

Development of e-LKPD based on high order thinking skills (HOTS) to improve cultural literacy in folklore text material

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Abstract

This research aims to develop HOTS-based e-LKPD as teaching material for learners to be able to understand the text material of folklore well. The method used in this research is the development (R&D) of Borg and Gall which is simplified into seven stages, namely (1) potential and problems; (2) data collection; (3) product development; (4) product evaluation; (5) revision; (6) product trials; and (7) final revisions. Expert validation results show this HOTS-based e-LKPD has been worth using with revisions. The results of the trial showed that as many as 70% of students were able to solve high-level questions, 80% of students solved moderate-level questions, and 90% of students solved low-level questions. The results of the response questionnaire showed e-LKPD in the high category so that the percentage of ministry was obtained by 87.4% with very interesting criteria on all aspects measured, namely material aspect 87.2%, presentation aspect 86%, and language aspect 89%. The overall number of such percentages reaches very high criteria so, it can be concluded that the e-LKPD developed is very interesting and makes it easier for students to understand the material.

Keywords: e-LKPD based on HOTS (High Order Thinking Skills), folklore, cultural literacy.

INTRODUCTION

In the 21st century, global development and change are happening very rapidly. Indonesia as part of the world participates in development and global change. This has an impact on the increasingly complex cultural diversity that enters and grows in Indonesian society. Meanwhile, Indonesia itself has a variety of ethnic groups, languages, customs, customs, beliefs, and social layers. The cultural diversity that Indonesia already has and the influx of foreign cultural influences requires the Indonesian nation to have the ability to respond to that diversity. Kemendikbud, (2017) states that the ability to understand diversity and responsibility towards the state as part of a nation is a skill that should be possessed by every individual in the 21st century.

The ability to understand diversity is important for every individual Indonesian nation so that social relations between individuals are maintained. With the harmony of relationships between individuals maintained, the emergence of group exclusivity and intolerant attitudes in society can be eroded. This is in line with Helaludin's opinion (2018) that conflict can occur if in an interaction between groups there is one group that has superiority over the other group. One way to develop a high tolerance for security is to develop cultural literacy in both the family, school, and community.

Cultural literacy is the ability to understand and behave towards Indonesian culture as national identity (Kemendikbud, 2017). Civilized societies are created through cultural literacy. As individuals, cultural literacy serves in helping with good interaction from a variety of different backgrounds. In addition, each individual, especially the younger generation, will know, love, maintain, and preserve the culture of their respective regions. Understanding the culture of the region has many benefits for the younger generation, among others, it can take on moral values, education, religion, and good characters contained in the culture.

Education has an important role in encouraging the creation of cultural literacy. Through education, culture can be learned, taught, and familiarized to students. Classroom learning can be integrated with the cultural values that society has. The integration of cultural literacy is expected to increase students' love and concern for their culture. This love will later become a habit and character attached to the student. Thus, when jumping into the community, students have a character of local wisdom.

Cultural integration in learning can be included in Indonesian learning. Learning Indonesian in schools is implemented in text-based manner. One of the texts that reflect cultural literacy is the text of folklore that is scored through four basic competencies, namely identifying the values and content of folklore, retelling the content of folklore, (3) comparing the values and language of folklore, and (4) comparing the values and language of folklore and short stories.

Folklore is a form of cultural heritage. As a genre of oral literature, folklore has many benefits for the supporting community, including students. Folklore are contained educational values and useful moral values. Folklore is usually presented with light stories that are easily understood by students. This will attract students to learn about their culture. Not only introduce the culture of each region but also folklore stores information on cultural systems such as philosophy, values, norms, and behavior of the community.

One of the islands that are rich in folklore is Madura Island. Madura Island consists of four districts, namely Bangkalan Regency, Sampang Regency, Pamekasan Regency, and Sumenep Regency. Each district has cultural peculiarities, including folklore. Madurese folklore has many contained in it, including the value of knowledge, social values, religious values, and customs values. Folklore from Madura has not been used as teaching material in school so many students do not know the folklore of Madura itself. Therefore, cultural literacy, especially Madura culture needs to be introduced to students to maintain Madura culture in the future.

