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Development of LKPD Based on Contextual Teaching and Learning to Improve the Learning Result of Class V SDN Karawaci 1

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ABSTRACT

Student Activity Sheets are teaching materials as a guide for students used to conduct investigations or problem-solving. The science worksheets used in class V are currently only focused on material texts and questions and do not develop student activities related to the student environment, so it is necessary to develop contextual learning-based worksheets on hot material science learning and its changes through Research and Development (R&D). to determine the feasibility of the content, the feasibility of presenting the assessment of contextual learning and the feasibility of graphics. Student and teacher responses after using LKPD classically 90.9% (very interesting) content feasibility, presentation feasibility, contextual learning assessment, and graphic feasibility from each validator, namely validator 1 of 86.96% (very feasible), validator 2 of 84 .78 (very decent), and the teacher's assessment of 89.15% (very decent). Based on the analysis of experts, media, and materials, LKPD meets the criteria to be used as teaching materials in science subjects

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INTRODUCTION

Science lessons aim to create people who are knowledgeable and understand their environment, not only theoretically but also understanding their own findings in their environment (Garrung, 2019). Therefore, the scope of science study materials for SD/MI includes the following aspects: (1) living things and life processes, namely humans, animals, plants, and their interactions with the environment, as well as health; (2) objects/materials, their properties and uses include: liquid, solid, and gas; (3) energy and its changes include: force, sound, heat, magnetism, electricity, light and simple machines; (4) the earth and the universe: the earth, the earth, the solar system, and other celestial bodies. Nevertheless, in reality, the implementation of science learning is not yet

relevant to the expected goals, and the linkage of science subjects with the environment is also still lacking (Amini & Teaching, 2019).

Based on a study by the Ministry of National Education (2007:16) shows that students in grades I – VI are still minimally introduced to scientific work, even though it is a characteristic of science subjects. This has also been stated in the background of the science curriculum for students in grades I - VI, which states that: "Science learning should be scientific inquiry (scientific inquiry) to foster the ability to think, work, and behave scientifically and communicate it as an important aspect of life skills'' (Wulandari et al., 2022).

Based on these findings, the development of student creativity needs to be done by allowing students to be creative without hindering other academic activities. Teachers must also be equipped with learning models that can increase teacher creativity in the classroom and students' learning creativity at school and at home. The problems that occur are a real result of science learning which is still not going well and not following what is expected from the curriculum (Gita et al., 2018).

This is evidenced by the discovery of several problems, including the lack of science subject learning activities to conduct direct observations and experiments on the material being taught so that students are impressed only by listening to the teacher's explanations and memorizing textbooks, Student Activity Sheets (LKPD) which It is used fixated on material texts and questions, and does not develop student activities that are directly related to the student's environment (Oktorini et al., 2019). Teachers also do not have the Student Activity Sheet (LKPD) composition, which must follow the characteristics of science subjects and the learner's learning environment so that the LKPD used can be more contextual. The learning carried out by the teacher is quite good, but the method used by the teacher still uses conventional teaching techniques and slightly inserts discussion methods. Furthermore, teachers do not associate learning materials with real life, so students' learning experience has not been conceptualized in everyday life or real life. The problems in science learning are very important. They must be rushed to find alternative solutions to the problem to improve the quality of science learning at SD Negeri Karawaci 1, Karawaci District in particular, and science learning in Indonesia in general. It has been explained that teaching materials are very important in the learning process to realize science learning in accordance with its essence.

Seeing this, the researchers took alternative actions by developing student teaching materials. The teaching materials for students that the researchers developed were LKPD based on contextual learning (Mustikasari et al., 2021). The researchers developed were more innovative and followed the characteristics of science. Students are invited to relate the material to their daily activities and are directly invited to do scientific work, so that learning is more meaningful for them (Amalina, 2020). Learning needs support in the communication process between teachers and students, one of which is using LKPD teaching materials. Based on observations, some current LKPDs do not cover students' activeness in terms of increasing students' ability to solve problems and are less associated with students' understanding of the environment. The need to use a contextual approach is that it can help students learn to develop, find their knowledge based on their level of development and experience through the environment as a learning resource, and develop students' skills to be more active and creative (Oktorini et al., 2019). The contextual approach places students in a meaningful context that connects students' prior knowledge with the material being studied and, at the same time, pays attention to the individual needs of students and the role of the teacher (Komalasari, 2014 : Somayana, 2020). LKPD is printed teaching material in the form of sheets of paper containing material, summaries, and instructions for implementing learning tasks that must be done by students, which refers to the basic competencies that must be achieved (Prastowo, 2015). The Student Activity Sheet is a student guide used to conduct investigations or solve problems. LKPD is one of the teaching materials used as a learning aid containing work signs, material summaries, and student activities per the existing learning

