

# Local Wisdom Gaming for Understanding and Interesting (Lossing Saddler) in Learning Magnet in Lentera Elementary School

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**Abstract:** This study was motivated by students' low understanding of IPAS (Natural and Social Sciences) material and difficulties during group discussions. Most students only enjoyed the practical activities and felt burdened by the notes that had to be memorised. Based on interviews with 50 students, it was found that confusion and the burden of memorisation were the main obstacles. To overcome this, the researcher developed the 'LOSSING SADDLER' (Local wisdom gaming for understanding and interesting learning combine with guessing word) method to improve the understanding of magnetic concepts and interest in learning IPAS in Phase C students. The research subjects included Grade V students of SD Kristen Lentera Ambarawa as the experimental class and students from six learning community primary schools in Semarang Regency as the comparison. Data were collected through unstructured interviews, documentation, tests and observations, and analysed descriptively quantitatively. This study aims to determine the effect of the 'LOSSING SADDLER' method on the understanding of magnetic material and the increase in student learning motivation. The expected results show that this method is able to increase students' understanding and interest in IPAS learning through a fun and meaningful approach.

**Keywords:** Deep learning; Interesting; Local wisdom; Lossing saddler; Understanding.

## Introduction

Teachers as knowledge developers who also act as agents of educational transformation must be able to carry out effective and efficient learning for students (Lee et al., 2024; Liu et al., 2023). Good learning should include awareness of the importance of learners in readiness to learn (mindfulness), the meaningfulness of learning (meaningful), and also the joy of learning (joyfulness) (Riski et al., 2023). This can be achieved if the classroom atmosphere is conducive with good collaboration between teachers and learners in good and smooth communication. Good learning is inseparable from the selection of appropriate techniques and models

to support the learning process of students as stated in the National Education System (2023). In line with the Merdeka Curriculum (2020-2025), IPAS (Natural and Social Sciences) Learning which contains combined material between Natural and Social Sciences. Through the combination of these two sciences, students are able to analyze problems and find solutions that occur in the natural and social environment in an inseparable whole. Learning Natural and Social Sciences (IPAS) is closely related to the surrounding nature, but also understands the environment, community welfare, health, territory, cultural diversity, economy, government, as well as issues that exist in today's modern society which is very dependent on technology and scientific progress which

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is a function of science literacy (Obeid et al., 2019). Therefore, learning Natural and Social Sciences is expected to equip students in facing the challenges of life in the future.

There are many factors that influence students' lack of understanding and interest in learning. As a teacher who facilitates the learning process - teaching needs to think and try to encourage students' learning motivation (Afdal, 2017; Fortus & Touitou, 2021; Schabas, 2023). The learning process in an educational institution must carry out learning activities that are interesting, arouse curiosity, challenge innovation, meaningful, and fun by prioritising student-centred learning (Sulistiyarini, 2024). Learners are also given the opportunity to develop their cognitive, affective, and psychomotor abilities so that they are actively involved, creative, independent, according to the talents and interests that God bestows on all learners (Kurniawan et al., 2020). The activeness and creativity of learners that are developed continuously in this learning activity make the learning atmosphere not only one-way (Teacher Centre). The students' activeness can explore their learning and become a very extraordinary thing to develop learning activities from students' ideas independently (Caesaria et al., 2020). A teacher does not have to be authoritarian in directing learning, which is serious, tense, and scary. But a teacher should be able to present a pleasant atmosphere by provoking the attention of students with quizzes, games, interesting ice breaking and adjusting to the learning material to be carried out or being discussed (Bahtiar & Fahmi, 2019).

As part of the agent of educational transformation in Indonesia, there is an ability to always move, be moved, and mobilise. Therefore, researchers need to make observations at Lentera Ambarawa Christian Elementary School with the research subjects being all fifth grade or phase C students (Radu & Schneider, 2019). Departing from a discussion with the Movers Teacher study group in Semarang Regency, the researcher conducted an interview with the fifth grade or phase C guardian along with students, it turned out that the researcher found several problems such as lack of activeness, creativity, understanding of the material, and interest in learning students in the learning process (Pretzsch et al., 2019). There were some learners who looked lethargic leaning their heads on the table, looking bored, and there was no enthusiasm in participating in learning (Liu et al., 2020). From the problems that occur, it appears that students are less interested in the learning material delivered by the teacher which results in a low understanding of the material and interest in learning in learning Natural and Social Sciences. Low learning outcomes in Lentera Ambarawa Christian Elementary School students can be seen from the results of student

evaluations that have not met the standard Learning Objective Completeness Criteria (KKTP) set at the beginning of the semester which is seventy-five. In addition to this, in observations found some learners who lack confidence and appear to be alone (Sonmez et al., 2020).