Folklore learning in schools so far has not shown maximum results. This appears to be the limited learning resources and reference sources that teachers use when teaching. Folklore taught has not specifically referred to folklore originating from Madura Island itself. Thus, students' knowledge and understanding of folklore from their home region are still lacking.

Based on the results of the needs analysis, teaching materials for folklore texts are sufficient, but they are not contextual and lead students to think critically. Existing teaching materials only include material and focus on questions that emphasize the realm of lower-level thinking, namely remembering. Research conducted by Subekti & Suparman, (2019) says that the teaching materials used by teachers still have many weaknesses. Along with the development of the times, the learning media has also

changed from conventional to digital, and LKPD is no exception. To increase students' knowledge and understanding of their local culture, teachers can arrange teaching materials in the form of Student Worksheets (LKPD).

LKPD is one of the teaching materials that play an important role in providing assignments that are relevant to the material being taught. Learning will be easier if it is accompanied by learning resources in the form of a specially designed LKPD. According to Prastowo (2011), LKPD itself is a printed teaching material that contains a summary of learning material and is equipped with instructions in completing tasks that must be done by students, based on the basic competencies that must be achieved. However, along with technological developments, Student Worksheets (LKPD) can be presented in electronic form or commonly called e-LKPD. E-LKPD can be accessed using even mobile phones or smartphones. E-LKPD not only presents material but is also equipped with videos and interesting pictures that can increase or strengthen students' understanding of studying the material presented. In addition, e-LKPD can be practically used because it can be accessed by teachers and students anytime and anywhere. This is in line with the need for online learning during the current pandemic.

In the era of the industrial revolution, students are required to have critical thinking skills so materials based on critical thinking skills or Higher Order Thinking Skills (HOTS) are needed. Higher-order thinking ability or HOTS is an ability that must exist in every student (Darmawan & Wahyudin, 2018). The results of previous studies showed that LKPD made by teachers rarely developed student HOTS (Bakri, Permana, Wulandari, & Mulyati, 2020).

Teachers can develop LKPD based on Higher Order Thinking Skills (HOTS) by raising folklore on the island of Madura. Higher-order thinking skills or HOTS are closely related to problem-solving skills. Higher-order thinking skills are defined as the broad use of the mind to find new challenges. According to Heong et al., (2011) these higher-order thinking skills require a person to apply new information or prior knowledge and manipulate information to reach possible answers in new situations.

Higher-order thinking skills will not be achieved by themselves without the efforts and supporting facilities. Teachers must have creativity in learning that can facilitate students to learn actively and independently. Through the LKPD based on Higher Order Thinking Skills (HOTS), teachers can improve students' cultural literacy.

Based on this, it is necessary to develop an e-LKPD based on High Order Thinking Skill (HOTS) to improve cultural literacy in folklore text material containing Madurese local wisdom.

This study aims to develop an e-LKPD product based on High Order Thinking Skill (HOTS) to improve cultural literacy in folklore text material containing Madurese local wisdom. In addition, this study also aims to determine the feasibility of the developed e-LKPD product and its effectiveness in learning.

METHOD

This research is a type of research and development (R&D), which is a type of research and development. R&D research methods are used to produce a particular product and test the effectiveness of that product. This research uses the Borg & Gall, (2003) development research model consisting of three main stages, namely preliminary study, product development, and evaluation. These stages are then outlined in the steps of (1) potential and problems; (2) data collection of LKPD needs; (3) the development of LKPD through the design (design) of the product and developing the initial product form; (4) evaluation of the product through validation by the relevant expert/ expert; (5) revision of the product design validation results; (6) peer trials and small class trials and product revisions followed by a wider trial with actual classes (30 students); (7) revise into operational products in the form of e-LKPD that are ready to be tested for their effectiveness.

