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Analysis of Learning Concentration in Science Learning of Grade V Students of Purwoyoso 01 Elementary School

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Abstract: This study aims to analyze the level of learning concentration, identify influencing factors, examine the relationship between learning concentration and learning outcomes, and explore teachers' efforts to address students' concentration difficulties among fifth-grade students at Purwoyoso 01 State Elementary School in Semarang City. The research used a qualitative descriptive approach with a saturated sampling technique, involving all 27 fifth-grade students as research subjects. Data were collected through interviews, observations, and documentation over three days, dividing students into three groups to obtain in-depth information. Data analysis employed the Miles and Huberman model, including data reduction, display, and conclusion drawing. The results showed that students' learning concentration levels were generally in the moderate category, averaging 70.33%. 37.04% of students were categorized as having high concentration, 37.04% moderate concentration, and 25.93% low concentration. Factors influencing learning concentration included physical health, learning environment, learning style, and motivation. Students with higher learning concentration tended to achieve better learning outcomes. Teachers' efforts to overcome concentration difficulties included using various learning methods, strengthening motivation, and creating a conducive learning environment.

Keywords: Concentration; IPAS; Learning outcomes

Introduction

The definition of education based on Law of the Republic of Indonesia Number 20 (2003) concerning the National Education System Chapter I Article 1, can be understood as a process that provides knowledge, skills, and values to individuals to help them grow and develop personally, socially, and professionally. It is not only about transferring information, but also about shaping character, opening minds, and helping someone reach their maximum potential. Education plays an important role in shaping an inclusive, cultured, and advanced society. Satisfactory learning outcomes can be achieved by all students, as long as they can learn well and are not disturbed by threats, obstacles, and difficulties (Kubikova et al., 2024). In reality, most students still face various difficulties in the learning process. Learning difficulties are a situation where competence or achievement does not meet the established standards (Almoslamani, 2022). According to Riinawati (2021), learning success can be assessed by how much students concentrate on learning in class. Learning concentration is when students are actively involved in focusing attention in the learning process, including in understanding, using, and evaluating knowledge and skills in various subjects. Students who have difficulty concentrating during learning can have a negative impact on their learning progress, and can even be detrimental to themselves because they do not get any benefits from the learning session (Daud, 2024).

The ability of students to maintain concentration in learning is very important so that they can understand the material being taught, including concepts, theories, and questions given (Golden, 2023). Losing

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concentration in learning during the learning process can cause difficulty in working on questions or problems, which can have an impact on their learning outcomes (Chueh & Kao, 2024). According to Winata (2021), the characteristics of someone who is not concentrating include often getting bored with something, always moving around, not listening when spoken to, changing the subject, often chatting, and disturbing other friends (Claessens et al., 2017). At the elementary school level, there are still many problems with students' difficulty concentrating on learning which result in low learning outcomes (Syahputra et al., 2022). This also happened to students in grade V of SD Negeri Purwoyoso 01, Semarang City. The researchers found this when conducting pre-research observations. The researchers observed that several students seemed to lose concentration in learning in the middle of the learning process. Students who lose concentration in learning are characterized by several characteristics such as students' attention is no longer focused on the teacher, students who chat with their friends, students who cannot answer teacher questions related to the material being taught, low learning outcomes or evaluations, and others (Mafarja et al., 2023).

Based on an interview with a class V teacher at SD Negeri Purwoyoso 01 on September 25, 2024, the obstacles or challenges faced when teaching were preparing students' moods at the beginning of learning and students' concentration in learning which sometimes decreased during learning. In science learning in class V of SD Negeri Purwoyoso 01, the average learning outcomes were still relatively low. The average first semester report card score was also relatively low (Öhrstedt & Lindfors, 2019; Purkayastha & Huber, 2024). One of the factors that causes low learning outcomes is the lack of student concentration in learning. This is in line with a survey conducted by the American Psychiatric Association (APA) which revealed that learning concentration disorders in school-age children range from 1-20% (Mechler et al., 2022). Meanwhile, a survey in East Java Province revealed that 7.4% of elementary school children experienced a decrease in concentration and interest in learning, and 5.20% faced a decrease in their ability to focus. Several previous studies have also strengthened the urgency of the problem, namely (Andriana et al., 2023), with their research showing that there is a relationship between concentration levels and learning outcomes.

