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Enhancing Students' Learning Motivation through Changing Seats in Primary School

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Abstract. The problem that teachers often face in primary school is the students' low absorption in understanding a lesson. Currently, learning is still teacher-centered, which causes students to be less active in participating in the teaching and learning process. The problem in this research is how to enhance students' learning motivation through changing seats in primary school. This study is a quantitative study with a research design using a post-test-only control design. The data were collected using test and observation method and were analyzed using normality test, homogeneity test, t-test, and further hypothesis testing, which are to compare the learning outcomes of the experimental class and the control class. This study concludes that there was an increase in students' learning motivation through changing seats in primary schools, which can be seen from the results of data analysis showing that the value of t_{count} = greater than t_{table} = 2.2899 at a significant level of 5% (t_{count} > t_{table}) count 3.0030 > table 2.2899, H₀ was accepted.

Keywords: changing seats, primary school, student learning motivation, teaching and learning process

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INTRODUCTION ~ One of the problems faced in education is the low quality of learning output marked by learning achievement that does not meet competency standards, such as curriculum demands (Tohidi & Jabbari, 2012). However, this is a natural thing, and learning is a relationship between teachers and students in the teaching and learning process. Therefore, teachers must have a strategy so that students can create effective and optimal learning (Mensah, 2014). One of the supporting factors is learning motivation and student seating placement in primary schools. Learning motivation is the tendency of students to carry out all learning activities that are driven by a desire to achieve the best possible achievement and function as a trigger of effort and achievement (Seto & Bantas, 2020). Mubarok (2019) affirms that seating formation is the arrangement of student seats in the learning process. Changing bench formations plays an essential role in the learning process, including increasing learning concentration; making learning more effective and efficient; making learning delivered equally, thoroughly, interestingly; students have varied perspectives on the subject matter being followed; and teachers can easily adjust the formation of the bench to the teaching strategy they choose, either individually, in groups, in pairs, or classically (Khairani et al., 2020).

There are many different styles of seating arrangements. Many seating arrangements require teachers to be creative in choosing which arrangement style to be used according to the conditions and material to be provided (Koutrouba et al., 2018). Inappropriate selection of seating arrangement styles can sometimes hinder students' understanding of the learning material. In practice, educators often teach with traditional seating arrangements made from time to time. The lack of creativity and innovation of teachers in managing the classroom makes the learning process boring for the students. This results in low opportunities for students to interact actively in learning. The teachers' role tends to be dominant so that students participation in the learning process is low and they tend to be less interested in the learning process.

Based on observations at one of the public primary schools in Sumenep, East Java, Indonesia, some teachers complained about their difficulties to manage classes with seating arrangements. The seating arrangement was the traditional style ones because the teacher has not been familiar with styles that can be used in learning. The pre-test involving fourth-grade students show that many students did not achieve the minimum completeness of 70, in which the average of the students only achieved 67. The low learning outcomes of students were also accompanied by a lack of motivation of students in participating in the learning process. When the learning process takes place, the students do not focus and prefer to play and share stories with friends, and some other students like to disturb friends who are studying, so the teacher must repeatedly warn them to focus.

Previous research conducted by Yulianti (2020) shows that learning motivation and seating arrangement influencing the learning outcomes. It can be seen from the percentage of students who were less attentive in lessons starting to decrease from 20%. On the other hand, students who were enthusiastic, active, and dare to express their opinions increased up to 65%. Another study was also conducted by Roy (2014) showing the impact of setting arrangements on students learning in secondary school. This study describes the existing seating arrangements in Bangladeshi schools, which were believed to play a constructive role in encouraging student learning in the classroom. In accordance, collaboration between teachers, school authorities, education boards, and the government is needed to improve seating arrangements in schools to make effective teaching and learning practices. Further research conducted by Fadhilah (2015) showed that variations in student seating arrangements increase the primary students' interest and motivation to learn, which should be used according to needs. Choosing the right seat can optimize teaching and learning activities. The study results prove that the use of variations in seating arrangements can increase students' interest and motivation in learning in elementary schools.

Regarding the gap above, various efforts need to be carried out so that the quality of the learning process can be maintained and improved. One solution to solving these problems is classroom management with seating arrangement. Variation in seating arrangement style is a way of arranging student seats that serves as an initial strategy to regulate student behavior as desired (Bahdad, 2020). Arrangements are made with different style variations in each lesson. While learning, the styles used in seating arrangements are face-to-face, chevron, cluster, seminar, and conference. The choice of style is adjusted to the field conditions from the survey results. The varied seating arrangements help preventing academic and emotional problems and can bring students from different backgrounds together. Classes managed with variations in seating arrangement styles keep students busy with active and challenging, and can carry out activities that make students captivated and motivated to learn, and set clear rules that students must accept. Compared to traditional seating arrangements, variations in seating arrangements are definitely more exciting and fun for students.