The test subjects in this study are expert validators, namely material experts, linguists, and learning experts. The instruments used in data collection in this development are tests and questionnaires, namely questionnaires for expert validators and student response questionnaires. This research data is split into two, namely qualitative data and quantitative data. Descriptive data in the form of comments, criticisms, suggestions, corrections, and assessments given from students, practitioners, and experts/experts on the product. Quantitative data is a student's writing test score and a questionnaire score during a product trial. The data analysis technique in this study is to describe all validator opinions, suggestions, and responses obtained from criticism sheets and suggestions.

This research data analysis technique is to process data in the form of assessment scores obtained from material experts, media experts, student responses, teacher responses, and tests. The score obtained from the questionnaire was analyzed on the Likert scale with the highest score of 5. The value criteria that are used as a limit to graduate from the media of learning folklore comics is B or good.

RESULT AND DISCUSSION

The results of this study are in the form of the level of product feasibility and effectiveness of the product developed. The results are described as follow: *The first*, The results of this development and research are e-LKPD based high order thinking skills (HOTS) in folklore text material. The stage of development carried out in this research includes stages (1) of potential and problems; (2) data collection of LKPD needs; (3) the development of LKPD through the design (design) of the product and developing the initial product form; (4) evaluation of the product through validation by the relevant expert/ expert; (5) revision of the product design validation results; (6) peer trials and small class trials and product revisions followed by a wider trial with actual classes (30 students); (7) revise into operational products in the form of e-LKPD that are ready to be tested for their effectiveness.

To be able to see the potential problems that exist, it is necessary to conduct an initial needs analysis. The results of the initial analysis conducted on this study were to develop e-LKPD based on HOTS (Higher Order Thinking Skills) in folklore material for class X. This research was conducted at Al-Hikam Bangkalan High School which is located at Jalan Raya Perumnas Tonjung Burneh No.1, Tonjung, Kec. Burneh, Kab. Bangkalan. This preliminary study stage is conducted by interviewing teachers of Indonesian subjects. The purpose of this preliminary research is to obtain a preliminary analysis of preliminary data. In addition to interviews with teachers, researchers also conducted an analysis of books and Student Worksheets used by teachers and an analysis of students' high-level thinking skills. In the process of analysis of interactive e-LKPD development, there needs to be an initial activity to set the objectives of e-LKPD-based e-LKPD development.

Based on the results of preliminary studies obtained the results that Al-Hikam High School requires e-LKPD based on local wisdom by lifting Madura folklore text. In

addition, teachers in Indonesian stated that students need LKPD with varying views so that students can understand folklore text material easily and can hone high-level thinking skills through HOTS-based problems.

Based on the results of the interview it can be concluded that the student worksheet for folklore material is not yet HOTS-based. In addition, worksheets are also still printed and not yet electronic-based. Electronic-based LKPD will be very helpful, especially in pandemic times like today that require teachers to teach online and offline.

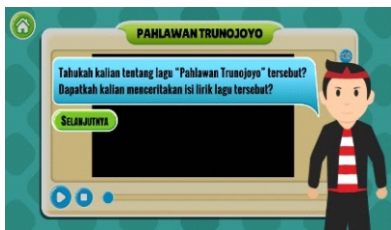
After the initial information has been obtained, the next step is to create the initial product. To create student worksheets in the materials section use more than one book and the internet. Here are the steps to creating a student worksheet: 1) Selecting the source of the material for reference to the material to be used, 2) Designing student worksheet designs, and 3) Select the necessary materials: (a) Design the front, content, and back of the student worksheet, (b) Design the front cover, back cover, and contents to train Higher Order Thinking Skills. (c) Collect and search for images, adapt practicums with materials, (d) Choose colors and backgrounds that are interesting but still appropriate to the material, (e) Package the learning material according to the basis.