The higher the concentration, the higher the grades obtained. Furthermore, research from Kurnianto & (Tong et al., 2022), shows that learning concentration can also interfere with students' problem-solving abilities to become more varied. Peixoto et al. (2024), in their research stated that learning concentration has a positive effect on mathematics learning achievement by 14.70%. Theoretical support also comes from broader studies. Wesarg-Menzel et al. (2023), emphasized the importance of voluntary attention in school-age children, as well as the need for a variety of materials and sufficient rest time to maintain children's concentration while studying. Lee (2025), showed the success of the Problem-Based Learning method in improving the concentration and learning outcomes of grade I students. Hyvönen et al. (2020), found that Dance Movement Therapy was able to improve cognitive, emotional, and physical integration which had an impact on concentration. Meanwhile, Pitluk Barash et al. (2025) showed the effectiveness of Brain Gym in increasing focus and feelings of happiness that support concentration. However, not all alleged factors proved relevant. Muhtazah et al. (2023) stated that sleep quality did not have a significant relationship with learning concentration in preclinical students.

The purpose of this study was to analyze the level of student learning concentration, to determine the factors that influence student learning concentration, to determine the relationship between learning concentration and student learning outcomes, and to determine teacher efforts in overcoming students' learning concentration difficulties.

Method

This study uses a qualitative approach with a descriptive approach. According to Busetto et al. (2020), qualitative research is a type of descriptive research that generally uses analysis. According to Bengtsson (2016), Qualitative research methods are often referred to as naturalistic research methods because they are carried out in natural conditions. Researchers use qualitative descriptive methods because the data collected during the study are not in the form of numbers, but in the form of words or pictures. The data in this study were collected from various sources through observation, interviews, and documentation. Data collection was carried out from sources who have an interest and understanding of the social environmental situation that is relevant to the problem being studied.

In this way, researchers can understand the situation more deeply and obtain complete data. This study was conducted using a descriptive method with the aim of providing an in-depth description of information related to the problems of learning concentration experienced by class V students of Purwoyoso 01 Elementary School, Semarang City. The information studied includes the level of learning concentration, factors that influence learning concentration, the relationship between learning concentration and student learning outcomes, and efforts to overcome learning concentration difficulties of

class V students of Purwoyoso 01 Elementary School, Semarang City.

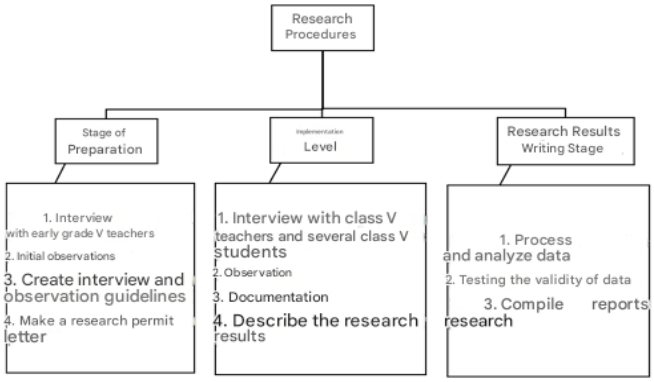

Figure 1. Research stages

Results and Discussion

The subjects of this study were all fifth grade students, who were divided into three groups to facilitate the observation, interview and documentation processes. Each group underwent research sessions alternately for three days, with one group observed and interviewed each day. This method was chosen so that the data obtained was more in-depth and accurate, allowing researchers to understand the behavioral patterns of students related to the research objectives more comprehensively. With this approach, it is hoped that the results of the study can provide a clear picture of the analysis of the learning concentration of fifth grade students. This analysis focuses on the level of student concentration, factors that influence concentration, and the relationship between learning concentration and learning outcomes.