The wide range of teaching materials taught in schools and limited time allocation provided in the curriculum lead to minimal exposure to learning at school (Somsai & Intaraprasert, 2011). Therefore, a selection of teaching materials is needed so that the presentation is in-sync with the available time allocation (Garon-Carrier et al., 2021). The selected material needs to be reorganized according to the students' maturity level (Parker et al., 2011). Schools as organizations engaged in education have aims to educate the nation's life, train students who have mature personalities and are responsible for themselves and society (Puspitarini & Hanif, 2019).

Schools are required to optimally organize education, namely to make the students mature so that later they can defend themselves to find their complete identity (Van Den Berg et al., 2012). This is a demanding job and requires some serious effort. As coaches and mentors, teachers must exist and place students above their interests. Teachers must be able to enhance motivation in every interaction with their students (Vikaraman et al., 2017). This is at the same time a question of who the teacher is as the one who needs to realize himself responsible in bringing their level of success (Syaparuddin & Elihami, 2020).

Teachers become one of many factors that can determine the optimal implementation of education in a school. Thus, teachers must play an active role and improve their professional skills since the success in schools is the education backbone are related to teachers' skills to foster and develop the students' skills to become intelligent, competent, and high moral people (Tanveer et al., 2012). Skills related to the profession regarding the teachers' competence and duties in education provide a formulation of fundamental skills for teachers. The basic skills needed to be possessed by teachers include mastery of teaching materials,

management of teaching and learning programs, classroom management, and student success for educational purposes (Hadzigeorgiou et al., 2012).

Structuring the classroom layout means that teachers must be able to design classrooms so that teachers and students become creative, feel comfortable to learn, write, place chairs, and even arrange decorations in the classroom (Guardino & Fullerton, 2010). All classrooms must always be clean and tidy. Therefore, the teacher must control the child's behavior, then direct it to be more productive behavior (Lin, 2011). Hence, optimal learning conditions can be achieved if teachers can manage the structure and infrastructure of education. The formulation of the problem discussed is whether there is an increase in students' learning motivation through changing seats in primary schools and what student kind of activities to be carried out with the seating arrangement. Based on the problems and formulations put forward, this study aims at determining the increase in students' learning motivation through changing seats in primary schools.

THEORETICAL FRAMEWORK

Student's Learning Motivation

Motivation is a psychic factor that is non-intellectual; its distinctive role is growing passion, feeling happy, and being eager to learn (Kholifah et al., 2020). Students who have strong motivation will have much energy to carry out learning activities. Part of this learning motivation has the term "Active Driving Force of Learning" (Kilari, 2017). This term describes a dramatic active thinking mover, occurring when a person responds to a problem. A person's motivation will be encouraged to achieve the goals and objectives and be aware of the goodness, interests, and benefits (Hasana, 2019). Indicators of learning motivation are as follows: (1) ideals, a target to be achieved. The development of morals accompanies the emergence of one's ideals, will, language, and life values, which lead to personality development (Lee et al., 2019); (2) Learning ability; each student has different learning abilities. This is measured by the development level of students' thinking, where students whose level of development of concrete thinking is not the same as students who have reached the level of development of rational thinking (Canrinus et al., 2012); (3) The condition of students can be seen from their physical and psychological conditions because students are creatures consisting of a psychophysical unit. The physical condition of students is known more quickly than the psychological condition. This is because physical conditions show clearer symptoms than psychological ones (Vaino et al., 2012); (4) Environmental conditions, which are elements outside the students, namely the family, school, and community environment. The physical environment of the school makes students feel comfortable to learn. Psychological and emotional needs also require attention, for example, the need for security, achievement, respect, and recognition that must be met so that learning motivation arises and can be maintained (Yustina et al., 2020); (5) Dynamic elements in learning, which are the unstable

elements in learning, for example, passion for learning, student emotions and others. Students have feelings, attention, willingness, memory, and thoughts that change the learning process, sometimes strong or weak (Fajari, 2020); (6) The teacher's efforts to teach students, which are related to their 'teaching preparation, starting from mastering the material, how to convey it, attracting students' attention and evaluating students' learning outcomes (Jhon et al., 2021).