objectives (Somayana, 2020). LAPD does not only focus on material texts and questions. Other components must be seen: titles, study instructions, basic competencies or subject matter, supporting information, tasks or work steps, and assessments. The existing material text is only a summary used to support the activities that students will carry out. The questions used are not too prioritized but prioritize the activities of students (Taranto, 2013 : Susilawati, 2022).

It is hoped that by developing LKPD based on contextual learning, students can learn more actively and creatively, the subject matter taught is understood in depth, not just rote memorization, and can connect the material obtained with their daily lives (Garrung, 2019). Therefore, based on the existing problems, the researchers developed LKPD to improve the quality of learning that could encourage the active involvement of students in learning and make it easier for students to remember the material taught in learning and the development of teaching materials for science subjects for class V SD Negeri Karawaci 1 Karawaci District can increase. Based on this background, the researchers conducted a study through development research entitled "Development of LKPD Based on Contextual Learning to improve Science Class V learning outcomes at SD Negeri Karawaci 1, Karawaci District, Tangerang City".

RESEARCH METHODOLOGY

The approach and type of research chosen in this study is Research and Development Research and Development (R&D), which is a type of research oriented to the manufacture and development of products, in this case, the Student Activity Sheet (LKPD) used by students in learning. This study uses a model of procedures and research steps of Borg and Gall. According to him, R&D is a process used to develop educational products in the form of a cycle of steps consisting of (1) studying findings related to the type of product to be developed; (2) developing products based on these findings; (3) conduct a field test of the product, and (4) revise the weaknesses found in the field test to form a final product. This research was conducted at SD Negeri Karawaci 1 Jl. Imam Bonjol No. 96 Karawaci District, Tangerang City. The implementation of the research started in February 2020 in the 2019-2020 school year with fifth-grade students of SD Negeri Karawaci 1 Tangerang City as research subjects. Data collection techniques in this study used instrument validation sheet material experts and media experts, questionnaires, observations, interviews, and documentation. Observations are carried out to obtain information/data through field observations. Interview guidelines are used to obtain certain information and analyze the needs of teachers and students through question and answer. The media validation instrument sheet and material validation assess the LKPP based on contextual learning. Scores on each criterion are 5 (strongly agree), 4 (agree), 3 (moderately agree), 2 (disagree), and 1 (strongly disagree) (Sugiyono, 2013:136). The results of the study were analyzed by: (Analysis, Design, Development, Implement, Evaluate) (Sugiono, 2019: 357). P = $\frac{\Sigma x}{\Sigma xi} \times 100\%$. P = Presentation Score. Σx = Total value of respondents' answers in one item. Σxi = The number of ideal scores in one item. 0% - 20% (less feasible); 21% - 40% (fairly decent); 61% - 80% (decent); 81% - 100% (very decent). Each component by using the formula according to (Arikunto, 2013: 35) as follows: = $\frac{\Sigma x}{\Sigma xi} \times 100\%$. P = Score Presentation. Σx = Total value of respondents' answers in one item. Σxi = The number of ideal scores in one item <20% unattractive; 21%-40% less attractive; 41%-60% is quite attractive; 61%-80% attractive; 81%-100% very attractive.

