



The Influence of Teaching and Learning Interaction on Student Success at Madrasah Aliyah Al-Iklhlas Poso

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Abstract

Teaching and learning interaction is an important factor in determining student learning success. This study aims to determine the level of teaching and learning interaction, the level of student learning success, and the influence of teaching and learning interactions on student learning success at Madrasah Aliyah Al-Iklhlas Poso. This study uses a quantitative approach with a survey method. The research population is all students of Madrasah Aliyah Al-Iklhlas Poso which is 111 people, with a sample of 55 students determined through proportionate stratified sampling techniques. Data collection was carried out through questionnaires, observations, interviews, and documentation. Data analysis using descriptive statistics and simple linear regression with the help of the SPSS program. The results showed that the teaching and learning interaction between teachers and students was in the very high category, while the success of student learning was in the medium category. The results of the regression test showed that there was a significant influence between teaching and learning interactions on student learning success, with a determination coefficient of 36.5%. These findings show that the quality of teaching and learning interactions plays an important role in improving student learning success, although there are still other factors that also affect learning outcomes. Therefore, improving the quality of educational interaction between teachers and students needs to be continuously developed as an effort to improve the quality of learning.

Kata kunci

Interaksi Belajar
Mengajar,
Keberhasilan Siswa

Abstrak

Interaksi belajar mengajar merupakan faktor penting dalam menentukan keberhasilan belajar siswa. Penelitian ini bertujuan untuk mengetahui tingkat interaksi belajar mengajar, tingkat keberhasilan belajar siswa, serta pengaruh interaksi belajar mengajar terhadap keberhasilan belajar siswa di Madrasah Aliyah Al-Iklhlas Poso. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei. Populasi penelitian adalah seluruh siswa Madrasah Aliyah Al-Iklhlas Poso yang berjumlah 111 orang, dengan

sampel sebanyak 55 siswa yang ditentukan melalui teknik proportionate stratified sampling. Pengumpulan data dilakukan melalui angket, observasi, wawancara, dan dokumentasi. Analisis data menggunakan statistik deskriptif dan regresi linear sederhana dengan bantuan program SPSS. Hasil penelitian menunjukkan bahwa interaksi belajar mengajar antara guru dan siswa berada pada kategori sangat tinggi, sedangkan keberhasilan belajar siswa berada pada kategori sedang. Hasil uji regresi menunjukkan bahwa terdapat pengaruh yang signifikan antara interaksi belajar mengajar terhadap keberhasilan belajar siswa, dengan koefisien determinasi sebesar 36,5%. Temuan ini menunjukkan bahwa kualitas interaksi belajar mengajar berperan penting dalam meningkatkan keberhasilan belajar siswa, meskipun masih terdapat faktor lain yang turut memengaruhi hasil belajar. Oleh karena itu, peningkatan kualitas interaksi edukatif antara guru dan siswa perlu terus dikembangkan sebagai upaya peningkatan mutu pembelajaran.

Introduction

Education is interpreted as the process of changing the behavior of students so that they become adult human beings who are able to live independently and as members of society in different individual environments. Education does not only include intellectual development, but is more emphasized on the process of fostering the personality of students as a whole so that children become adults, therefore education is basically a human effort (educator) to responsibly guide children to become adults. This conscious effort is carried out in the form of learning where there is an educator who serves his students to carry out learning activities, and the educator assesses or measures the success rate of the student.

The existence of a change in behavior in a person (student) may be caused by a change in the level of knowledge, skills or attitude, and it is one of the signs that the person has learned, because learning is a complex process that occurs in everyone throughout his life and the learning process occurs because of a person's interaction with his environment.

The teaching and learning process is a process that contains a series of actions between teachers and students on the basis of a reciprocal relationship that takes place in an educational situation to achieve goals, interaction or mutual relationship between teachers and students is the main requirement for the teaching and learning process to take place. Interaction in the teaching and learning process has a broad meaning not only the relationship between teacher and student, but in the form of educational interaction in this case not only the delivery of messages in the form of subject matter, but the instillation of attitudes and values in students who are learning.