As Pretzsch et al. (2019) has said that: 'The cooperative learning model will be able to foster effective learning, namely learning that characterises: it facilitates students to learn something useful such as facts, skills, values, concepts, and how to live harmoniously with others; knowledge, values, and skills are recognised by those who are competent to judge'. One of the methods in cooperative learning is the game 'LOSSING SADDLER'. 'LOSSING SADDLER' is a game of charades combined with traditional games that are adapted to each region of residence, as well as looking at the community assets of the existing regions. For example, games from the people of Central Java are: Engklek, kaki seribu, egrang bamboo and coconut shells, playing rope, marbles, and so on. This activity is expected to help students in improving positive attitudes in learning in the form of understanding material about magnets and providing opportunities for students to be actively involved in learning so as to foster interest in learning in students (X. Liu et al., 2020; Sonmez et al., 2020). In the implementation of learning, teachers provide examples of self-directed learning models combined with differentiated learning as in the demands of the independent curriculum and the latest curriculum 2025 which promotes deep learning.

The learning process is in the early stages of preparing students to have full awareness that they are ready to learn, this can be filled with praying activities first and or providing 'ice breaking' that arouses the enthusiasm of students. Furthermore, the teacher gives an initial explanation of how to play charades by giving an example of the game to be played (Ansari et al., 2019; Johnson et al., 2019). In the process of core activities, students play finding words about magnets, giving scores to groups, the teacher goes around to see the process and facilitates students who may have questions. After the specified time ends, the teacher invites learners to regroup and discuss what words they have got, motivating students to look for meaning or information related to the words they have found in books, google, interviews with other teachers, after they find ready to be presented with the group about the word they found (Ismawati, 2022). It can also be discussed if there are unclear concepts while noting important things. So that the process of meaningful learning can be fulfilled. In addition to joyful learning, traditional games conducted with groups can inspire liveliness, intimacy, cooperation, mutual respect, social

learning or socialising, and refresh themselves from ancient times (Berti, 2023; G. Chou, 2023; Riski et al., 2023).

Traditional games applied in charades with friends, in addition to trying to preserve and participate in maintaining Indonesia's cultural heritage, can also introduce the values of caring, getting to know each other, attitude of cooperation, as well as a means used in the learning process that can arouse desire, interest, motivation, and psychological influence for students. The introduction of character education through games needs to be encouraged from an early age as a strengthening of the nation's character in this era of globalization (Aisyah, 2019)

By applying the 'LOSSING SADDLER' learning model, teachers are expected to be able to create a pleasant learning atmosphere by implementing active, innovative, creative, effective, fun, joyful, and weighted learning (PAIKEMGEMBROT). So that students can be actively involved in the learning process and it is hoped that this 'LOSSING SADDLER' method can increase understanding and interest in learning for students in the learning content of Natural and Social Sciences about magnets in particular. This is reinforced by previous research conducted by (Vera et al., 2020).

## Method

According to Sugiyono (2019), stated in his book entitled 'Educational Research Methods' in 2010, there are three forms of experimental research, namely: pre-experimental design, true experimental design, and quasy experimental design. This research is a quasi experimental design with nonequivalent control group design model. This design is almost the same as the pretest-posttest control group design, but the experimental group is not chosen randomly or randomly.

Thus the experimental class and control class are compared with the process: pretest, then given the method, after which a posttest is given. The population in this study involved all phase C (fifth grade) students of Lentera Ambarawa Christian Elementary School, a total of forty students as an experimental class given learning activities by applying 'LOSSING SADDLER' learning. As the control class, forty of the best students

from six Semarang Regency teacher learning group schools were given the usual learning in the class with simple lab work. In addition to using pretests and posttests, researchers also collected data through classroom observations, interviews, and documentation or photographic evidence during the learning process (Sugiyono, 2016).