Classroom management

Classroom management is an activity carried out by teachers to create classroom conditions that allow a conducive and maximum learning process to occur (Evertson & Weinstein, 2013). Teachers carry out activities to create classroom conditions that allow a conducive and maximum learning process (Doyle, 2013). The learning environment is related to the people and facilities. Classroom activities requires collaboration between teachers, students and adequate facilities. The arrangement of classroom facilities aimed at ensuring accessibility, affordability and convenience of teachers and students to utilize learning tools and resources and to move from one side to the other, and to build teacher and student interactions and also students-students interactions (Manning & Bucher, 2013).

Student Seating

The physical learning environment has an important influence on the results of learning (Luwesti et al., 2017). A favorable physical environment meeting the minimum requirements supports the intensity of students' learning process and has a positive influence on the achievement of teaching objectives (Bahdad, 2020). One of the physical environments is the seating arrangement. Student seating arrangements significantly impact motivation, behavior, and interactions between fellow students and teachers (Ahmad & Siregar, 2020). The seating arrangement is a method to arrange student seating to enhance students' motivation and learning outcomes (Sartika, 2020). Student seating arrangements are carried out to fulfill four objectives: (1) Accessibility, which makes students easy to reach available learning tools and resources; (2) Mobility makes students and teachers easy to move from one part to another in the learning process; (3) Facilitating interaction and communication between teachers and students as well as between students; (4) Enabling students to work together in a group (Amelia et al., 2017). Dividing the seating arrangement model into three models, namely the traditional arrangement, the Horseshoe arrangement (horseshoe shape or the shape of the letter "U"), and the modular arrangement (group form) or the modification of three other forms of student seating arrangement in other terms, namely rows (rows), clusters (groups), and circles (circular). The seating arrangement used in this study is a variation of the seating arrangement style and the traditional seating arrangement by arranging student benches in various ways in each lesson. The style variations used include face-to-face, chevron, cluster, seminar, and conference styles.

METHOD

Research Design

This study employs a quantitative research. An experimental research method was used with a model post-test-only control design (Sung et al., 2017). In this design, there are two groups, each of which is selected randomly (R). The first group was given treatment (X) as the experimental group, and the latter as the control group (Y). The effect of treatment was analyzed by different tests using a statistics *t-test*. There was a significant difference between the experimental and control groups, so the treatment given had a significant effect. The research design is presented in the following Figure 1;

$$egin{array}{|c|c|c|c|}\hline R_1 & X & O_1 \\ \hline R_2 & O_2 \\ \hline \end{array}$$

Figure 1. Research design "posttest control design"

Description:

 R_1 = Experimental group

 R_2 = Control group

X = Treatment

 O_1 = Post test results after treatment

 O_2 = Post test results with no treatment

Population and Sample

The population in this study was obtained from one of the public primary schools in Sumenep, East Java, Indonesia. The samples were 37 fourth-grade students in Class A as the experimental group and 37 fourth-grade students in Class B as the control group. The sampling technique used in this study was a simple purposive sampling; namely, the sampling of members of the population is considered the most appropriate and efficient because purposive sampling is a purposive sample.

Data Collection Technique

The data were collected using: (1) test to collect data information related to student learning outcomes after participating in learning to answer problems, namely increasing students' learning motivation through changing seats; (2) observation, the observation sheet was used to collect data about student activities in learning and teacher's skills in managing seat arrangement and motivating the students; (3) A questionnaire is an information-gathering tool consisting several written questions to be answered written by the respondent. The questionnaire was used to find out about students' learning motivation. Questionnaire sheets were administered to each student to determine their learning motivation in classroom learning. The questions used in the questionnaire consist of positive questions and four alternative answers. The selection of alternative answers was done using Likert scale. The Likert

scale measures attitudes, opinions, and perceptions of a person or group of people about social phenomena (Suárez Álvarez et al., 2018). With Likert scale, the variables to be measured are translated into sub-variables and then the sub-variables are translated into components. Components are used as a starting point for compiling instrument items which can be in the form of questions or statements, which respondents then answer.