The potential and problem stage is done by identifying the potential and problems that exist in schools related to the use and needs of HOTS-based LKPD in folklore material. Researchers made observations at Al-Hikam High School and interviewed one of the teachers. Based on the results of the interview it can be concluded that the student worksheet for folklore material is not yet HOTS-based. In addition, worksheets are also still printed and not yet electronic-based. Electronic-based LKPD will be very helpful, especially in pandemic times like today that require teachers to teach online and offline.

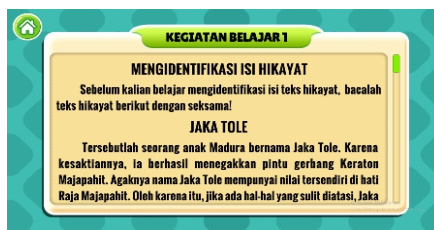
The second step is the collection of LKPD needs data. Researchers collected LKPD material from various reference sources. The reference source is then processed so that it can produce a HOTS-based e-LKPD product by following the competencies and goals to be achieved. This e-LKPD contains short story text material that is divided into learning activities in each basic competition.

Next is the e-LKPD development stage. E-LKPD development utilizes unity application. In e-LKPD, there are several learning activities based on HOTS. The folklore

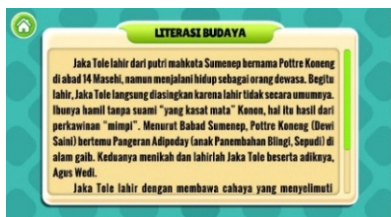
text taken is a folklore text that originated in Madura because it wanted to improve the cultural literacy of students. Here's the e-LKPD product design.



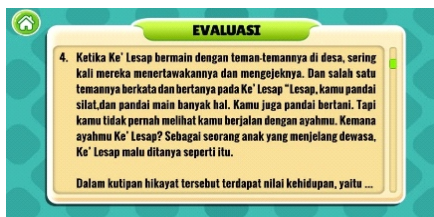
Picture 1 Aperception Activities



Picture 2 Learning Activities



Picture 3 Cultural Literacy



Picture 4 Evaluation

The next step is expert validation. Validation that is done includes expert validation of material from e-LKPD that has been developed and validation of user response questionnaire (student). Material experts provide an assessment of HOTS-based e-LKPD (Higher Order Thinking Skills) on madura folklore text material. Material experts come from different college lecturers.

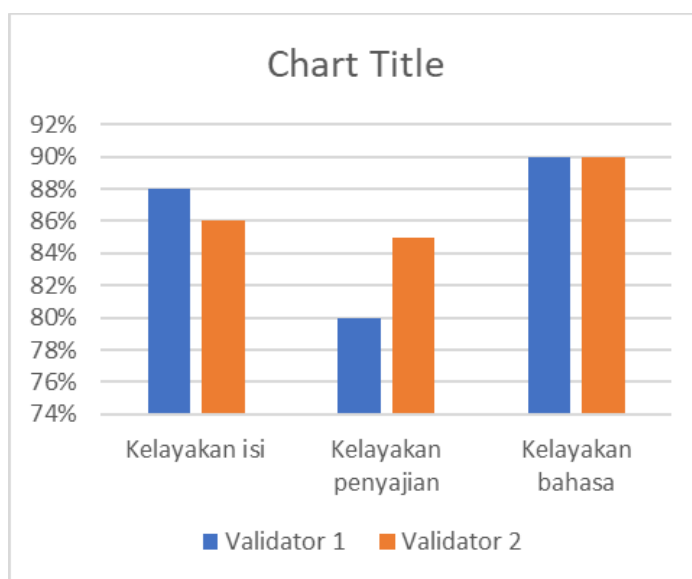
Expert validation results of the material are analyzed so as to produce the following validation data.

