

TEACHER STRATEGIES FOR CREATING INTERESTING AND DYNAMIC LEARNING

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Abstract: This research discusses the key role of teachers in creating interesting and dynamic learning. There are still many elementary school teachers who use the lecture method in learning so that learning becomes monotonous and unpleasant for elementary school students, especially at SD Negeri Pinayungan II, which is the subject of this research. In an effort to improve the quality of education, teachers need to develop various strategies that can make learning more interesting for students. This research aims to inspire teachers, educators, and educational practitioners to improve the effectiveness of their teaching so that they can create more interesting and dynamic learning for students. The research approach used is qualitative with a case-based method regarding teacher strategies for creating interesting and enjoyable learning. The data collection technique uses interview, observation, and documentation techniques. Data analysis techniques in this study use qualitative descriptive analysis techniques. The results of the research using interview, observation, and documentation techniques showed that many teachers used the lecture method, which made students disinterested in the learning process. In fact, there are many strategies that teachers can use to make learning in the classroom interesting and dynamic, namely by using strategies such as educational technology, applying a variety of teaching methods, and so on. To achieve this, teachers must innovate in their teaching by trying various interesting and dynamic strategies.

Keywords: Strategy, Interesting Learning, Dynamic Learning

INTRODUCTION

Education is an important foundation in the development of individuals and society. In a rapidly changing world, the quality of education has an increasingly important role (Bentley, 2012). Teachers, as the main agents in the learning process, have a great responsibility to ensure that learning in the classroom is not only informative but also interesting and dynamic. Engaging and dynamic learning play a key role in motivating students, sparking interest in learning, and ensuring deep understanding (Baker, 2014).

Engaging learning is not just fun but creates experiences that empower students to explore ideas, encourage creativity, and develop skills needed in a changing world. Unfortunately, there are still challenges in achieving truly interesting and dynamic learning. Many teachers still rely on traditional lecture methods, which, while transferable to information, are often less effective in creating engaging learning experiences (Jayawardana, 2017).

The term learning refers to two activities, namely teaching and learning activities. Teaching activities include what is done by the teacher while learning activities are related to students. This concept is in line with the statement of Wideasanti (2023) that learning is a process of exchanging knowledge in two directions, where teachers act as providers of information and students are recipients of information. Marlinda (2013), On the other hand, describes learning as a process of interaction between learners, educators, and learning resources in a particular learning environment. Suparlan (2020) Also views learning as the process of sending messages

from the source of the message to the recipient of the message through a particular channel or medium.

From these three definitions, it can be understood that learning contains three important elements, namely: (1) the process planned by the teacher, (2) learning resources, and (3) students who learn. In the context of fun learning, students are more directed to have high motivation in learning by creating fun and exhilarating situations.

Learning is referred to as a pleasant experience when, in its context, there is an atmosphere that is relaxed, free from pressure, safe, engaging, triggers interest in learning, engages learners fully, grabs their attention, creates a learning environment that is engaging, passionate, full of excitement, and maintains a high level of concentration (Hidayat, 2022). Conversely, the learning experience becomes unpleasant when the atmosphere of learning is filled with pressure, feelings of threat, tension, feelings of helplessness, lack of enthusiasm, lack of interest, boredom, monotony, and lack of attraction for students (Kusuma, 2019). In the context of school education as a whole, the main focus is on the learning process. This shows that the achievement of educational goals is highly dependent on the effectiveness of the implementation of the learning process. Engaging and dynamic learning occurs when an environment that supports student learning concentration can be realized.

The reality now is that there are still many students who are less motivated to learn when the learning process takes place in the classroom. Therefore, a teacher must have a strategy so that learning becomes fun so that students are motivated to learn. The use of the term strategy began and became popular in military circles. Strategy is a technique, tactic, way, and tips of a commander to win the war. Strategy comes from Latin: *Stratos* (army) and *Agein* (lead).