RESULTS AND DISCUSSIONS

This study develops student activity sheets based on contextual learning on heat and transfer material for class V students. Based on observations, some current LKPDs do not cover students' activeness in terms of improving students' ability to solve problems and are less related to students' understanding of the environment. The need to use a contextual approach is that it can

help students learn to develop, find their knowledge based on their level of development and experience through the environment as a learning resource, and develop students' skills to be more active and creative. Likewise, there is still a problem that in science subjects, there are students who still have difficulty accepting and understanding the teaching materials taught by the teacher. The teaching materials taught are not too many. However, in these teaching materials, it is necessary to cultivate concepts through experiments and students' active role to see more real from the teaching materials being taught. The findings were found in Natural Sciences (IPA) subjects, especially Core Competence 3.6, applying the concept of heat transfer in daily life, and Core Competency 4.6, reporting observations on heat transfer. Media experts and material experts validate LKPD development. The results obtained from the validator of the material expert on the learning aspect are 70% (feasible), while the media expert on the aspect of the graphic feasibility is 87.5%. (very decent) Products that the validator in several parts has assessed are revised for improvement. The results of the implementation of students and teachers in the very good category, namely 90.17% of student responses and 90% of teacher responses. Product trials are carried out online via WhatsApp messages.

The level of effectiveness based on students' test results at the time of the pretest and posttest experienced a difference. The average pretest score is 69.2, and the posttest average is 76.9. In addition, there are also differences in learning completeness in the pretest and posttest. The number of students who completed the pretest was 18 (56%), while at the time of posttest the number of students who complete the pretest was 22 (73%). Thus, there is an increase in learning outcomes before and after using LKPD products based on contextual learning. The normality test results of the pretest and posttest values obtained a significance of 0.122 (pretest) and 0.528 (posttest). The test criteria for data normality are if the significance is > 0.05, then Ho is accepted, and if the significance is <0.05, H0 is rejected. If each value of Sig. of the pretest and posttest is more than 0.05, then Ho is accepted. Accepting Ho, the data before and after using LKPD based on contextual learning in science learning of heat and transfer teaching materials for class V SDN Karawaci 1 are normally distributed.

CONCLUSION

Products that validators have assessed in several sections are revised for improvement. The results of the implementation of students and teachers in the very good category, namely 90.17% of student responses and 90% of teacher responses. Product trials are carried out online via WhatsApp messages. The level of effectiveness based on students' test results at the time of the pretest and posttest experienced a difference. The average pretest score is 69.2, and the posttest average is 76.9. In addition, there are also differences in learning completeness in the pretest and posttest. The number of students who completed the pretest was 18 (56%), while at the time of the posttest, the number of students who completed the pretest was 22 (73%). Thus, there is an increase in learning outcomes before and after using LKPD products based on contextual learning. The normality test results of the pretest and posttest values obtained a significance of 0.122 (pretest) and 0.528 (posttest). The test criteria for data normality are if the significance is > 0.05, then Ho is accepted, and if the significance is <0.05, H0 is rejected. If each value of Sig. of the pretest and posttest is more than 0.05, then Ho is accepted. Accepting Ho, the data before and after using LKPD based on contextual learning in science learning of heat and transfer teaching materials for class V SDN Karawaci 1 are normally distributed.

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References

Amalina, A. F. (2020). Pengembangan Media Scrapbook Dengan Penerapan Pendekatan Kontekstual Pada Muatan Pelajaran Ipa Kelas V Sekolah Dasar. *Jurnal Health Sains*, *1*(5), 468–478. https://doi.org/10.46799/jsa.v1i5.90

Arikunto, Suharsimi. 2010. *Prosedur Penelitian suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.

Awalluddin. 2008. *Statistika Pendidikan*. Jakarta: Dirjen Dikti Depdiknas. BSNP. 2007. *Standar Proses Untuk Satuan Pendidikan Dasar dan Menengah*. Jakarta: Depdiknas.

Garrung, M. (2019). Penerapan Contextual Teaching And Learning (CTL) untuk Meningkatkan Hasil Belajar Murid pada Pokok Bahasan Gaya Mempengaruhi Gerak Benda di Kelas IV SDN 236 INP Songgo Kabupaten Tana Tora. *Jurnal Pemikiran Dan Pengembangan Pembelajaran Penerapan*, *1*(3).

Gita, S. D., Annisa, M., & Nanna, W. I. (2018). Pengembangan Modul Ipa Materi Hubungan Makhluk Hidup Dan Lingkungannya Berbasis Pendekatan Kontekstual. *LENSA (Lentera Sains): Jurnal Pendidikan IPA*, *8*(1), 28–37. https://doi.org/10.24929/lensa.v8i1.28.