Level of Learning Concentration in Science Learning

Based on the results of observations, the level of learning concentration in science learning of fifth grade students of Purwoyoso 01 Elementary School, Semarang City is in the 'moderate' category. In measuring the level of student learning concentration, a classification is used based on 18 aspects of learning concentration which are the development of 9 main indicators. The first seven indicators are adapted from Arnaiz-Sánchez et al. (2023) namely: attention or acceptance of the subject matter, a desire to respond to the knowledge taught, appropriate body movements according to the teacher's instructions, the ability to apply the knowledge that has been obtained, the ability to analyze the knowledge that has been obtained, the ability to express views or decisions that are the result of personal beliefs, ideas, and attitudes, and the ability to interpret information comprehensively. In addition, two indicators are taken from Imran et al. (2024), namely: focusing on the teacher, the blackboard, and the subject matter, and asking for additional information. The development of these aspects aims to describe the level of concentration of students in more detail. The following is a visual table of the classification of learning concentration levels based on Huang et al. (2024) to determine the extent to which students show concentration in learning during the learning process.

Table 1. Classification of Concentration Levels

Concentration Category	Percentage Range	Number of Aspects Fulfilled	Number of students
High	76 – 100	14 – 18 aspect	10 (37.04)
Medium	56 – 75	10 – 13 aspect	10 (37.04)
Low	≤ 55	0-9 aspect	7 (25.93)

Based on the concentration classification table, it can be seen that in terms of paying attention to the material delivered by the teacher calmly, most students appear to be able to pay attention, follow the learning calmly, listen to the explanation carefully, actively take notes of important things, and are able to follow the learning process well. However, there are still some students who show a lack of attention such as being sleepy, talking to their deskmates, or playing with personal items. In terms of the ability to answer apperception questions, most students can relate the material being studied to the experiences they have experienced, although there are still some students who do not appear to answer the apperception. Furthermore, in terms of the desire to respond to the knowledge taught, only a small number of students actively ask or respond to the learning material, while most of the others are still passive. In terms of providing reinforcement for the material taught, students tend not to be accustomed to relating new material to the knowledge they already have so that discussions in learning become less active.

In terms of body movement according to the teacher's instructions, most students can follow instructions well, although there are some who are still less cooperative with the teacher's instructions or directions. Based on the aspect of writing activities related to important points of the material in the notebook according to the teacher's instructions, most students seemed to follow the instructions given, although there were still 1-2 students who did not follow the instructions. Then, in the aspect of application or application of knowledge, several students were able to apply learning concepts to practical tasks such as making a plan of each student's house based on the cardinal directions. However, there were still students who were less precise in implementing the concept even though they were able to explain it verbally. In the aspect of the ability to analyze knowledge, some students were

able to relate the material to real experiences, for example in grouping plants and animals based on their characteristics. However, there were still some students who had not been able to relate the material to personal experiences so that their understanding was less deep.

In the aspect of conveying views or opinions, students who paid attention to learning from beginning to end were generally able to express opinions logically and coherently, reflecting an understanding of the material. However, most students were still passive in class discussions, and some who spoke tended to express irrelevant opinions. A small number of students were able to convey logical responses to other people's opinions, but generally this skill still needed to be improved. Based on the aspect of the ability to interpret information, students who are focused are able to draw conclusions from the material being studied and relate it to personal experiences. However, students who are less focused tend to have difficulty understanding the core of the material and making the right conclusions. In terms of focusing on the teacher, the blackboard, and the subject matter, most students show readiness to learn by responding when called by the teacher. However, there are still students who appear confused, sleepy, or talking to themselves during the learning process.

In terms of being active in asking for additional information, only a small number of students dare to ask when they find concepts from the material that they do not understand. Most students only receive information passively. Based on the results of interviews with grade V teachers and all students, it was obtained that the level of student concentration in learning science varies greatly and if averaged is included in the moderate category. Most students pay close attention to the teacher, but there are also those who state that students are sleepy during science learning, especially when learning is during the day. In responding to the material, most students state that they are shy and afraid of making mistakes. In following the teacher's instructions, almost all students obeyed, such as when asked to write down important points in their notebooks, although some stated that they did not take notes when they were in a bad mood. Most stated that they were able to apply their knowledge, but their ability to analyze and discuss was still limited. During group discussions, students were able to express their opinions, although some expressed reluctance to participate because they felt that their opinions or ideas were not appreciated by their group members.