Educational interaction can take place, both in the family, school and community environment. However, the interaction that the author refers to here is an educational interaction that takes place specifically with certain provisions in the school environment commonly called *teaching and learning interactions*. Teaching and learning interaction

means that there are interaction activities from teachers who carry out teaching tasks on one side, with learning residents (students, students/learning subjects) who are carrying out learning activities on the other side.¹

But in reality sometimes the interaction process does not run optimally, for example sometimes we get where a teacher in dealing with students is not communicative, dominates the class and is authoritarian which is out of place, students are passive and only used as objects of lessons, so students tend to be lazy and not creative, finally sometimes we find children who after the end of the teaching and learning process do not experience meaningful changes from in terms of understanding and behavior change. Therefore, efforts are required from teachers to manage the interaction process to increase student success. As is the case with the teachers at Madrasah Aliyah Al-Iklhlas Poso, in the process of teaching and learning interactions that have been and are temporarily carried out by educators to students, it seems that the relationship between educators and students is quite harmonious.

In an effort to improve the quality of education that we are developing now, it is necessary to anticipate how the interaction process implemented by educators during the process takes place to support the success of students. Therefore, the above problem is considered necessary by the author to conduct research on how the influence of teaching and learning interactions on the learning success of students at Madrasah Aliyah Al-Iklhlas Poso.

Method

Population

A study can be carried out if there is an object to be studied, and sometimes looking at the whole object of research, this is called a population. Furthermore, to get a concrete picture of the population in relation to this discussion, the author puts forward some of the following opinions:

According to Suharsimi Arikunto, population is the whole object of research. If one wants to research all the elements in research, then the research is population research.²

Sutrisno Hadi gave the meaning of population is the entire population that is intended to be investigated or researched called population or universum. A population is limited to a small number of people or individuals who have the least common traits.³

Therefore, the author can conclude that the population is the number of subjects to be studied. The population in this study is all students at Madrasah Aliyah Al-Iklhlas Poso as many as 111 people consisting of 3 classes, class X totaling 45 people, class XI totaling 30 people, and class XII totaling 36 people and also all teachers totaling 16 people.

¹Abu Ahmadi and Joko Tripasetyo, *Teaching and Learning Strategies*, (Cet. I; Bandung: Pustaka Setia, 1997), 118

² Suharsimi Arikunto, *Research Procedure (An Introduction to Practice)*, (Cet. VIII; Jakarta: Rineka Cipta, 1992), 102

³ Sutrisno Hadi, *Research Methodology*, (Cet. XXI; Yogyakarta: Andi Offset, 1992), p. 45

Sample

The sample is a portion of the population to be studied.⁴ Meanwhile, according to Sugiyono, the sample is part of the number and characteristics possessed by the population.⁵ So a sample is a portion of a population that is taken in a certain way that is thought to have population characteristics.

Sampling in this study uses *probability sampling* techniques where all populations get the same opportunity to be sampled. And more specifically, the researcher uses *the Proportionate Stratified Sampling technique*. Sampling in this way is based on the opinion expressed by Suharsimi Arikunto who said that if the researcher thinks that the population is divided into levels or strata, then sampling should not be done randomly. The existence of strata or levels should not be ignored, and each strata should be represented as a sample.⁶

This method is done by taking samples that are representative of each class level taken proportionally and representatively. Strata class is the basis for determining this sample. So the size of the sample taken from the population of 111 students is 55 people.

Tabel. 1
Pengambilan Sampel Secara Proportionate Stratified Sampling

Populasi	Total Sample	Proportional Number of Samples in Each Class
All Students of Madrasah Aliyah Al-Iklhlas Poso A total of 111 people	55 person	Class I = 45 → 22 Class II = 30 → 15 Class III = 36 → 18
T o t a l	55 person	55 person

Research Instruments

In an effort to obtain accurate data, the author uses research instruments, the existence of instruments in a research is one of the important elements because it functions as a tool or means to collect data that can be held accountable for its truthfulness. In this case, the author uses research instruments, namely:

- Observation notes, which are techniques used by directly observing the state of the field. Observations were used to obtain data on the implementation process of teaching and learning interactions at Madrasah Aliyah Al-Iklhlas Poso. This data was obtained through direct observation in the field. The things observed are the teaching and learning process.
- Interview guidelines, interview techniques are a way of collecting data or information through interviews. The interviews were used to obtain data on the teaching and learning interaction process at Madrasah Aliyah Al-Iklhlas Poso.