## Result and Discussion

### Result

This research is an experimental research. The population in this study were all phase C students at Lentera Ambarawa Christian Elementary School as an experimental class conducted through learning using the LOSSING SADDLER learning method. As a control class by taking a sample (40 students) from the study group, it was carried out through the usual learning in the class, namely the practicum method. The research time was carried out in September - December 2024. The design taken uses a test form, namely: PreTest - Posttest, as well as a test of students' interest.

Data collection techniques used through observation, documentation and tests. The frank or disguised observation method was used to obtain data about the learning process before the research was carried out because the researcher conducting data collection stated frankly to the data source, that the researcher was conducting research. Observation was also carried out by conducting interviews and observing the teaching and learning process taking place (Abdjul et al., 2019). Documentation was carried out by taking data from teacher records in the form of a list of names of students, a list of test results, and photographic evidence during the research. Tests were written in the form of written pretests and posttests in the form of multiple choice with 20 questions each.

### Discussion

In this section, a description of the results of research on the effect of the 'LOSSING SADDLER' learning method on increasing understanding of magnets and interest in learning Natural and Social Sciences for phase C students at Lentera Ambarawa Christian Elementary School with a total of 40 students who took the understanding test.

**Table 1.** Pretest and posttest data descriptive statistics

| Parameters          | N  | Min | Max | Mean  | Std. Deviation |
|---------------------|----|-----|-----|-------|----------------|
| Pretest Experiment  | 40 | 15  | 85  | 56.63 | 14.736         |
| Pretest Control     | 40 | 15  | 80  | 52.13 | 13.954         |
| Experiment Posttest | 40 | 60  | 100 | 81.00 | 11.220         |
| Posttest Control    | 40 | 50  | 95  | 77.13 | 13.487         |
| Valid N (listwise)  | 40 |     |     |       |                |

Based on Table 1 above, it can be seen from the pretest results from the experimental class with 40 participants that the minimum score is 15 and the maximum score is 85. In contrast to the posttest results for both the experimental class and the control class with a minimum score of 50 and a maximum score of 100. Meanwhile, the average score in the pretest results is 56.63 in accordance with the KKTP (Criteria for Completion of Learning Objectives) at Lentera Ambarawa Christian Elementary School is 75, so based on the data only 5 (12.5%) students could meet the criteria for understanding magnetism, the remaining 35 (87.5%) students did not meet the KKTP standards. After learning using LOSSING SADDLER and practicum as usual learning activities, the data shows the results of the posttest in the experimental class with an average score

of 80.25, indicating that there were 27 (67.5%) students who could meet the KKTP standards and only 13 (32.5%) students who could not meet the KKTP.

Based on the data above, the post test results from the control class also increased on average, namely 78.16 with the assumption of completeness, there were 26 (68.4%) students who met the KKTP and only 12 (31.6%) who did not meet the KKTP standards. So from these data it can be concluded that by using LOSSING SADDLER there was an increase in the average score of 23.62 in the experimental class and 21.52 in the control class. The difference in the increase in the understanding results of the experimental class and the control class after the post test was carried out was 2.1. The prerequisite test results for data analysis with the initial normality test are shown in Table 2.

**Table 2.** Experimental class Normality Test One-Sample Kolmogorov-Smirnov Test

| Parameters                       |                | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| Normal Parameters <sup>a,b</sup> | N              | 40                      |
|                                  | Mean           | 0.0000000               |
|                                  | Std. Deviation | 10.82424648             |
| Most Extreme Differences         | Absolute       | 0.105                   |
|                                  | Positive       | 0.102                   |
|                                  | Negative       | -0.105                  |
| Test Statistic                   |                | 0.105                   |
| Asymp. Sig. (2-tailed)           |                | 0.200 <sup>c,d</sup>    |

a. Test distribution is Normal

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on Table 2, it can be seen that the test data is normally distributed, namely with a significance value of <0.005, namely 0.200. The sample comes from the results of the classic normality test in the experimental

class. Apart from the normality test, the author also presents the results of the homogeneity test for the two classes.

**Table 3.** Data from homogeneity test results

| Parameters                           | Levene Statistic | df1 | df2    | Say.  |
|--------------------------------------|------------------|-----|--------|-------|
| Based on Mean                        | 0.132            | 1   | 76     | 0.718 |
| Based on Median                      | 0.032            | 1   | 76     | 0.858 |
| Based on Median and with adjusted df | 0.032            | 1   | 68.403 | 0.858 |
| Based on trimmed mean                | 0.099            | 1   | 76     | 0.754 |

Based on Table 3. It can be assumed that the significance result is more than 0.005, namely 0.754, which means that the conditions in the experimental class and control class are homogeneous. Based on the average value with a significance value of 0.718 and the middle value with a significance value of 0.858. So that the prerequisite tests for this variant analysis have been fulfilled.