This problem regarding the monotonous learning process certainly occurs in all schools in Indonesia. One of the schools that experience this problem is SD Negeri Pinayungan II. SD Negeri Pinayungan II was chosen as a research subject because it has characteristics or conditions that represent the general challenges faced by schools in Indonesia related to the monotonous learning process, including the tendency to use learning methods that are less interesting or the lack of variety in learning strategies. When researchers conducted observations from September to November 2023, they found that the learning carried out by teachers had not improved; teachers taught learning to students only by giving assignments, explaining or lecturing, attending, and learning rarely using media. In fact, the learning provided by the teacher should have changed. For example, in providing material, the teacher needs to use media so that students understand it better. If the learning process does not change to a better level, it can result in students not having high motivation in learning.

Previous research by (Syaparuddin et al., 2020) showed that of the three cycles applied, the development of student learning motivation can be seen from the activeness and enthusiasm of students during the learning process. In the evaluation of post-test scores, on average, students get good grades. The percentage of increase in student scores in cycle I is 24.3%, and in cycle II, it is 34.5%. This happened because students were motivated to be enthusiastic about learning. According to another research by Samad & Tidore (2015), as an English teacher, it is very important to know the learning strategy so that the learning atmosphere becomes more

enjoyable. Therefore, teachers who teach English in early childhood need several strategies in the teaching and learning process. There are several strategies that can be applied, such as TPR (total physical response, songs, music and movement, and stories. Research (Yuliana et al., 2020) shows that blended learning implemented for two years has a high level of interest and knowledge among students in the Department of English Education. In similar research by (El Gendy, 2022), the results showed the effectiveness of a program based on several fun learning strategies to develop learning motivation and several intelligence skills that worked as input to reduce attention deficit disorder and hyperactivity in kindergarten children. The study (Jack & Lin, 2017) focused on three main aspects. First, empirical studies that present students' perspectives from different academic fields, both in science and non-science subjects, on how to make classroom learning more engaging. Second, it identifies common instructional strategies across these fields that contribute to creating an engaging learning environment. Finally, it introduces an instructional framework called TEDI (Transdisciplinary Connections, Mediated Engagement, Meaningful Discovery, and Self-determined Inquiry), which provides a practical approach for middle school science teachers to make science learning truly engaging for their students in the context of a science classroom.

The novelty of this research is that the research subject has never been studied before. SD Negeri Pinayungan II is always open to new strategies or methods to improve learning activities, such as interesting and dynamic learning strategies. If teachers can manage interesting and dynamic learning strategies well, then learning objectives will be achieved. Interesting learning strategies can include the use of various techniques and approaches that focus on interactivity, creativity, and active participation of students in learning. Some examples of engaging learning strategies include active learning, the use of educational technology, project-based learning, and cooperative learning.

This study contributes to existing knowledge by exploring and identifying effective teacher strategies to create an engaging and dynamic learning environment. It adds to the understanding of instructional practices that promote student engagement and learning outcomes. The findings of this study can inform educational theories and frameworks related to pedagogy, instructional design, and student-centered learning. This research provides insight into the factors that contribute to an engaging and dynamic classroom experience. The findings of this study can be useful for teachers and educators in designing and implementing instructional strategies that can increase students' interest and engagement in the learning process. It provides practical guidance on how to create an engaging and dynamic classroom environment. Teachers can adapt and implement the identified strategies in their own teaching practice to make learning more fun and meaningful for their students. This can increase student motivation, participation, and academic achievement. This research aims to inspire teachers, educators, and educational practitioners to improve the effectiveness of their teaching so as to create more interesting and dynamic learning for students.

