspect | Item |
|---|---|
| Material/Content | 1. The material on the Android-based interactive media Lectora Inspire includes the meaning of the proclamation of independence. <br> 2. Android-based Lectora Inspire interactive media materials can increase students' interest in learning and also students' knowledge |
| Media Requirements | 1. Android-based Lectora Inspire interactive media is easy to use anytime and anywhere and attracts students' attention <br> 2. Android-based Lectora Inspire interactive media is attractive and easy to use <br> 3. Lectora Inspire interactive media based on Android can increase student learning creativity |
| Acculation or Appearance | 1. The Android-based Lectora Inspire interactive media display uses the right resolution <br> 2. On the interactive media Lectora Inspire based on Android, animated images are clearly visible <br> 3. The Android-based Lectora Inspire interactive media font levels are clear and easy to understand and the colours are appropriate. <br> The interactive media display of Android-based Lectora Inspire matches the colour combination of the background, writing and animation |

The data analysis techniques used to analyze the data are qualitative descriptive analysis, quantitative and inferential statistics. Qualitative descriptive analysis is used to collect data in the form of comments provided by experts and students. Quantitative analysis is used to collect data in the form of scores given by experts and students. Inferential statistical analysis is used to test product effectiveness. This research uses a method to analyze the measurement results of test devices or instruments before and after using the Android-based Lectora Inspire media to determine the effectiveness of the product being developed. To find out the validity or invalidity of data, try the test instrument. Then, use independent samples to find out differences from previous results using the t-test. To use the N-gain test as proof of the results of increasing learning outcomes from the difference in the maximum pretest and post-test scores.

## 3. RESULT AND DISCUSSION

### Result

This product development research has three main things, namely Android-based Lectora Inspire, effectiveness and feasibility of Android-based Lectora Inspire on the meaning of the proclamation of independence in class VI elementary school. In developing the Android-based Lectora Inspire media using the ADDIE model which has 5 stages: analysis, design, development, implementation and evaluation. The first, analyze. At this stage, observation activities, interviews and data on student learning outcomes in class VI were carried out. There were several questions in the interview activities conducted with class VI teachers which discussed basic social studies as well as material problems that were difficult for class VI students to understand or digest and also student learning outcomes that were still incomplete from standard of minimum completeness. Then, it also discusses the learning media that occurs at the school. It can be concluded from this interview that there is a lack of optimality in the learning process regarding the history of the meaning of the proclamation of independence in class VI. This is the cause of students' lack of interest in learning and the learning media used in schools.

The second, design. At the design stage, this stage is used to prepare sketches in making Android-based Lectora Inspire media. The preparation of the interactive media Lectora Inspire based on Android from the product design form is formed initially with pictures or charts which serve as instructions for creating and evaluating it. Then, the design engineering section of the media being developed is equipped with explanations starting from materials, measurements or scale, tools used, as well as work steps. Fourth, development. At this stage, Android-based Lectora Inspire interactive media was developed based on the design results that had been previously developed. The results of the development of interactive media Lectora Inspire based on Android are presented in Figure 1.

**Figure 1**. Results of Android-Based Lectora Inspire Interactive Media Development

The Android-based Lectora Inspire Interactive Media that has been developed will then be tested for validity by media experts and material experts. If the media design has been declared complete, it can be submitted to the expert team to fill out the validator questionnaire for the product being developed. The assessment results given by learning media experts obtained a percentage of 76% so that they received very decent qualifications. The assessment results given by learning material experts obtained a percentage of 95% so that the qualifications were very worthy. The results of the assessment given by the teacher obtained a percentage of 96% so that the qualification was very worthy. The results of the small group trial obtained a percentage of 90% so that the qualification was very feasible. The results of the large group trial obtained a percentage of 84% so that the qualification was very feasible. Validity results are presented in Table 4.

**Table 4**. The Product Validity Test Results

| No. | Test Subjects | Validity Results | Information |
|-----|---------------|------------------|-------------|
| 1. | Media Expert Test | 76% | Very Worth It |
| 2. | Material Expert Test | 95 % | Very Worth It |
| 3. | Classroom Teacher Test | 96% | Very Worth It |
| 4. | Small Group Trials | 90% | Very Worth It |
| 5. | Large Group Trials | 84% | Very Worth It |

Fourth, implementation stage. This stage explains whether the media product being developed is suitable for use as a tool in the learning process. To see whether the media is effective or not, it can be seen from the results of the pretest and post-test questions given to students. Experiments can be carried out before and after the use of learning media in the learning process. He provided treatment work using the Android-based Lectora Inspire learning media which then carried out pre-test and post-test questions. The test results are presented in Table 5.

**Table 5.** The Product Effectiveness Test Results

| No. | Test Subjects | Pre-test | Post-test |
|-----|---------------|----------|-----------|
| 1. | Small Group Trials | 49.20 | 85.00 |
| 2. | Large Group Trials | 62.53 | 89.53 |

The final stage, namely evaluation. This stage is a review as well as suggestions given from the expert team to researchers regarding the level of feasibility of the media being developed, the t-test, and the N-gain test. The results of the pre-test and post-test normality test in the small group were 0.20, so that L calculated < L table (0.20 < 0.33) so it could be normally distributed. The results of the pre-test and post-test normality test in the large group were 0.20, so that L calculated < L table (0.20 < 0.22) so it could be normally distributed. Next, a homogeneity test was carried out. The results of the homogeneity test for

small groups and large groups show homogeneous data, because t < t table. Next, an N-gain test is carried out. The N-gain test results are presented in Table 6.