Table 1. Learning Motivation Grid

No	Indicator	Indicator Sub Indicator		
	Knowing the	Prepare textbooks and other supplies	1, 11	
1	students' preparation in	Maintain an attitude when the teacher has started to enter the classroom and start learning	5, 12	
	participating in	Pay attention to the teacher in front	2, 9	
	the learning process	Prepare yourself before facing a test or quiz	4, 7	
	Knowing the students' attitude in	Ask the teacher or friends if there is material that you don't understand	3, 8	
2	following the learning process in	Attitude when faced with problems from questions	10, 14	
	the classroom	Paying attention to the teacher when the teacher is explaining the material	6, 16	
		Doing Daily Tests or other Exams	13, 15	
3	Knowing students' attitudes towards	The influence of the environment (friends) on the lesson	22	
	lessons	The attitude of students to get good grades	24	
4	Knowing students' reactions to lessons	The effect of guidebooks such as worksheets or textbooks on students	19	
		Student actions toward bad and good grades	18, 21	
_	attitudes towards	Students' attitude towards the lesson before the seat position changes	23	
5	changes in seating	Students' attitude towards the lesson after the seat position changes		

Data Analysis Technique

The data analysis technique used in this research is the normality test, homogeneity test, t-test, hypothesis test.

$$COV = \frac{s}{mean} \times 100\%$$

Figure 2. Normality test formula

The condition is that the data of the two variables are said to be normally distributed if the coefficient of variation value is less than 20% (COV < 20%).

$$t = \frac{\overline{X_1} - \overline{X_2}}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

Figure 3. t-test formula

Description

t = t value

 \bar{x}_1 = The average value of the experimental class learning outcomes

 \bar{x}_2 = The average value of the control class learning outcomes

 s_1^2 = Experimental class variance value

 s_2^2 = Control class variance value

 n_1 = Number of experimental class samples

 n_2 = Number of control class samples

RESULTS

The data obtained at the school are presented in tabular form and analyzed to prove the truth of a hypothesis formulated. as follows:

Experimental Class

a. Determining the largest and smallest scores

Highest Score = 90

Lowest Score = 50

b. Determining the Range (R)

$$R = n_{max} - n_{min}$$

$$= 90 - 50$$

$$= 40$$

c. Determining the Class Interval (k)

k = 1 + 3.3 log
$$n$$

= 1 + 3.3 log 37
= 1 + 3.3 . 1.57
= 1 + 5,17
= 6.17 = 7 (result was rounded)

d. Determining the Length of the Interval (p)

p =
$$\frac{\Lambda}{k} = \frac{40}{7}$$

=5.71= 6 (result was rounded)

e. Creating distribution table

Table 2. Frequency Distribution of Experimental Class

No.	Class Interval	Many Numbers (fi)	The midpoint (xi)	fi. xi	Xi²	fi.xi²
1.	50 – 55	4	52.5	210	2,756.25	11,025
2.	56 – 61	3	58.5	175.5	3,422.25	10,266.75
3.	62 – 67	4	64.5	258	4,160.25	16,641
4.	68–73	7	70.5	493.5	4,970.25	34,791.75

5.	74–79	7	76.5	535.5	5,852.25	40,965.75
6.	80 – 85	6	82.5	495	6,806.25	40,837.5
7.	86 – 91	6	88.5	531	7,832.25	46,993.5
	Amount ∑	37		2,698.5	35,799.75	20,1521.25

f. Calculating the average of the mean

$$\bar{x} = \frac{\sum fixi}{\sum fi} = \frac{2698.5}{37} = 73$$

g. Calculating Standard Deviation(s)

From the frequency distribution table of the research data above, the variance value is using the formula:

$$\begin{split} S_1^2 &= \frac{n(\Sigma(fixi^2)) - \Sigma(fixi)^2}{n(n-1)} \\ S_1^2 &= \frac{37(201521.25) - (2698.5)^2}{37(37-1)} \\ S_1^2 &= \frac{7456286.25 - 7281902.25}{37.36} \\ S_1^2 &= \frac{174384}{1332} \\ S_1^2 &= 130.92 \\ S_1 &= \sqrt{130.92} \\ S_1 &= 11.44 \end{split}$$

So, the standard deviation (S) obtained was 11.44.

h. Normality test

$$COV = \frac{s}{mean} \times 100 \%$$
$$= \frac{11.44}{73} \times 100 \%$$
$$= 0.16 \times 100\%$$
$$= 16 \%$$

The data of the two variables are said to be normally distributed if the coefficient of variation value is less than 20% (COV < 20%). Thus, the experimental class had normal characteristics because 16% < 20% or COV < 20%.