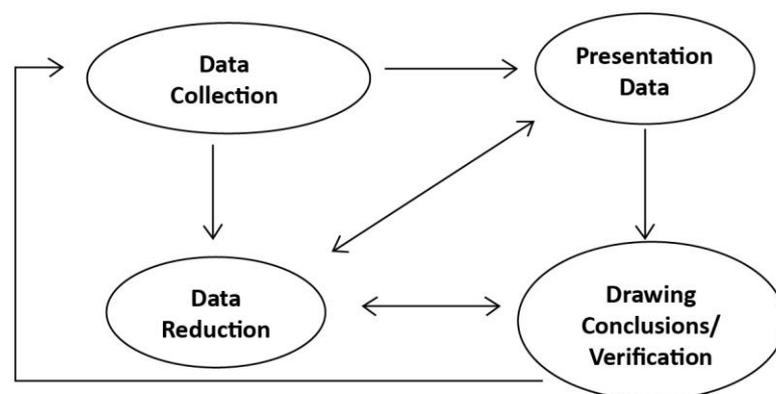
METHOD

In this study, the author used a method with a case-based method. Qualitative descriptive refers to a research approach that aims to provide a detailed and comprehensive description of a particular phenomenon or topic. It is a flexible and exploratory method used in qualitative research to gain an in-depth understanding of the experiences, perspectives, and behaviors of individuals or groups (Kim et al., 2017). The approach used by researchers is the phenomenology data approach. The phenomenological approach is a process carried out through experiences seen directly by researchers, and questions are needed that aim to reveal a fact in the field.

This research was conducted at Pinayungan II State Elementary School, which is addressed at Sukadana Hamlet RT / RW 001/001 Pinayungan Village, East Telukjambe District, Karawang City, West Java 41316. The research was carried out for 3 (three) months, from September to November 2023. The reason for choosing the location is because SD Pinayungan II is where researchers teach, and SD Pinayungan II is also quite attractive to the community, but students' academic achievement is still lacking. Arikunto (Yusuf & Daris, 2018) said that the source of research data is the subject from which the data was obtained. The informants used in this study were taken according to research needs. The author chooses informants who fit the research criteria, namely teachers as the main resource persons and students as a complement to the interview.

Data analysis techniques in this study use qualitative descriptive analysis techniques. The data analysis technique in this study was carried out based on an interactive analysis model developed by Miles and Huberman (Muri & Yusuf, 2017). The analysis steps are carried out, namely data collection, data presentation, data reduction, and conclusions.

Figure 1. Miles and Huberman Interactive Analysis Model



Data collection was carried out by direct observation, documentation, and interviews. Interviews were conducted for three days with a total of 10 observation visits. Documentation was carried out in 3 periods, namely at the end of each month of research. Furthermore, the data obtained was reduced. Data reduction is done by selecting data, grouping data, selecting data, and summarizing data. Furthermore, after the data is reduced, the data is ready to be presented. The last step is data verification, which is done by drawing conclusions based on the data obtained.

The method used by researchers in this study to test data validity or data credibility is the data triangulation technique.

RESULTS AND DISCUSSION

Results

Based on the results of research that researchers have conducted at Pinayungan II State Elementary School using interview, observation, and documentation techniques, it was found that in the process of teaching and learning activities that still use the lecture method, learning feels unpleasant and monotonous. Based on these conditions, there needs to be improvements in the way teachers teach learning in the classroom. Research conducted by Purnasari & Sadewo (2021) said that interesting learning really needs to be done in order to create learning objectives that are achieved, create a conducive atmosphere in learning, and evaluate learning outcomes. Creating interesting and dynamic learning requires teacher strategies to create it. Every teacher has a different strategy in each teaching process in the classroom. According to Stephanie K. Marrus, strategy is a process carried out by someone in determining planning to focus on long-term activities that they want to achieve (Suryani, 2021). The teacher's strategy is a way used by a teacher to design an activity so that it facilitates and shapes the person in carrying out his activities. The strategies used by a teacher in classroom learning have a huge impact on the success of a student.

Table 1. Data Teacher Strategies in Creating Interesting and Dynamic Learning
at SD Pinayungan II

No.	Data	Description
1.	Use of interactive technology	Teachers use technology such as multimedia, interactive software, or digital learning applications to enrich students' learning experiences. For example, learning videos, animations, or virtual simulations are used.
2.	Project-based learning	Teachers give students real-life tasks or projects that allow them to apply knowledge and skills in a context relevant to everyday life. Examples include research projects, experiments, presentations, or creative products.
3.	Cooperative learning	Teachers encourage students to work together in small groups to achieve learning objectives together. In this strategy, students interact with each other, share ideas, and help each other in understanding the subject matter.
4.	Active learning	Teachers involve students directly in learning activities, such as group discussions, simulations, role plays, or collaborative projects. The aim of this strategy is to get students actively involved in the teaching-learning process.
5.	Utilization of local resources	Teachers integrate local resources, such as visits to historical places, museums, or companies, to enrich students' learning and connect the subject matter to the real world.
6.	Emphasis on creativity	Teachers provide space for students to develop their creativity through tasks that encourage critical thinking, problem-solving, and innovation.
7.	Constructive feedback	Teachers provide constructive and development-oriented feedback to students to help them understand their strengths and areas for improvement in their learning.
8.	Flexibility in the learning approach	Teachers use approaches that are flexible and adaptable to student's needs and interests to increase their engagement and motivation in learning.