**Table 6.** N-Gain Test Results

| Class | Many Students | Average | | N-Gain | Criteria |
|---|---|---|---|---|---|
| Pretest | Post-Test | | | | |
| Small Group | 5 | 49.02 | 85.00 | 0.741 | Tall |
| Large Group | 15 | 62.53 | 89.53 | 0.728 | Tall |

The results of data analysis show that the Android-based Lectora Inspire media received a very high category. It was concluded that the Android-based Lectora Inspire media was effective in improving learning outcomes. The Android-based Lectora Inspire media is qualified so it is very suitable for use in learning material on the meaning of the proclamation of independence at SDN 2 Gaden, Klaten Regency.

**Discussion**

The results of data analysis show that Android-based Lectora Inspire Media is suitable for use in learning. This is caused by several factors. First, Android-based Lectora Inspire Media is suitable for use because it can improve student learning outcomes. Learning media is the most important thing in learning activities (Riwu et al., 2018; Siregar & Kurniati, 2022). With the Android-based Lectora Inspire media, it has a good impact on the learning process which can overcome problems in learning that often use conventional methods. This was also expressed in previous research which stated that learning media is a means of delivering messages to students in a planned manner so that learning activities can take place effectively and improve student learning outcomes (Dewi et al., 2019; U. Dewi et al., 2022; Wulandari et al., 2020). Previous findings also confirm that the function of media is a learning resource and clarifies the material provided and provides an overview of the material (Dewi & Sujana, 2021; Oktarina et al., 2021; Rofiq et al., 2019). This is what causes media to make it easier for students to learn, and makes it easier for teachers to teach so that the goals of learning are achieved optimally. Students' understanding in learning will increase with the help of learning media. With the Android-based Lectora Inspire learning media, it can provide students with creativity in thinking critically about the meaning of the proclamation of independence, and can make it easier for students to understand the material better. The media has several unique features ranging from animation, background sound, choice options (material achievements, material content, to quizzes), as well as reading texts that can increase students' learning activity to continue learning (Hafni et al., 2022; Rofiq et al., 2019).

Second, Android-based Lectora Inspire Media is suitable for use because it increases student learning motivation. In delivering material starting from KI, KD, as well as learning objectives, it can provide student concentration in ongoing learning (Kayal et al., 2022; Sari et al., 2019). In the learning process, the use of Android-based Lectora Inspire media gives students attention to continue studying actively and with fun. The use of learning media is able to provide students with a deeper understanding of the material that is presented well (Ilmi et al., 2021; Syahrowardi & Permana, 2016). This causes students to be more motivated in learning. Interesting learning media can significantly increase student learning motivation (Wardana & Sagoro, 2019; Wuryanti, 2016). Previous research findings also reveal that the benefits of media are overcoming students' lack of interest in learning, increasing enthusiasm for learning, and determining student acceptance of learning content (Pradilasari et al., 2019; Widiyasanti et al., 2018). The use of this media is very important in the learning process because it is a useful stimulus to increase the harmony in receiving information. Other findings also state that interesting media can significantly increase students' enthusiasm for learning, so that students become very happy when studying (Sunarti et al., 2016; Zaharah & Susilowati, 2020). This is of course very important in learning activities, so media is one of the important tools that every teacher must pay attention to.

Third, the Android-based Lectora Inspire media is suitable to be used because it improves the learning atmosphere, especially regarding proclamation event material in class VI. Digital learning media has interactive elements, such as videos, simulations or educational games. This causes students to be actively involved in the learning process, which can improve the learning atmosphere to be more enjoyable (Shofi, 2020; Syahrowardi & Permana, 2016). Apart from that, the Android-based Lectora Inspire media combines interesting visual and audio elements, such as images, animations and videos. Combining images and sound can help students understand content better, especially for those who learn better through visual or audio media (Amelia & Harahap, 2021; Hendriawan & Septian, 2019). Previous findings also state that digital learning media can be accessed at any time, thus giving students the flexibility to study according to their own schedule, which can increase their comfort and enjoyment in learning (Putri & Muhtadi, 2018; Widyatmojo & Muhtadi, 2017).

Previous research findings also state that the Android-based Lectora Inspire learning media is very easy to use anytime and anywhere, making learning easier (Hendriawan & Septian, 2019; Syahrowardi & Permana, 2016). Other research also confirms that Android-based learning media can increase student enthusiasm and motivation for learning so that it can improve student learning outcomes (Putri & Muhtadi, 2018). It was concluded that the Android-based Lectora Inspire Media is suitable for use in learning activities for class VI elementary school. Android-based Lectora Inspire media is effective in improving learning outcomes. The advantage of Android-based Lectora Inspire Media is that it is easy to modify according to our wishes to make it interesting and easier for students to learn. The implication of this research is that the Android-based Lectora Inspire learning media can have a positive impact and motivate students in learning.

## 4. CONCLUSION

The research results show that the Android-based Lectora Inspire media received very good qualifications from experts and students. The results of data analysis also show that the Android-based Lectora Inspire media is effective in improving learning outcomes. It was concluded that the Android-based Lectora Inspire media had a good impact on the learning process in the classroom regarding the meaning of the proclamation of independence. With this media, it can improve students' understanding of the meaning of the proclamation of independence, not only that, but it can also improve student learning outcomes much better in class V1 SDN 2 Gaden, Klaten Regency.

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