The focus on the teacher and the material was generally good, although many students stated that they were disturbed by their classmates because their friends liked to be noisy and naughty. The aspect of asking for additional information had not developed well, many students were reluctant to ask additional questions because they felt that the material they wanted to ask had not been covered in the ongoing learning, in addition, many students expressed that they did not ask because they were embarrassed.

Factors Affecting Students' Concentration in Learning Science

The results of the observation show that the concentration of learning of fifth grade students during science learning is influenced by several important factors, namely physical health, learning environment, learning style, and learning motivation. Students who appear tired or unhealthy appear less able to concentrate, often put their heads on the desk, and do not respond well to learning. The learning environment also has a big influence, even though the beginning of learning is conducive, the noise of vehicles from the highway and classmates who are not conducive can interfere with students' concentration in learning. In terms of learning style, students appear less enthusiastic when the teacher only uses the lecture method, so that their concentration is difficult to maintain.

On the other hand, when the teacher provides a variety of methods such as writing or watching videos that suit their learning style, these students appear more enthusiastic, are able to concentrate well and are active in learning activities. Learning motivation is another key factor, students who show mental readiness and active involvement during learning, such as asking questions, taking notes, and completing assignments seriously. This will make students able to concentrate well. Based on the results of interviews with grade V students, it was found that concentration during science learning was influenced by physical health, learning environment, learning style, and learning motivation. Students who expressed that unhealthy physical conditions such as flu and cough tended to have difficulty concentrating and often showed passive behavior during learning. On the other hand, students who expressed that they attended learning in a healthy condition and had breakfast were able to concentrate well from the beginning to the end of learning.

In terms of the learning environment, most students admitted that disturbances from naughty and noisy classmates and the noise of vehicles from the highway made it difficult for them to concentrate. Regarding learning style, most students expressed that they felt bored quickly if they only listened to the teacher's explanation, but they were more enthusiastic and concentrated well when learning was varied with writing activities or watching videos. The motivation factor is also very important, students expressed that when they have high motivation either because of encouragement from within themselves, their parents and teachers, they will be more active in asking

questions, taking notes, and showing better focus during the learning process. So that students who have the motivation to learn will find it easy to concentrate well.

Relationship between Learning Concentration and Learning Outcomes during Science Learning

Students who are categorized as having a high level of learning concentration (10 students) obtained an average score of 70-90 and if averaged obtained a score of 81, while students with a moderate level of concentration (10 students) had an average score of 60-70 and if averaged obtained a score of 67, and students with a low level of concentration (7 students) had an average score of 30-50 and if averaged obtained a score of 47. Based on the results of observations and evaluation scores of Science learning during three meetings, the researcher obtained the results of grouping students into three levels of learning concentration which are presented in the following table:

Table 2. Differences in the Relationship between Concentration and Learning Outcomes at Each Level of Learning Concentration

Concentration level	Number of Students	Average Evaluation Score	Characteristics of Observation
High	10	81	Active
			Focused and not easily distracted
			Respond quickly to teacher instructions
			Often volunteer when asked to read, answer, or summarize
Medium	10	64	Must be designated first to be active
			Sometimes focused, sometimes distracted
			Requires additional direction from teacher
Low	7	47	Often chats, daydreams, or plays alone during lessons
			Not active during class discussions.
			Not answering even though other friends have answered the teacher's question.

This comparison shows that the higher the level of student concentration in learning, the higher the learning outcomes, and vice versa. Thus, learning concentration is an important factor that directly affects student learning outcomes, where increased concentration will have a positive impact on increasing understanding of the material and obtaining more optimal learning outcomes.

Efforts to Overcome Students' Difficulties in Concentrating in Learning Science

Based on the results of observations regarding teachers' efforts to overcome students' difficulties in concentrating in learning science, it was found that teachers implemented various strategies or efforts to increase student concentration and participation. These efforts include checking learning readiness, creating a conducive learning environment, increasing student activity and participation, and providing refreshment in learning. In an effort to check learning readiness, before starting learning, the teacher prepares students by leading prayers, singing national songs, asking how students are, and then providing motivation or enthusiasm for learning. After that, the teacher ensures that students bring all the books according to the learning on that day. In an effort to encourage regular learning habits at home, at the end of each lesson, teachers often remind students of the importance of reopening textbooks or notes that have been made, even when there are no assignments or homework given. This habit is expected to become part of students' daily routines, so that the learning process does not only occur in class, but also continues in the home environment. Furthermore, in creating a conducive learning environment, before starting the lesson, teachers remind students who are on duty to carry out their responsibilities properly, such as sweeping the floor, tidying up chairs and tables, and ensuring the cleanliness of the blackboard and the area around the classroom. In addition, during the science learning process, when there are students who start to appear unconducive, the teacher will warn them or use a personal approach so that the students can be conditioned again and not disturb other students.