Table 1 shows various teacher strategies for creating interesting and dynamic learning, including the use of interactive technology, project-based learning, cooperative learning, active learning, utilization of local resources, emphasis on creativity, constructive feedback, and flexibility in learning approaches. It is important for teachers to choose strategies that suit their classroom context and student characteristics to achieve optimal learning outcomes.

Table 2. Data Factors Behind the Occurrence of Problems at SD Pinayungan II

No.	Data	Description
1.	Lack of concept understanding	One of the factors that can cause problems is a lack of understanding of the concepts underlying a topic. Students may face difficulties in understanding complex or abstract concepts, which can hinder their ability to apply knowledge effectively.
2.	Lack of prerequisite skills	Some problems may arise due to a lack of prerequisite skills required to understand or complete a particular task. For example, students may face difficulties in reading fluently, writing clearly, or using basic math skills.
3.	Lack of motivation	Low motivation can be a significant factor in the occurrence of problems. Students who lack motivation may have difficulty paying attention to lessons, actively participating, or completing tasks well.
4.	Lack of social support	Environmental and social factors can also play a role in the occurrence of problems. Lack of support from peers, family, or teachers can affect students' well-being and hinder their ability to cope effectively.

Table 2 illustrates some of the factors that can cause problems in learning, including Lack of concept understanding, Lack of prerequisite skills, Lack of motivation, and Lack of social support. However, it is important to remember that each situation and individual may have different factors and unique complexities.

Table 3. Data Inspiration

No.	Data	Description
1.	Description of Different Teaching Methods	Detailed descriptions of the different teaching methods implemented by teachers, such as project-based learning, group discussions, problem-solving, or the use of technology in learning.
2.	Student Performance Evaluation Data	Data on improvements in student performance or achievement before and after the implementation of the new teaching strategy. This could be grades, test results, or other assessments that can show the impact of the teaching strategy.
3.	Description of Learning Environment	Description of the physical learning environment and technology used in the teaching process. This could include classroom organization, use of current technology, or provision of learning resources.
4.	Classroom Observation	Direct observation of the learning process in a classroom implementing a particular teaching strategy. This can provide in-depth insights into teacher-student interactions, engagement levels, and the impact of the teaching strategy.

In Table 3, the inspiration data consists of several aspects, including a description of different teaching methods, student performance evaluation data, a description of the learning environment, and classroom observation. These extensive and diverse data and descriptions will provide a comprehensive understanding of the impact and effectiveness of various teaching strategies in creating engaging and dynamic learning in the classroom.

Discussion

Teacher Strategies in Creating Interesting and Dynamic Learning at SD Pinayungan II

Based on the research conducted at SDN Pinayungan II, it was found that there are various teacher strategies for creating interesting and dynamic learning, including the use of interactive technology, project-based learning, cooperative learning, active learning, utilization of local resources, emphasis on creativity, constructive feedback, and flexibility in learning approaches. It is important for teachers to choose strategies that are appropriate to the classroom context and student characteristics to achieve optimal learning outcomes.

The classroom is a dynamic learning environment, bringing together students from different backgrounds with different levels of ability and character (Renzulli, 2021). Therefore, to be a teacher who has the ability to create interesting and dynamic learning requires the implementation of interesting and dynamic learning strategies in the classroom to help meet the individual needs of students.

Interesting and dynamic learning strategies in the classroom include visualization, bringing boring academic concepts to life with visual and practical learning experiences that can help learners understand how to apply the material students learn in class in the real world. For example, an interactive whiteboard or LCD projector can be used to display photos, videos, and activities that encourage students to experiment and be active in class.