Control Class

a. Determining the largest and smallest scores

b. Determining the Range (R)

R =
$$n_{max} - n_{min}$$

= 75 - 46
= 29

c. Determining the Class Interval (k)

$$k = 1 + 3.3 \log n$$
$$= 1 + 3.3 \log 37$$

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d. Determining the Length of the Interval (p)

p =
$$\frac{R}{k} = \frac{29}{7}$$

= 4.14= 5 (result was rounded)

e. Creating distribution table

Table 3. Frequency Distribution of Control Class

No.	Class Interval	Many Numbers (fi)	The midpoint (xi)	fi. xi	Xi ²	fi.xi²
1.	45 – 50	3	48	144	2,304	6,912
2.	51–55	3	53	159	2,809	8,427
3.	56–60	4	58	232	3,364	13,456
4.	61–65	3	63	189	3,969	11,907
5.	66–70	9	68	612	4,624	41,616
6.	71–75	15	73	1095	5,329	79,935
	Amount ∑	37		2431	22,399	162,253

f. Calculating the average of the mean

$$\bar{x} = \frac{\sum fixi}{\sum fi} = \frac{2431}{37} = 66$$

g. Calculating Standard Deviation(s)

From the frequency distribution table of the research data above, the variance value is using the formula:

$$S_{1}^{2} = \frac{n(\sum(fixi^{2})) - \sum(fixi)^{2}}{n(n-1)}$$

$$S_{1}^{2} = \frac{37(162253) - (2431)^{2}}{37(37-1)}$$

$$S_{1}^{2} = \frac{6003361 - 5909761}{37.36}$$

$$S_{1}^{2} = \frac{93600}{1332}$$

$$S_{1}^{2} = 70.27$$

$$S_{1} = \sqrt{70.27}$$

$$S_{1} = 8.382$$

So the standard deviation (S) obtained was 8.382

h. Normality test

$$COV = \frac{s}{mean} \times 100 \%$$

$$= \frac{8.382}{66} \times 100 \%$$

$$= 0.13 \times 100\%$$

$$= 13 \%$$

The data of the two variables are said to be normally distributed if the coefficient of variation value is less than 20% (COV < 20%). Thus, the control class had normal characteristics because 13% < 20% or COV < 20%.

Homogeneity Test

The homogeneity test was calculated using the following formula.

$$F = \frac{\text{Highest Score}}{\text{Lowest Score}} = \frac{11.44}{8.382} = 1.36$$

To find out whether it is homogeneous or not, the F_{count} must be compared with the F_{table}, with:

F table = db numerator =
$$n-1$$

= $37-1$
= 36
F table = db denominator = $n-1$
= $37-1$
= 36
So, Ftable = 1.72 .

Level of significance (a) = 0.05 or 5%

if: $F_{count} > F_{table}$, inhomogeneous

if: F_{count} < F_{tabel}, homogeneous (Murti et al., 2019)

The results of the calculation of the homogeneity test show that the value of F_{count} = 1.19, while from the F distribution data with dk the numerator = 36, and dk the denominator 36 was obtained F_{table} = 1.72. Based on these calculations, F_{count} < F_{table} or 1.19 < 1.72 at a significant level of 5%. So it can be concluded that the data had the same or homogeneous variance.

t-test

After conducting the normality test and homogeneity test, the data in this study were declared regular and homogeneous. The next step is to prove the truth of the hypothesis through a t-test.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

$$= \frac{73 - 66}{\sqrt{\frac{130.92}{37} + \frac{70.27}{37}}}$$

$$= \frac{7}{\sqrt{3.5383 + 1.8991}}$$

$$= \frac{7}{\sqrt{5.4374}}$$

$$= \frac{7}{2.331}$$

$$= 3.0030$$

Based on the calculated value using the t-test formula, the value was 3.0030. Furthermore, in testing the hypothesis, it is determined by the following steps:

a. Determining the hypothesis to be tested.

 H_0 = 0, There is no increase in students' learning motivation through changing seats in primary school. (H_0 = 0)

 H_a : There is an increase in students' learning motivation through changing seats in primary school. ($H_a \neq 0$)

b. Determining the level of significance and degrees of freedom.

The significant level used is 5% or 0.05, and the degrees of freedom are:

$$dk = n_1 + n_2 - 2$$

$$= 37 + 37 - 2$$

$$= 72$$

c. Determining the value of tcount and ttable

 t_{table} is obtained from the calculation of the t test formula above and the value of t_{count} was obtained= 3.0030.

With a significant degree (a) = 0.05 and dk = 72, results obtained:

$$t_{table} = \frac{\alpha}{2}$$
; n-1
= $\frac{0.05}{2}$; 72-1
= 0.025; 71
 $t_{tabel} = 2.2899$

d. Defining the rejection area.

With a significant degree (a) = 0.05 and dk = 72, results obtained t_{tabel} = 2.2899 so that the test criteria were obtained as follows; H_0 is accepted if -2.2899< t_{count} < 2.2899. H_a is accepted if t_{count} 2.2899> t_{count} > -2.2899 because t_{count} > t_{table} atau 3.0030 > 2.2899 then t_0 was rejected and t_0 was accepted.