Table 1. The Result of Material Expert Validation Assessment

Aspects	Percentage of Validator Score 1	Percentage of Validator Score 2
Content eligibility	88%	86%
Serving eligibility	80%	85%
Language eligibility	90%	90%
Average	86%	87%
Average 2 validators		86.5%
Categories		Worth using with revisions

Judging from table 4.1 the results of material expert validation can be seen that the material expert validator 1 gives a value on the feasibility aspect of e-LKPD content by 88%, the aspect of presentation eligibility gets a percentage of 80%, and the language eligibility aspect by 90%. Meanwhile, the expert validator of material 2 assessed the feasibility of the content by 86%, the feasibility of presentation by 85%, and language eligibility by 90%. The average validator material validation assessment result is 1 by 86% and validator 2 by 87%.

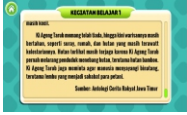
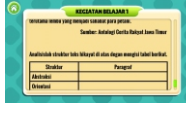
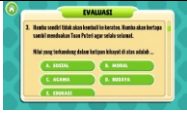
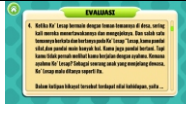

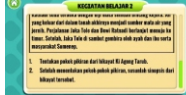
Based on the material expert's assessment, it is known that the average percentage of the two validators is 86.5% and the category is suitable for use with revisions. The analysis of the material expert validation assessment is presented in graph 1.



Graph 1. Results of Validary Assessment of Material Experts

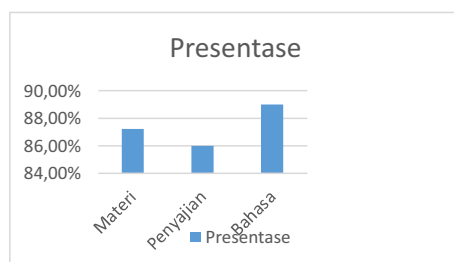
The next stage is the revision of the design. Based on the input of the material expert validator, several revisions to the e-LKPD were made to improve the product being developed. The results after doing product validation. The improvements include:

Table 2. The Result of e-LKPD

No.	Suggestions	Before Revision	After Revision
1.	Add HOTS based workout		
2.	Changing HOTS Questions		
3.	Adding task instructions		

The next step is the revision of the plan. Based on the input of expert validator material some revisions to e-LKPD are made for the improvement of the developed product. After the e-LKPD was assessed by the validator, e-LKPD was piloted on 15 students of class X al-Hikam Bangkalan High School. The results of HOTS-based e-LKPD assessments on usage trials are that as many as 70% of students can solve high-level questions, 80% of students solve moderate-level questions, and 90% of students solve low-level questions.

In addition to measuring student success rates, researchers also shared response questionnaires to find out feedback from students related to the use of e-LKPD. Based on the results of the response questionnaire obtained a percentage of 87.4% with very interesting criteria on all aspects measured, namely material, presentation, and language. Furthermore, the results of the small group test can be seen in the following chart.



Based on the chart it is seen that in the material aspect reached a percentage of 87.2%, aspects of presentation reached 86%, and language aspects 89%. The overall

number of such percentages reaches very high criteria so, it can be concluded that the e-LKPD developed is very interesting and makes it easier for students to understand the material.

According to Prastowo (2011) LKPD is a printed teaching material in the form of sheets containing materials, summaries, and instructions that must be implemented by learners. LKPD is a collection of sheets of paper that contain materials, tasks that must be done in learning activities, and steps that must be done in learning.

E-LKPD based on HOTS is designed with Android-based to be used as a complement and support for textbooks in learning folklore text material. This e-LKPD can be used by students with or without guidance from teachers on classroom learning activities. This is in accordance with the function of LKPD according to Soetopo (2004: 45) which is as a guide for students to conduct a series of activities in the teaching and learning process. E-LKPD is expected to create an active learning atmosphere. The atmosphere is an atmosphere that allows students to experience, interaction, communication, and reflection by utilizing technology.