In increasing student activity and participation, teachers often ask students questions randomly, especially to students whose concentration seems to be decreasing, in addition, teachers also ask students to read the material text before explaining the material. Furthermore, in providing refreshment or refreshing in learning, the teacher invites students to do ice breaking such as clapping and the like. In addition, the teacher also shows YouTube videos. Based on the results of the interview, the teacher said that he implemented various efforts to overcome students' learning concentration difficulties in science learning. The teacher routinely checks students' learning readiness at the beginning of each lesson to instill responsibility and discipline.

Furthermore, the teacher expressed encouraging students to get used to studying regularly at home, even if only for a short time, so that they are more ready to receive material in class. Third, the teacher creates a conducive learning environment by maintaining the cleanliness and tidiness of the classroom, thus providing physical and psychological comfort. Fourth, the teacher increases student activity by giving random questions and direct monitoring during learning. Fifth, the teacher inserts refreshing activities such as watching learning videos, question and answer sessions, singing songs related to the material, and doing ice breaking to maintain students' enthusiasm and concentration throughout the learning process.

Discussion

In this study, data obtained through observation, interviews, documentation and evaluation results of students during science learning will be analyzed. This analysis focuses on the level of student concentration, factors that influence concentration, and the relationship between learning concentration and learning outcomes. In addition, this study also examines the strategies implemented by teachers in overcoming the concentration difficulties of fifth grade students in science learning. By conducting direct observations in the field, researchers obtain more accurate and in-depth data, because they can directly observe the science learning process in the classroom.

Interpretation of Students' Learning Concentration Levels during Science Learning

The results of the study related to the analysis of the level of learning concentration of fifth grade students in science learning are in line with previous research conducted by Carmi (2024), the results of the study showed that subject A had high learning outcomes and met all learning concentration indicators. Subject B with moderate learning outcomes was able to meet 6 learning concentration indicators, and learning concentration indicators that were not met included being able to apply the knowledge gained, being able to analyze the knowledge gained and being able to express ideas. Subject C has been able to fulfill 8 indicators of learning concentration, regarding the indicator of learning concentration that was not fulfilled, namely being able to apply the knowledge gained. Furthermore, there is previous research conducted by Ida et al. (2023), the results of the study obtained the percentage of data on the level of student learning concentration in the mathematics learning process in the high category with an average value of 88.63. Chan et al. (2023), also revealed that most students were able to concentrate well during the learning process, which is in accordance with the results of the questionnaire which showed that around 75.69% of students concentrated when learning mathematics. Although there are some students who are not fully concentrated, a high level of concentration is more dominant and supports the success of the learning process.

The three previous studies have similarities in highlighting the importance of student learning concentration in supporting the success of the learning process. Research conducted by Hu et al. (2023) all show that a high level of learning concentration is positively correlated with good learning outcomes. Although each study used a different approach and subject, all agreed that the majority of students showed a fairly high level of concentration during the learning process. In addition, the three studies also used certain indicators or instruments to assess students' learning concentration, either through analysis of indicator achievement or through the distribution of questionnaires. When associated with the results of the research that has been conducted, it can be seen that the level of learning concentration of students in grade V during science learning varies greatly, with an average of 70.33% which is included in the moderate category. Although these results do not show the dominance of the high concentration category as in several previous studies, in general they still show a positive tendency towards students' concentration abilities in the learning process.