DISCUSSION

Learning models are essential because they will make students easier to understand a subject. Based on the research results, the researchers got entirely satisfactory results, which can be seen from the result of data analysis using the t-test method to see how much learning motivation and seating arrangement affect learning outcomes with the technique of changing seating arrangement before and after treatment.

Based on the data analysis that has been carried out, it was obtained that $t_{count} = 3.0030$ and the value of t_{table} with DK = n1 + n2 - 2 = 72 and a significant level of 5% was obtained $t_{table} = 2.2899$. Since t_{count} was greater than t_{table} ($t_{count} > t_{table}$), which was 3.0030 > 2.2899 at a significant level of 5%, it indicated that there were differences in learning ability results. In conclusion, the implementation of seating arrangement and how it enhanced learning motivation affected significantly positive learning outcomes. Furthermore, based on the results of observing activities during the teaching and learning process, the results had been analyzed, showing that students were active during the teaching and learning process. This was evident from the

five indicators used as criteria to assess student activity observed by researchers showed that most students were active. In general, seating affected students' learning outcomes by considering the position in front, behind, right or left side, and nearby peers. Sartika (2020) states that seating arrangements are included in the description of the problem of classroom arrangement. The seat affects students in learning, such as if the seat is good, not too big, not too low, round, rectangular, according to the condition of the student body, then student will be able to study quietly. A learning environment, one of which is seating arrangements, can make students comfortable to follow the learning process. Ahmad & Siregar (2020) suggest that the classroom affects the process and student learning outcomes. Comfortable classrooms need to be created so that students do not feel bored, which could result in suboptimal learning process. So, it can be concluded that seating arrangement should consider the position on the front, behind, right or left sides to result in optimal student learning outcomes.

CONCLUSION

This study concludes that there was an increase in primary school students' learning motivation through changing seats. on the findings showed that t-test results were better than (>) at a significant level of 5% with a value of 3.0030 > 2.2899. After calculating the average percentage of active students during learning activities, it can be inferred that the more often the seating arrangement used, it will increase students' motivation. This is believed to be significant, which means that the fact does not only apply to the research samples but also to the population. The success of teacher's efforts in creating adequate learning conditions requires: (1) knowing precisely the factors that can support the creation of favorable conditions in the teaching and learning process; (2) Knowing the expected problems that might disrupt the learning climate; (3) Mastering appropriate seating arrangements and knowing when to use them. Hence, it is expected that school should pay attention to the learning activities being planned to achieve desired learning outcomes using seating arrangement.

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REFERENCES

Ahmad, S., & Siregar, N. (2020). Pengaturan Tempat Duduk Untuk Meningkatkan Motivasi Belajar Siswa Pada Pembelajaran Tematik Di Kelas 3 Madrasah Ibtidaiyah An-Nizham Kota Jambi [Seating Arrangements To Improve Student Motivation in Thematic Learning for Third Graders of Madrasah Ibtidaiyah An-Nizham Jambi City]. UIN Sulthan Thaha Saifuddin Jambi.

Amelia, C., Achmad, A., & Marpaung, R. R. T. (2017). Formasi Tempat Duduk terhadap Hasil Belajar Siswa Kelas 7 [Seating Formation toward Seventh Graders Learning Outcomes]. Jurnal Bioterdidik: Wahana Ekspresi Ilmiah, 5(7).