Cooperative Learning encourages learners to work together by forming groups. Expressing learners' ideas verbally and responding to others encourages learners to develop their confidence as well as improve communication and critical thinking skills. Examples include conducting scientific experiments and acting out short plays in class (Felder & Brent, 2007).

Then, in Question-Based Instruction, teachers can ask questions that can encourage students to think for themselves and become more independent learners by encouraging students to think for themselves and become more independent learners. Encouraging students to ask questions and dig deeper into their ideas will help improve their problem-solving skills and help them gain a deeper understanding. Providing question-based instruction can focus students' attention on the lesson or material being discussed. These questions can be used to find out what students have learned as well as to motivate and foster students' interest in learning.

The use of technology in the classroom, by utilizing technology in the teaching process, is one effective way that can be taken to actively involve students, especially because digital media is very familiar to students in the 21st century. Interactive whiteboards or smartphones can be used to display images and videos that can help students visualize the material being studied. Learning can become more interactive when technology is used because learners can be directly involved in the delivery of learning materials.

This case study highlights various strategies that teachers can use to create engaging and dynamic learning. A technology-focused approach, active learning strategies, and strong relationships with students can help teachers achieve this goal. Thus, teachers have a key role in improving the quality of education and motivating students to become learners who love to learn.

So the strategies that teachers can do to create interesting and dynamic learning include 1) problem-based approach, 2) student collaboration, 3) use of technology, 4) project-based

learning, 5) play approach in learning, 6) student-centered approach, 7) skills approach, 8) using relevant material, 9) variety of teaching methods, 10) process-centered learning, 11) using stories, 12) differentiating learning, 13) formative assessment, 14) connecting with the real world, 15) activating imagination, and 16) flexibility in teaching. Teachers who succeed in creating engaging and dynamic learning combine several of these strategies. This allows them to create diverse and engaging learning experiences for students, helping them to understand and apply concepts better.

Factors Behind the Occurrence of Problems in Learning with the Lecture Method

Based on the results of research conducted at SDN Pinayungan II, it was found that there are several factors that can cause problems in learning, namely lack of understanding of concepts, lack of prerequisite skills, lack of motivation, and lack of social support. However, it is important to remember that each situation and individual may have different factors and unique complexities. The background of the problem stems from the necessity to adapt learning approaches and methods to meet the evolving demands of education in the contemporary era. Various factors contribute to this need for change. Firstly, there's a shift in student needs as they are immersed in an environment abundant with information and technology. Traditional lecture-based methods might not align with their learning styles and interactions with the world. Secondly, education increasingly emphasizes 21st-century skills such as critical thinking, collaboration, and creativity. The conventional lecture approach may fall short of cultivating these essential competencies. Thirdly, advancements in educational technology have opened doors to more interactive and technology-driven learning, which traditional lectures may not fully utilize. Moreover, ongoing educational research highlights more effective learning methods, exposing potential weaknesses in the lecture-based approach. Additionally, students possess diverse learning styles, and some may respond better to interactive methods rather than passive lectures. Furthermore, the evolving job landscape requires individuals with diverse skills that traditional lectures might not sufficiently nurture. Lastly, educational expectations have expanded, aiming for graduates who can think critically, problem-solve, and actively contribute to society, goals which the lecture method might not effectively achieve. In essence, these collective factors emphasize the necessity to adapt learning methodologies to attain more pertinent and impactful educational outcomes in today's rapidly changing landscape.

Inspiration For teachers, educators, and education practitioners in improving teaching effectiveness