Analysis of Factors Affecting Students' Concentration in Learning Science

The results of this study state that there are several factors that affect students' concentration in learning, including physical health, learning environment, learning style and student motivation. This is in line with the theory of Hita et al. (2021), which states that concentration in learning is very important in education because it can help someone understand the material being studied better and remember the information given and the concentration in learning is influenced by the factors in it. The results of this study are also in line with the results of previous research conducted by Ahmad et al. (2024), which showed that the factors that affect the concentration of learning of grade V students at SDN Nusa Indah include a hot and humid classroom environment, sitting position while studying, and the level of fatigue and boredom of students. Then there is previous research conducted by Al-Qahtani (2015), the results of this study provide a good picture of the influence of discipline and learning environment. Discipline and learning environment greatly influence students' concentration in learning, so that learning can run according to expectations and learning objectives. That student boredom at SDN 1 Pandan was influenced by less supportive environmental factors, monotonous learning methods, and lack of learning motivation

(Gumasing & Castro, 2023). This boredom has a significant effect on student learning concentration, and various efforts from educators can be made to overcome this.

The three previous studies have similarities in highlighting that external and internal factors greatly affect the level of learning concentration of elementary school students. Both studies at SDN Nusa Indah, SDN 2 Tahunan, and SDN 1 Pandan, all three emphasized that a less conducive learning environment, such as a hot classroom, uncomfortable sitting position, as well as factors of boredom, fatigue, and lack of learning motivation, contribute greatly to reducing student learning concentration. In addition, monotonous and less varied learning methods also trigger a decrease in student interest and attention during learning. These three studies agree that student learning concentration does not only depend on cognitive abilities, but is also greatly influenced by factors such as classroom atmosphere, teacher approach in teaching, and student psychological conditions.

The relevance of this study lies in the finding that the concentration of learning of fifth grade students in science learning is also greatly influenced by several factors such as physical condition, learning environment, learning style and motivation. Some students who do not have good concentration in learning are also influenced by certain factors, such as feeling sleepy during learning during the day or a bad mood. This strengthens the conclusion that concentration in learning does not stand alone, but is influenced by various aspects both from within the students themselves and from the learning environment. This study provides contextual and actual evidence that it is important for teachers to create an interesting and conducive learning atmosphere so that student concentration is maintained and learning objectives can be achieved optimally.

Relationship between Learning Concentration and Student Learning Outcomes during Science Learning

The results of this study state that the level of learning concentration greatly affects student learning outcomes. This is in line with previous research conducted by Lin et al. (2023), which showed that there is a positive correlation between the level of student learning concentration and their learning outcomes. Students with high levels of concentration tend to get good learning outcomes, while students with low levels of concentration usually have less than optimal learning outcomes. This indicates that increasing learning concentration can contribute to improving student learning outcomes. Furthermore, there is previous research conducted by Simorangkir et al. (2022), which states that learning concentration has a positive influence on students' mathematical problem-solving abilities. This shows that learning concentration is an important factor that supports high-level cognitive skills, such as mathematical problem-solving abilities. The higher the level of student concentration when learning, the more effective they are in understanding, analyzing, and solving the problems given. Conversely, low concentration can hinder the logical and systematic thinking process, which ultimately has a negative impact on learning outcomes.The relationship between learning concentration and learning outcomes shows that the higher the level of student concentration during the learning process, the more likely it is to improve their learning outcomes. Research shows that learning concentration has a significant effect on student learning outcomes.

The three studies have similarities in showing a positive relationship between the level of learning concentration and student learning outcomes. That students with high learning concentration tend to get better learning outcomes compared to students with low concentration. In addition, the three studies emphasized that learning concentration is not only a supporting factor, but is an important aspect that significantly influences students' academic achievement (Yona et al., 2023). Learning concentration was shown to have a positive effect on students' mathematical problem-solving abilities, which strengthens the view that concentration plays a major role in the thinking and learning process. The results of this study indicate that there is a positive relationship between learning concentration and student learning outcomes. The higher the level of student learning concentration, the better the learning outcomes. Thus, this study not only confirms the results of previous studies but also provides empirical support that increasing learning concentration can contribute directly to improving student academic achievement.

Efforts to Improve Learning Concentration during Science Learning

There is a study conducted by Abdulrahaman et al. (2020), which revealed that teacher strategies in improving student learning concentration during online learning include the use of varied learning media such as videos and recordings of materials so that students can learn independently and repeat the material as needed. In addition, teachers provide direct motivation and ask questions gradually to increase involvement and concentration in the learning process. This approach aims to prevent students from getting bored quickly and remain motivated in following mathematics lessons. Teachers also try to adjust learning methods to student conditions, even though they face obstacles such as limited internet access and limited time. With this

strategy, it is hoped that students can be more focused and active during the online learning process.