- Bahdad, M. (2020). Pengaruh pengaturan tempat duduk terhadap hasil belajar siswa kelas 11 di SMK Negeri 1 Makassar [The effect of seating arrangements on the learning outcomes of eleven graders at SMK Negeri 1 Makassar]. Universitas negeri makassar.
- Canrinus, E. T., Helms-Lorenz, M., Beijaard, D., Buitink, J., & Hofman, A. (2012). Self-efficacy, job satisfaction, motivation and commitment: Exploring the relationships between indicators of teachers' professional identity. *European Journal of Psychology of Education*, 27(1), 115–132.
- Doyle, W. (2013). Ecological approaches to classroom management. In Handbook of classroom management (pp. 107–136). Routledge.
- Evertson, C. M., & Weinstein, C. S. (2013). Handbook of classroom management: Research, practice, and contemporary issues. Routledge.
- Fadhilah, L. N. U. R. (2015). Variasi Pengaturan Tempat Duduk Siswa Dalam Upaya Meningkatkan Minat Dan Motivasi Belajar Pada Mata Pelajaran IPA Kelas 4 Di SD Negeri 1 Sawahan Tahun Ajaran 2014/2015 [Variations in Student Seating Arrangements as an Effort to Increase Interest and Motivation in Learning in Science Subjects for Four Graders at SD Negeri 1 Sawahan of 2014/2015 Academic Year]. Universitas Muhammadiyah Surakarta.
- Fajari, L. E. W. (2020). Student critical thinking skills and learning motivation in elementary students. *Journal of Physics: Conference Series*, 1440(1), 12104.
- Garon-Carrier, G., Bégin, V., Brendgen, M., Vitaro, F., Ouellet-Morin, I., Dionne, G., & Boivin, M. (2021). Classroom Placement and Twins' Social Behaviors in Elementary School: Providing Empirical Evidence to Inform Educational Policy. *Educational Policy*, 1–26. https://doi.org/10.1177/08959048211015626
- Guardino, C. A., & Fullerton, E. (2010). Changing Behaviors by Changing the Classroom Environment. *TEACHING Exceptional Children*, 42(6), 8–13. https://doi.org/10.1177/004005991004200601
- Hadzigeorgiou, Y., Fokialis, P., & Kabouropoulou, M. (2012). Thinking about Creativity in Science Education. Creative Education, 03(05), 603–611. https://doi.org/10.4236/ce.2012.35089
- Hasana, S. N. (2019). Multimedia development using visual basic for application (VBA) to improve students' learning motivation in studying mathematics of economics.
- Jhon, W., Zubaidah, E., & Mustadi, A. (2021). Challenges in the implementation of character education in elementary school: experience from Indonesia. *Ilkogretim Online*, 20(1).
- Khairani, S., Suyanti, R. D., & Saragi, D. (2020). The Influence of Problem Based Learning (PBL) Model Collaborative and Learning Motivation Based on Students' Critical Thinking Ability Science Subjects in Class V State Elementary School 105390 Island Image. Budapest International Research and Critics in Linguistics and Education (BirLE) Journal, 3(3), 1581–1590.
- Kholifah, N., Sudira, P., Rachmadtullah, R., Nurtanto, M., & Suyitno, S. (2020). The Effectiveness of Using Blended Learning Models Against Vocational Education Student Learning Motivation. International Journal of Advanced Trends in Computer Science and Engineering, 9(5), 7964–7968. https://doi.org/10.30534/ijatcse/2020/151952020
- Kilari, N. (2017). Internet of Things for Business. In International Journal of Engineering and Computer Science (Issue June). https://doi.org/10.18535/ijecs/v6i3.60
- Koutrouba, K., Markarian, D.-A., & Sardianou, E. (2018). Classroom Management Style: Greek Teachers' Perceptions. *International Journal of Instruction*, 11(4), 641–656.
- Lee, J., Song, H.-D., & Hong, A. J. (2019). Exploring factors, and indicators for measuring students' sustainable engagement in e-learning. *Sustainability*, 11(4), 985.
- Lin, Y.-S. (2011). Fostering Creativity through Education A Conceptual Framework of Creative