⁴Arikunto, *Procedure*, 177

⁵Ibid, 55

⁶Arikunto, *Procedure*, 115

This data was obtained through interviews with teachers or teaching staff as well as students.

- c. Documentation, namely data that is ready. This documentation technique is used to obtain accurate data about the state of Madrasah Aliyah Al-Iklhlas Poso which is used as a research location
- d. Questionnaire guidelines, which are a way of collecting data by providing a number of written questions that are used to obtain information and respondents in the sense of reports about their personality or things that they know. This data was obtained by providing a number of questions to students about the teaching and learning interaction process in their school.

Results and Discussion

Description of Teaching and Learning Interaction at Madrasah Aliyah Al-Iklhlas Poso

The teaching and learning process is an activity between two human elements, where the student (student) as the learning party and the educator as the teaching party will always have educational interaction with students as educational subjects. The success of the teaching and learning process is influenced by several components such as the methods applied, the media used and others. However, in addition to the main components in teaching and learning activities, there are other factors that also influence, namely the relationship between teachers and students.

The reciprocal relationship between teachers and students in the teaching-learning process is a very decisive factor, because no matter how good the lesson material given, no matter how perfect the method used, but if the relationship between teacher and student is not harmonious, it will create an undesirable result. Therefore, to see the interaction of teaching and learning at Madrasah Aliyah Al-Iklhlas Poso, the author made a tabulation of the scores collected through a questionnaire as attached to the attachment of this thesis. Based on the results of the questionnaire distribution, it was found that the total number of questionnaire scores (Σn) = 2150.

Furthermore, to see the average value (\bar{X}) of the total score of teaching and learning interactions at Madrasah Aliyah Al-Iklhlas Poso is as follows:

Table. 1

Average Values and Standard Deviations of Teaching and Learning Interactions
Madrasah Aliyah Al-Iklhlas Poso

	N	Minimum	Maximum	Mean	Std. Deviation
VAR0001	55	32.00	45.00	38.9273	3.3876

Source : Data processing through SPSS program

Based on the table above, the average value of teaching and learning interactions at Madrasah Aliyah Al-Iklhlas Poso = 38.92. While the standard deviation or standard deviation is 3.38. Furthermore, to see the category of high and low teaching and learning

interaction at Madrasah Aliyah Al-Iklhlas Poso, the author compiles a score classification based on the categories that have been determined using the Benchmark Reference Assessment (PAP),⁷ which is as follows:

Table. 2
Classification of Scores to See Teaching and Learning Interactions at Madrasah Aliyah Al-Iklhlas Poso

No.	Interval	Klasifikasi
1.	0 - 10	Very Low
2.	10 - 20	Low
3.	20 - 30	Medium
4.	30 - 40	High
5.	40 - up	Very High

Table. 3
Teaching and Learning Interaction at Madrasah Aliyah Al-Iklhlas Poso

No.	Variable Value (Y)	Frequency	(Y : SMI x 100)	Category
1.	32	4	67	Very High
2.	33	2	69	Very High
3.	34	1	71	Very High
4.	35	2	72	Very High
5.	36	4	75	Very High
6.	37	2	77	Very High
7.	38	7	79	Very High
8.	39	7	81	Very High
9.	40	3	83	Very High
10.	41	11	85	Very High
11.	42	6	88	Very High
12.	43	2	90	Very High
13.	44	3	92	Very High
14.	45	1	93	Very High

Based on the table above, it clearly shows that the teaching and learning interaction at Madrasah Aliyah Al-Iklhlas Poso

⁷ Anas Sujono, *Introduction to Educational Evaluation*, (Cet. I; Jakarta: PT. Raja Grafindo Persada, 1998), 318

With good and harmonious communication between teachers and students, the process of learning and teaching interaction in the classroom can be realized as said by one of the teachers in an interview conducted by the author who said :

Good communication between teachers and students is one of the determining factors in the success of the teaching and learning interaction process, and in this relationship there has been good feedback between educators and students as a component of learning and teaching so that there is good communication between those components.⁸

Based on the information above, it can be understood that one of the factors that determines the success of the teaching and learning interaction process is the existence of a good and harmonious relationship between teachers and students, thus a feedback arises which is one of the processes of interaction in the learning process.