Yuan (2025), also conducted a study with research results showing that the gradual and continuous application of ice breaking techniques can improve the learning concentration of grade IV students at SD Negeri 22 Ampenan. Before the implementation, the level of concentration and learning outcomes of students were in the sufficient category with a percentage of 52%. After the action was carried out through cycle I, there was an increase to 65%, and in cycle II it increased again to 81%, which is included in the very good category. Data were collected through observation, questionnaires, and documentation, which showed that the use of ice breaking can significantly increase student motivation and focus. This increase has a positive impact on student learning outcomes, as evidenced by the increasing percentage of students who are able to show good and very good concentration and learning outcomes that have increased significantly from cycle I to cycle II. This study confirms that the ice breaking technique is effective in creating a conducive learning atmosphere, increasing motivation, and supporting the achievement of better learning outcomes in the classroom.

Finally, there is a previous study conducted by Fatmasari et al. (2022), the results of the study showed that the application of the Mind Mapping method significantly increased student learning concentration in science lessons in class V of SDN Doridungga, Donggo District. By using this strategy, students find it easier to concentrate and are able to understand the material better, which has a positive impact on their learning outcomes. In addition, this method helps activate the entire brain and clarify the relationship between concepts, so that the learning process becomes more effective and of higher quality. This study also confirms that the right teacher strategies, such as providing initial information, motivation, and positive habits, support the success of implementing Mind Mapping in improving student concentration.

The three articles discussed have similarities in terms of the use of active strategies to improve student concentration. Each article shows that the application of various methods, such as the use of varied learning media, ice breaking techniques, and mind mapping, can improve student concentration and engagement during the learning process. All of these studies also highlight the importance of creating a pleasant learning atmosphere and adjusting learning methods to the needs of students. In particular, the similarities of the three articles lie in the approach that involves activating students' mentality to maintain concentration through fun and interesting methods, which can also increase student motivation to focus more. The use of ice breaking techniques, varied learning media, and methods such as Mind Mapping show teachers' efforts to foster curiosity and reduce student boredom, which often inhibits learning concentration.

The results of this study are in line with previous findings which show that teacher strategies play an important role in improving student concentration. This study strengthens these findings by showing that teacher strategies such as checking learning readiness, encouraging independent learning habits at home, creating a conducive learning environment, increasing active student participation, and inserting refreshing activities, all proved effective in maintaining and improving learning concentration. These strategies reflect teacher awareness of the importance of a flexible, interactive, and responsive approach to student needs to create a learning environment that supports increased focus and motivation to learn, which ultimately has a positive impact on student learning outcomes.

Conclusion

Based on the results of qualitative research with observation, interview and documentation techniques related to the analysis of learning concentration in the subject of Natural Sciences (IPAS) for class V of SD Negeri Purwoyoso 01, Semarang City, several conclusions can be drawn. The conclusions are presented as follows: The level of learning concentration of students in learning Natural and Social Sciences (IPAS) is generally in the moderate category; There are several factors that can affect the learning concentration of class V students of SD Negeri Purwoyoso 01, Semarang City during IPAS learning, namely physical health, learning environment, learning style and student motivation; There is a relationship between the level of learning concentration and student learning outcomes. The higher the level of student concentration, the higher the student's learning outcomes; Teachers' efforts to overcome learning difficulties are by implementing various strategies, such as checking learning readiness at the beginning of learning, encouraging independent learning at home, creating a comfortable classroom environment, and increasing participation through random questions and direct monitoring. Refreshing activities such as showing learning videos, ice breaking, and questions and answers.

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Author Contributions

The contribution of the authors involved in the preparation of this scientific article consists of EKP (First Author) who played a role and played a role in conducting observations and research in one of the Elementary Schools that became the subject of research and writing this scientific article. Furthermore, DNT (Second Author) as a supervisor who has guided and provided direction in the preparation of this article.

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The author declares no conflict of interest.

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