- Pedagogy. Creative Education, 02(03), 149–155. https://doi.org/10.4236/ce.2011.23021
- Luwesti, A., Syaiful, M., & Ekwandari, Y. S. (2017). Pengaruh Penataan Formasi Tempat Duduk U Terhadap Peningkatan Motivasi Belajar Sejarah [The Effect of Arrangement of U Seating Formation on Increasing Motivation to Learn History]. PESAGI (Jurnal Pendidikan Dan Penelitian Sejarah), 5(4).
- Manning, M. L., & Bucher, K. T. (2013). Classroom management: Models, applications, and cases. Pearson.
- Mensah, F. M. (2014). Using Observation Prompts in the Urban Elementary School Field Placement. Teacher Education in Black Communities Implications for Access, Equity and Achievement, September 2014, 273–292.
- Mubarok, A. (2019). Penataan Tempat Duduk di Kelas dalam Memotivasi Belajar Siswa [Seating Arrangement in Classroom in Motivating Student Learning]. Akademika: Jurnal Manajemen Pendidikan Islam, 1(1), 39–51.
- Murti, E. D., Nasir, N., & Negara, H. S. (2019). Analisis Kemampuan Pemecahan Masalah Matematis: Dampak Model Pembelajaran SAVI ditinjau dari Kemandirian Belajar Matematis [Analysis of Mathematical Problem Solving Ability: The Impact of the SAVI Learning Model in terms of Mathematical Learning Independence]. Desimal: Jurnal Matematika, 2(2), 119–129. https://doi.org/10.24042/djm.v2i2.4072
- Parker, T., Hoopes, O., & Eggett, D. (2011). The Effect of Seat Location and Movement or Permanence on Student-Initiated Participation. College Teaching, 59(2), 79–84. https://doi.org/10.1080/87567555.2010.538766
- Puspitarini, Y. D., & Hanif, M. (2019). Using Learning Media to Increase Learning Motivation in Elementary School. Anatolian Journal of Education, 4(2), 53–60. https://doi.org/10.29333/aje.2019.426a
- Roy, J. E. (2014). The Impact of Seating Arrangement on Students' Learning in Secondary Schools. International Journal of Information, Business and Management, 6(2), 1.
- Sartika, R. D. (2020). Pengaruh pengelolaan tempat duduk terhadap hasil belajar IPA di kelas 5 SD Negeri 53 Kota Pagar Alam [The influence of seat management on science learning outcomes for Five Graders at SD Negeri 53 Pagar Alam City]. lain Bengkulu.
- Seto, S. B., & Bantas, M. G. D. (2020). Pengaruh Motivasi Belajar dan Formasi Duduk Terhadap Hasil Belajar Mata Kuliah Asessmen Pembelajaran Matematika [The Effect of Learning Motivation and Sitting Formation on Learning Outcomes of Mathematics Learning Assessment Course]. Jurnal Cendekia: Jurnal Pendidikan Matematika, 4(2), 526–533.
- Somsai, S., & Intaraprasert, C. (2011). Strategies for coping with face-to-face oral communication problems employed by Thai university students majoring in English. Gema Online Journal of Language Studies, 11(3), 83–96.
- Suárez Álvarez, J., Pedrosa, I., Lozano, L. M., García Cueto, E., Cuesta Izquierdo, M., & Muñiz Fernández, J. (2018). Using reversed items in Likert scales: A questionable practice. *Psicothema*, 30.
- Sung, S. H. H., Shen, J., Jiang, S., & Chen, G. (2017). Comparing the effects of dynamic computer visualization on undergraduate students' understanding of osmosis with randomized posttest-only control group design. Research and Practice in Technology Enhanced Learning, 12(1). https://doi.org/10.1186/s41039-017-0067-3
- Syaparuddin, S., & Elihami, E. (2020). Improving Student Learning Through the Curriculum. *Jurnal Edukasi Nonformal*, 1(1), 56–64.
- Tanveer, M. A., Shabbir, F. M., Ammar, M., Dolla, S. I., & Aslam, H. D. (2012). Influence of teacher on students' learning motivation in management sciences studies. *American Journal of Scientific Research*, January, 76–87.
- Tohidi, H., & Jabbari, M. M. (2012). The effects of motivation in education. Procedia Social and

- Behavioral Sciences, 31(2011), 820–824. https://doi.org/10.1016/j.sbspro.2011.12.148
- Vaino, K., Holbrook, J., & Rannikmäe, M. (2012). Stimulating students' intrinsic motivation for learning chemistry through the use of context-based learning modules. *Chemistry Education Research and Practice*, 13(4), 410–419.
- Van Den Berg, Y. H. M., Segers, E., & Cillessen, A. H. N. (2012). Changing peer perceptions and victimization through classroom arrangements: A field experiment. *Journal of Abnormal Child Psychology*, 40(3), 403–412. https://doi.org/10.1007/s10802-011-9567-6
- Vikaraman, S. S., Mansor, A. N., & Hamzah, M. I. M. (2017). Mentoring and Coaching Practices for Beginner Teachers—A Need for Mentor Coaching Skills Training and Principal's Support. *Creative Education*, 08(01), 156–169. https://doi.org/10.4236/ce.2017.81013
- Yulianti, N. (2020). Pengaruh Pengelolaan Kelas Terhadap Motivasi Belajar Siswa Pada Kegiatan Pembelajaran Mata Pelajaran PAI Kelas 10 di SMA Bakti Ponorogo [The Effect of Classroom Management on Students' Learning Motivation for 10 Grade Students in Islamic Religion Subject Learning Activities at SMA Bakti Ponorogo]. IAIN Ponorogo.
- Yustina, Y., Halim, L., & Mahadi, I. (2020). The Effect of 'Fish Diversity' Book in Kampar District on the Learning Motivation and Obstacles of Kampar High School Students through Online Learning during the COVID-19 Period. *Journal of Innovation in Educational and Cultural Research*, 1(1), 7–14.