Based on the results of the research conducted at SDN Pinayungan II, it was found that the inspiration data consisted of several aspects, including descriptions of different teaching methods, student performance evaluation data, descriptions of the learning environment, and classroom observations. These extensive and diverse data and descriptions will provide a comprehensive understanding of the impact and effectiveness of different teaching strategies in creating engaging and dynamic learning in the classroom. Inspiring and empowering educators to enhance the effectiveness of their teaching methods for more engaging and dynamic learning experiences can be achieved through various strategies. Firstly, sharing success stories that highlight impactful teaching practices provides tangible evidence of how changes in teaching approaches positively

influence student outcomes. Secondly, offering professional training and development opportunities, such as workshops or courses, acquaints teachers with the latest and most effective teaching methodologies. Thirdly, establishing mentoring programs where experienced educators guide newer teachers fosters a supportive mentor-student relationship and knowledge sharing. Collaboration among teachers within and across subjects is also pivotal, encouraging idea exchange and mutual learning. Constructive feedback on teaching practices serves as a positive means for improvement. Equally important is ensuring teachers have access to diverse educational resources, including technology and relevant course materials, enabling them to explore new methods confidently. Cultivating innovative learning environments equipped with flexible classroom designs and modern technological resources further stimulates dynamic learning experiences. Sharing pertinent literature and promoting engagement in learning communities facilitates continuous professional development and peer sharing. Recognizing and appreciating teachers' efforts in creating engaging learning atmospheres reinforces their value. Moreover, reminding educators of the profound purpose of shaping future generations serves as intrinsic motivation. Lastly, encouraging a culture of critical thinking among educators promotes ongoing evolution and refinement of teaching approaches. Fostering an environment that supports continual learning and professional growth among educators not only elevates teaching quality but also cultivates an engaging and dynamic learning environment for students.

CONCLUSION

The results show that most teachers tend to use the traditional lecture method in the classroom learning process, which in turn can decrease students' interest and engagement. Meanwhile, there are many alternative strategies that teachers can implement to make learning more interesting and dynamic. One effective strategy is to integrate educational technology into learning, such as the use of educational software, applications, or other technological aids that can increase student interaction and engagement. In addition, using a variety of different teaching methods can also increase the attractiveness of learning. For example, group discussion methods, collaborative projects, problem-based learning, or simulations can arouse students' interest and encourage active participation in the teaching and learning process. Teachers' innovative efforts in adopting these strategies are crucial in creating a stimulating and engaging learning environment for students. It is important for teachers to innovate in their teaching approach, trying out different strategies and methods that are interesting and dynamic. Doing so can create a classroom atmosphere that motivates, sparks creativity, and adapts to students' learning styles. This not only increases students' interest in learning but can also improve their overall learning outcomes.

BIBLIOGRAPHY

- Baker, D. P. (2014). *The schooled society: The educational transformation of global culture*. St Bentley, T. (2012). *Learning beyond the classroom: Education for a changing world*. Routledge.
- ELGendy, S. M. A. E. S. (2022). *The Effectiveness Of A Program Based On Some Interesting Learning Strategies To Develop Motivation To Learn And Some Successful Intelligence*