E-LKPD is developed based on the results of analysis of the needs of teachers and students. The presence of e-LKPD is expected to be a valid, practical, and effective teaching book in studying short story writing material. E-LKPD is also systematically designed.

This HOTS-based e-LKPD emphasizes high-level thinking skills involving the cognitive realms of knowledge (C1), understanding (C2), application (C3), analysis (C4), evaluation (C5), and creativity (C6). HOTS includes critical thinking and creative thinking. Critical thinking and creative are two very basic human abilities because critical thinking and creative thinking can encourage a person to always look at every problem faced critically, and try to find a solution creatively, so that a new thing is better and beneficial for his life (Zaenal & Heri, 2015).

E-LKPD based on HOTS developed contains perception activities, learning activities for each achievement of indicators, exercises and tasks for each learning activity, cultural literacy, and evaluation to solve some problems at the end of the material. E-LKPD was developed by utilizing the application so that it can be accessed by students anytime and anywhere. There is an e-LKPD PC and gadget version. By developing elkpd in the form of applications are expected to increase the motivation of students to learn. In

Prastowo's, (2015) opinion that the didactic requirement that LKPD gives rise to a stimulus by using tools and interacting with real objects to explore the initial ability.

In this study, e-LKPD was developed by emphasizing training and habituation in solving problems during the learning process so that understanding of a concept or knowledge must be built (constructed) by students themselves. Learning activities in elkpd include learning theories, namely constructivism theory where students must discover for themselves and transform complex information. In addition, it is important to direct students to meaningful learning activities where in solving a problem must have an initial concept in solving each problem.

This E-LKPD has questions in various forms. It aims to provide detailed, detailed and thorough information about students' abilities as test takers. This treatment is considered very important so that teachers can evaluate according to the principles of objective assessment and can measure the actual abilities of students. Assessments carried out in accordance with these existing principles can provide valid results regarding the benchmarks for students' abilities. According to Nafiah (2010), the type of questions that can be used in the preparation of HOTS-based questions which PISA also uses in the testing model is the objective test (multiple choice). This type of question is a type of question whose sentences have not been resolved and to be able to complete it, it can be done by choosing one of several alternative answers available for each item.

E-LKPD is not only based on HOTS but also emphasizes on cultural literacy. Literacy is a form of symbols and systems as well as sound systems that contain meaning, so that understanding literacy is a basic competency that includes four aspects of language skills, namely listening, speaking, reading and writing (Anggraini, 2016). Based on this, cultural literacy needs to be continuously implanted and preserved in order to achieve listening skills in the sense of living a work, speaking skills in the sense of being able to do a critique, reading skills in the sense of being able to describe and understand meaning, writing skills in the sense of being able to express thinking concepts. and interpretive.

Based on the results of the student response questionnaire obtained the results of most students interested in using this e-LKPD. This is in accordance with the function of LKPD according to Prastowo, (2015) which is LKPD as a teaching material that makes it easier to understand the material and LKPD as a teaching material that is quite concise and to train students in doing. ELKPD based HOTS can help students complete problems

and exercises step by step and not think about the end result alone because each stage is considered not focused on the end result. This is in line with the opinion of Desmita (2005) stated that for children the process of doing something is more interesting than the results will be obtained.

E-LKPD folklore text material is made practical to attract students' learning interest. On the front page is given a picture of local wisdom, namely the natives of Madura dressed in full custom. In addition, e-LKPD is also given the right color composition to impress more attractive. Such conditions make e-LKPD more attractive to students to use it (Muslich, 2010). Illustrations in e-LKPD will give a varied look, so that more interest to read and learn it (Pannen & Purwanto, 2001). The appearance of e-LKPD has been adjusted according to the characteristics of students, so there is no need for a long adaptation process (Haryonik & Bhakti, 2018).