Based on the data presented in the table, it proves that using the "LOSSING SADDLER" method has an

influence on students in the in-depth learning process. (deep learning) so that they can easily understand the material and there is meaningfulness in the learning process (meaningful learning) which has an impact on fulfilling the standards for completing learning objectives that have been set by the school. Apart from that, student involvement in learning is fun (joyful learning) will continuously increase students' interest in learning so that it can stimulate the creation of student



well being (P.-N. Chou & Feng, 2019; Nurtanto et al., 2020).

#### *Results of data processing concerning learning interest*

After using the "LOSSING SADDLER" method in the process of learning content in Natural and Social Sciences, especially magnetic material in everyday life. According to Bahtiar & Fahmi (2019) & Sulistiyarini (2024), choosing the right method is a solution to learning problems, namely learning materials that can increase students' interest in learning (Ansari et al., 2019; Johnson et al., 2019). This is in line with interview data and student responses regarding their interest in learning using a questionnaire via Google Form, the

results provide very good results with a percentage increase of 73.2% in the experimental class and 54.65% in the control class. The explanation will be given in Table 4.

After interviews were conducted and students filled out the questionnaires given, the results obtained were 89.2% in the experimental class and 70.65% in the control class. This reinforces the statement that there was a significant improvement after using fun learning methods both in the experimental class with "Puzzle Gems", as well as in the control class which tried classes with practices like normal learning which could arouse students' interest in learning, even though the difference was only 16%.

**Table 4.** Results of the Student Interest Questionnaire

| Class                        | Total | Maximum Value | Rerata | Difference | Initial Interest | Improvement |
|------------------------------|-------|---------------|--------|------------|------------------|-------------|
| Experimental Class Interests | 1784  | 2000          | 89.20  | 18.55      | 16               | 73.20       |
| Interest Class control       | 1413  | 2000          | 70.65  |            |                  | 54.65       |

According to Sonmez et al. (2020), the indicators of interest are as follows: Having great curiosity; Often asking meaningful questions; Giving lots of ideas and suggestions on a problem; Being able to express opinions spontaneously and not being shy; Having or appreciating beauty; Having your own opinion and being able to express it, not easily influenced by other people; Have a high sense of humor; Have a strong imagination; Able to propose thoughts, problem-solving ideas that are different from other people's (original); Can work alone; Enjoy trying new things; Able to develop or detail an idea (elaboration ability) By utilizing the "LOSSING SADDLER" learning method, it will increase students' interest in learning, so that they can improve students' comprehension abilities in understanding all learning concepts, especially learning Natural and Social Sciences about magnets (Ansari et al., 2019). By increasing understanding of Natural and Social Sciences, students become more independent and can achieve good learning achievements as well (Presti et al., 2020).

## Conclusion

Based on the results of the research and discussion presented, it can be concluded that in learning Natural and Social Sciences with "LOSSING SADDLER": There is a difference in the influence of learning between classes that apply LOSSING SADDLER and classes taught using ordinary practical learning methods. It can be seen that the final result is that the level of understanding and interest of students is different and increasing. Natural and Social Sciences learning can be done with thematic learning or combining guessing

words (literacy learning in Indonesian) with traditional games (Physical Education and Health Sports learning) to make it more optimal. Based on observations, there are differences in the influence of high and low learning interest on learning outcomes or students' understanding. Students who have a high interest in learning dominate games, have high curiosity, self-confidence, are responsible for completing their assignments, like challenges, are independent, have broad insight in finding solutions to every difficulty they face.

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## Author Contributions

Syntyché Riyani played a major role in designing the research, collecting data, and drafting the final report. Wahyu Hari Kristiyanto provided guidance on methodology and data analysis, and reviewed the academic content. Adi Winanto provided general guidance throughout the research process and participated in the discussion of manuscript

improvements. All authors actively contributed to the finalisation of this research report.

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### Conflicts of Interest

The researcher declares that there is no conflict of interest in the conduct and reporting of this research.

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