- Skills As An Approach To Reduce Attention Deficit Hyperactivity Disorder Of Kindergarten Children. *Journal of Scientific Research in Education*, 23(8), 245-377.
- Fahmi, Z. (2013). Indikator pembelajaran aktif dalam konteks Pengimplementasian pendekatan pembelajaran aktif, kreatif, Efektif, dan menyenangkan (PAKEM). *Al-Ta lim Journal*, 20(1), 278-284.
- Felder, R. M., & Brent, R. (2007). Cooperative learning. *Active learning: Models from the analytical sciences*, 970, 34-53.
- Herrmann, K. J. (2013). The impact of cooperative learning on student engagement: Results from an intervention. *Active learning in higher education*, 14(3), 175-187.
- Hidayat, M., Miskadi, M. S., & Murtikusuma, R. P. (Eds.). (2022). *Joyful Learning Solusi Meningkatkan Keterampilan Berbicara*. Penerbit P4I.
- Jack, B. M., & Lin, H. S. (2017). Making learning interesting and its application to the science classroom. *Studies in Science Education*, 53(2), 137-164.
- Jayawardana, H. B. A. (2017). Paradigma pembelajaran biologi di era digital. *Jurnal Bioedukatika*, 5(1), 12-17.
- Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of qualitative descriptive studies: A systematic review. *Research in nursing & health*, 40(1), 23-42.
- Kusuma, C. S. D. (2019). Integrasi bahasa Inggris dalam Proses Pembelajaran. *Efisiensi - Kajian Ilmu Administrasi*, 15(2), 43-50. <https://doi.org/10.21831/efisiensi.v15i2.24493>
- Marlinda, L., Rianto, H., Informatika, M., Bina, A., & Informatika, S. (2013). Pembelajaran Bahasa Indonesia Berbasis Web. November 2019, 2-4.
- Minsih, M., & D, A. G. (2018). Peran Guru Dalam Pengelolaan Kelas. *Profesi Pendidikan Dasar*, 1(1), 20. <https://doi.org/10.23917/ppd.v1i1.6144>.
- Purnasari, P. D., & Sadewo, Y. D. (2021). Strategi Pembelajaran Pendidikan Dasar di Perbatasan Pada Era Digital. *Jurnal Basicedu*, 5(5), 3089-3100. <https://jbasic.org/index.php/basicedu/article/view/1218>
- Renzulli, J. S. (2021). The enrichment triad model: A guide for developing defensible programs for the gifted and talented. In *Reflections on gifted education* (pp. 193-210). Routledge.
- Samad, F., & Tidore, N. (2015). Strategi pembelajaran Bahasa Inggris yang menyenangkan untuk anak usia dini. *Jurnal Ilmiah Cahaya PAUD*, 1(2), 47-57.
- Syaparuddin, S., Meldianus, M., & Elihami, E. (2020). Strategi pembelajaran aktif dalam meningkatkan motivasi belajar pkn peserta didik. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(1), 30-41.
- Smith, P.L., & Ragan, T.J. (1993). *Instructional Design*. NY: Macmillan Publishing Company.
- Suparlan, S. (2020). Peran Media dalam Pembeajaran di SD/MI. *Islamika*, 2(2), 298-311. <https://doi.org/10.36088/islamika.v2i2.796>
- Suryanti. (2021). *Pengelolaan Pengajaran* (Nurrahwati, Ed.; Nurrahwati). Bintang Pustaka Madani.
- Widiasanti, I. (2023). Kaitan Big Data Pada Platform Zoom dan Google Classroom Sebagai Media Penunjang Pembelajaran. *Sukma: Jurnal Pendidikan*, 7(1), 1-15. <https://doi.org/DOI:https://doi.org/10.32533/07101.2023>

- Wiske, Martha Stone. (1998). *Teaching for Understanding: Linking Research with Practice*. Harvard Graduate School of Education.
- Yuliana, R., Marwa, M., & Hamuddin, B. (2020). The Investigation of Students' Knowledge of a Novel Learning Strategy: What is Interesting about Blended Learning for EFL University Students? *Utamax: Journal of Ultimate Research and Trends in Education*, 2(2), 80-87.
- Yusuf, Muri. A. (2017). *Metode Penelitian: Kuantitatif, Kualitatif, dan Penelitian Gabungan*. In I. Fahmi & Suwito (Eds.), *Metode Penelitian* (Cetakan ke-4, pp. 407–409). Kencana.
- Yusuf, M., & Daris, L. (2018). *Analisis Data Penelitian Teori & Aplikasi dalam Bidang Perikanan*. In M. Ismail (Ed.), *Analisis Data Penelitian* (Cetakan Pertama, Vol. 1, pp. 1–5). PT Penerbit IPB Press.
[https://www.google.co.id/books/edition/Analisis_Data_Penelitian_Teori_Aplikasi/qrkREAAAQBAJ?hl=id&gbpv=1&dq=Yusuf,+Muhammad+%26+Lukman+Daris.+\(2019\).+Analisis+Data+Penelitian+Teori+%26+Aplikasi+dalam+Bidang+Perikanan.+Bogor:+PT+Penerbit+IPB+Press.&printsec=frontcover](https://www.google.co.id/books/edition/Analisis_Data_Penelitian_Teori_Aplikasi/qrkREAAAQBAJ?hl=id&gbpv=1&dq=Yusuf,+Muhammad+%26+Lukman+Daris.+(2019).+Analisis+Data+Penelitian+Teori+%26+Aplikasi+dalam+Bidang+Perikanan.+Bogor:+PT+Penerbit+IPB+Press.&printsec=frontcover).



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