These results are consistent with the results of several studies stating that forms of learning media in digital or paperless form are easy and interesting to use (Sagita et al., (2018); Yurtyapan & Kandemir, (2021); Zhang & Lin, (2020)). LKPD Elektronik that has been developed is a work guide for learners to facilitate learners in the implementation of learning activities in electronic form that can be viewed on desktop computers, notebooks, and smartphones. This form of LKPD will be the future of students' lifestyles.

Students need to be provided with an education that is in accordance with conservation values in this case is local wisdom. This aims to have the intellectual potential that is possessed, balanced by the emotional, social, and spiritual intelligence that is needed to compete (Masrukhi, 2012). According to Baynes & Austin, (2012) incorporating a culture that is an element of local wisdom in the school curriculum, beneficial to all students.

Local wisdom can help students in connecting science and developing a positive cultural identity so that learning becomes more meaningful. The advantages of LKPD are as follows: (a) E-LKPD is developed with exercises tailored to basic indicators and competencies directly, (b) E-LKPD is equipped with cultural literacy so as to help students get to know the culture of the region, especially Madura. (c) E-LKPD is equipped with HOTS-based problems so as to train students to think at a high level. (d) E-LKPD is more efficient in terms of financing because it does not require additional costs to print and multiply. (e) This E-LKPD can be accessed without having to connect to the internet network.

In addition to the advantages, this e-LKPD also has shortcomings. The disadvantages in this e-LKPD are as follows. This e-LKPD can only be used by students in schools who give permission to use the device in the classroom. In addition, this e-LKPD can be used by teachers and students who already have high-level IT skills.

CONCLUSION

Based on the results of research and discussion in this study, it can be concluded as follows. First, the development of HOTS-based e-LKPD on folklore writing material designed to be valid is an average percentage of two validators of 86.5% and categories worth using with revision. Thus, e-LKPD can be used by teachers and students. The validity of e-LKPD is illustrated from the three aspects of assessment, namely aspects of content/material feasibility, presenters, and language. The results of HOTS-based e-LKPD assessments on usage trials are that as many as 70% of students are able to solve high-level questions, 80% of students solve moderate-level questions, and 90% of students solve low-level questions. Based on the results of the response questionnaire obtained a percentage of 87.4% with very interesting criteria on all aspects measured, namely material aspect 87.2%, presentation aspect 86%, and language aspect 89%. The overall number of such percentages reaches very high criteria. This shows that LKPD is effective against students' learning outcomes. So it can be concluded that the resulting LKPD can be used as teaching materials in the learning process Indonesian.

This shows that LKPD is effective against students' learning outcomes. So it can be concluded that the resulting LKPD can be used as teaching materials in the learning process Indonesian. The HOTS-based e-LKPD can be further developed for the preparation of the Minimum Competency Assessment (AKM). As a teaching material, the HOTS-based e-LKPD is used in learning Indonesian folklore text material for class X SMA.

REFERENCES

- Bakri, F., Permana, H., Wulandari, S., & Mulyati, D. (2020). Student Worksheet with AR Videos: Physics Learning Media in Laboratory for Senior High School Students. *Journal of Technology and Science Education*, 10(2), 231. <https://doi.org/10.3926/jotse.891>