Helminsyah dan Anwar Husein. 2012. Pengaruh Pembelajaran CTL Dalam Meningkatkan Ketuntasan Prestasi Belajar IPA Pada Siswa Kelas V SD Negeri 8 Banda Aceh. Jurnal Tunas Bangsa 70-86.

Komalasari, Kokom. 2014. *Pembelajaran Kontekstual.* Bandung: PT Refika Aditama.

Muhlisin, Ahmad. 2012. Pengembangan Perangkat Pembelajaran IPA Terpadu Berbasis CTL dengan Model Pembelajaran Kooperatif Tipe Student Teams Achievement Division (STAD) Tema Polusi Udara. Journal of Educational Research and Evaluation 1 (2).

Mustikasari, G., Wijayanti, A., & Agustini, F. (2021). Pengembangan Media Video Berbasis Pendekatan Kontekstual Tema 7 Sub Tema 1 Kelas Iv Sdn Mranggen 2 Demak. *Wawasan Pendidikan*, *1*(2), 150–160. https://doi.org/10.26877/wp.v1i2.8728

Oktorini, E., Trisnantari, H. E., & Suselo, A. (2019). Pengembangan LKS Berbasis Hots (High Order Thinking Skills) Dalam Meningkatkan Prestasi Siswa Mata Pelajaran Ips Sd Kelas V Sdn Gondang I. *Jurnal Binawakya*, *1*(1420210060), 2019.

Prastowo, Andy. 2015. *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Jogjakarta: DIVA Press.

Samatowa, Usman. 2010. Pembelajaan IPA di Sekolah Dasar. Jakarta: Indeks. Sugiarti dan Patta Bundu. 2014. Contextual Chemistry Based on Learning Environment (PKKBL) T0 Improve Student Learning Outcomes And Academic Honesty For Junior High School. Journal of Education and Practice. Vol 5 (2):140-143.

Setyorini, W. dan P. Dwijananti. 2014. Pengembangan LKPD Fisika Terintegrasi Karakter Berbasis Pendekatan CTL Untuk Meningkatkan Hasil Belajar. Unnes Physics Education Journal 3 (3).

Somayana, W. (2020a). Pengembangan Lks Berbasis Contextual Teaching and Lea Rning Pada Pembelajaran Ipa Materi Daur Air Sekolah Dasar. *Jurnal Pendidikan Indonesia*, *1*(4), 479–493.

Somayana, W. (2020b). Pengembangan Lks Berbasis Contextual Teaching And Learning Pada Pembelajaran Ipa Materi Daur Air Kelas V Sd Negeri Amertasari Tahun Pelajaran 2019/2020. *Jurnal Pendidikan Indonesia*, *1*(4), 493–507.

Sugiyono. 2017. *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Bandung: Alfabeta.

Sugiono. (2019). *Metode Penelitian Kuantitatif, Kualitatif dan R&D* (Cetakan ke). Alfabeta, CV, Bandung.

Susilawati, W. O. (2022). Pengembangan Lembar Kerja Peserta Didik (LKPD) Berbasis Contextual Teaching and Learning (CTL) di Sekolah Dasar. *Edukatif : Jurnal Ilmu Pendidikan*, *4*(3), 4922–4938. https://doi.org/10.31004/edukatif.v4i3.2909

Wisudawati, Asih widi dan Eka Sulistyowati. 2014. *Metodologi Pembelajaran IPA*. Jakarta: Bumi Aksara.

Wiraguna, dkk. 2014. Pengaruh Pendekatan CTL Berbasis Kearifan Lokal Terhadap Hasil Belajar IPA Siswa Kelas V Di SD Gugs IV Kecamatan Buleleng. Jurnal Mimbar PGSD Universitas Pendidikan Ganesha. Vol 2 (1).

Wulandari, A., Ferdiansyah, M., & Syaflin, S. L. (2022). Pengembangan Modul Ipa Muatan Perubahan Energi Berbasis Pendekatan Contextual Teaching And Learning (Ctl) Pada Siswa Kelas Iii Sd Negeri 117 Palembang. *Indonesian Research Journal on Education: Jurnal Ilmu Pendidikan*, *2*(3), 1044–1048.

Zulaiha, R. 2008. Analisis Butir Soal Secara Manual. Jakarta: Depdiknas Badan Penelitian dan Pengembangan Pusat Penilaian Pendidikan.