- Baynes, R., & Austin, J. (2012). *Indigenous Knowledge in the Australian National Curriculum for Science: from Conjecture to Classroom Practice. Paper Presented at the 5th Biennial International Indigenous Development Research Conference*. New Zealand: Auckland.
- Borg, W. R., & Gall, M. D. (2003). *Educational Research: An Introduction* (7th ed). New York: Longman.
- Darmawan, D., & Wahyudin, D. (2018). *Model Pembelajaran di Sekolah*. PT. Remaja Rosdakarya.
- Derlina, P. I. K. (2016). Kemampuan Pemecahan Masalah Siswa SMA dalam Model Pembelajaran Berbasis Masalah dengan metode Know-Want-Learn (KWL). *Jurnal Saintech*, 8(3), 1-10.
- Dwi. (2017). Pengembangan Lembar Kerja Siswa (LKPD) dengan Pendekatan Santifik untuk Meningkatkan Hasil Belajar Mata Pelajaran IPS Bagi Siswa Kelas IV Sekolah Dasar. Universitas Negeri Surabaya.
- Haryonik, Y., & Bhakti, Y. B. (2018). Pengembangan Bahan Ajar Lembar Kerja Siswa dengan Pendekatan Matematika Realistik. *MaPan: Jurnal Matematika dan Pembelajaran*, 6(1), 40-55. <https://doi.org/10.24252/mapan.2018v6n1a5>
- Heong, Y. M., Othman, W. B., Yunos, J. B. M., Kiong, T. T., Hassan, R. Bin, & Mohamad, M. M. B. (2011). The Level of Marzano Higher Order Thinking Skills among Technical Education Students. *International Journal of Social Science and Humanity*, 1(2), 121-125. <https://doi.org/10.7763/ijssh.2011.v1.20>.
- Ike, L. (2014). *Pengaruh Metode Pembelajaran Pemecahan Masalah Terhadap Kemampuan Kreatif Siswa Dalam Menyelesaikan Soal Pengolahan Data Kelas IV SD*". Universitas Negeri Surabaya.
- Kemendikbud. (2017). *Materi Pendukung Gerakan Literasi Budaya dan Kewargaan*. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Masrukhi. (2012). Membangun Karakter Berbasis Nilai Konservasi. *Indonesian Journal of Conservation*, 1(1), 20-29. <https://doi.org/10.15294/ijc.v1i1.2061>.
- Muslich, M. (2010). *Text Book Writing: Dasar-Dasar Pemahaman, Penulisan, dan Pemakaian Buku Teks*. Yogyakarta: Ar-Ruzz Media.
- Pannen, P., & Purwanto. (2001). *Penulisan Bahan Ajar*. Jakarta: Pusat Antar-Universitas untuk Peningkatan dan Pengembangan Aktivitas Intruksional Direktorat Jenderal Perguruan Tinggi.

- Prastowo, A. (2015). *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Yogyakarta: Diva Press.
- Rita, N. J. (n.d.). Four Essential Rules of 21st Century Learning.
- Roesminingsih, & Susarno, H. L. (2015). *Teori dan Praktek Pendidikan*. Surabaya: Bintang Surabaya.
- Sagita, L., Widagsa, R., & Dwipa, N. M. S. (2018). Developing Bilingual Scientific-Worksheet For Indefinite Integral. , 9(2), . <https://doi.org/>. *Journal on Mathematics Education*, 9(2), 249–258. <https://doi.org/10.22342/jme.9.2.5401.249-258>.
- Subekti, M. A. S., & Suparman. (2019). Analisis Kebutuhan E-LKPD untuk Menstimulus Kemampuan Berpikir Kritis dengan Model Pembelajaran Discovery Learning. *Proceedings of the Steem 2019*, 1(1), 185–192. Retrieved from <http://seminar.uad.ac.id/index.php/STEEEM/article/view/2870>.
- Trianto. (2014). *Mendesain Model Pembelajaran Inovatif, Progresif dan Kontekstual*. Jakarta: PT Kharisma Putra Utama.
- Yurtyapan, E., & KandemiR, N. (2021). The Effectiveness of Teaching with Worksheets Enriched with Concept Cartoons in Science Teaching Laboratory Applications. *Participatory Educational Research*, 8(3), 62–87. <https://doi.org/10.17275/per.21.54.8.3>.
- Zhang, Y., & Lin, C.-H. (2020). Student Interaction And The Role Of The Teacher In A State Virtual High School: What Predicts Online Learning Satisfaction? *Technology, Pedagogy and Education*, 29(1), 57–71. <https://doi.org/10.1080/1475939X.2019.1694061>