In relation to the matters explained by the author above, the results of the distribution of questionnaires for students about the relationship between teachers and students and the teaching-learning process at Madrasah Aliyah Al-Iklhlas Poso will be presented.

Description of Student Learning Success at Madrasah Aliyah Al-Iklhlas Poso

Student learning success is the results achieved by students in the teaching and learning process in the form of scores given by teachers after evaluations are held. However, it should be noted that, in order to provide grades or determine final grades to students, there are two forms of assessment given, namely: assessment in the form of formative tests and assessments in the form of summative tests.⁹

The summative test aims to assess students' achievement in mastering the subject matter that has been given to them for a certain period of time.¹⁰

In learning that occurs in schools or especially in the classroom, teachers are the party responsible for the results. Thus, teachers should be equipped with evaluation knowledge as a science that supports their task, namely evaluating student learning outcomes. In this case, the teacher is in charge of measuring whether the student has mastered the knowledge learned by the student under the guidance of the teacher in accordance with the formulated goals.

The determination of the grades or results written in the table below is the combination of the value of the formative test results and the summative result value of the average score of the student's report card.

To find out in detail the success of student learning at Madrasah Aliyah Al-Iklhlas Poso , you can see the table below :

⁸Interview Results

⁹Anas Sudiyono , *Introduction to Education* Cet.III; Jakarta PT. Raja Grafindo Persada, 2001.

¹⁰Interview Results

Table. 4
 Average Values of Student Learning Outcomes
 Madrasah Aliyah Al-Iklhlas Poso

No.	Nama Siswa	Kelas	Nilai	Ket.
1	2	3	4	5
1	Nursida	X	8	
2	Syamsul	X	7	
3	Haslan	X	8	
4	Gunawan	X	7	
5	Sartika Dewi	X	8	
6	Zulhidayat	X	8	
7	Farida. S	X	9	
8	Irmawati	X	7	
9	Nursakina	X	8	
10	St. Aisyah Rafi	X	9	
11	Herawati	X	7	
12	Nurlinda	X	8	
13	Fadli	X	8	
14	Liska	X	9	
15	Arman Yahya	X	7	
16	Haslinda	X	8	
17	Dika Hanggara	X	6	
18	St. Safira	X	8	
19	Nursainsi	X	8	
20	Sudarman	X	7	
21	Nurhandayani	X	9	
22	Asmuri Mursyid	X	7	
23	Jusman	XI	7	
24	Darwis	XI	7	
25	Ilyas Kurniawan	XI	8	
26	Bakri Wahid	XI	8	
27	Idris. S	XI	7	
28	Hasmiati	XI	9	
29	Suriati	XI	8	
30	Ampri Hakim	XI	8	
31	Rahmaniar	XI	8	
32	Nurjannah	XI	9	
33	Abdul Aziz	XI	8	
34	Nur Ilmiati Salim	XI	9	
35	Fajar Kadang	XI	7	

36	Abd. Rahman	XI	7	
37	Rosmiati	XI	9	
38	Idris	XII	7	
39	Rahmat Nurman	XII	7	
40	Suhida	XII	8	
41	Yunita	XII	8	
42	Abd. Razak	XII	8	
43	A. Muh. Ridwan	XII	7	
44	Nirwan	XII	7	
45	Hajar Ahmad	XII	8	
46	Putri	XII	8	
47	Afra Wafiqah	XII	8	
48	Muhalis	XII	8	
49	Armawati	XII	7	
50	Sulkifli	XII	7	
51	Selpiani	XII	7	
52	Basuki	XII	8	
53	Taslim	XII	7	
54	St. Walida	XII	9	
55	Irmyanti	XII	9	

Data source : School documents for the 2024/2025 school year

To see the average score (\bar{X}) of student learning success at Madrasah Aliyah Al-Iklhlas Poso, as seen in the following table:

Table. 5

Average Scores and Standard Deviations of Student Learning Success

Madrasah Aliyah Al-Iklhlas Poso

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00002	55	7.00	9.00	7.5818	0.7121

Source : Data processing through SPSS program

Based on the table of student learning success above, the smallest score = 7 and the largest score = 9 were obtained, from these scores obtained the average score (Mean) = 7.58 and the standard deviation (Sd) = 0.71. For details, you can see the frequency distribution table below:

Table. 6
 Data on the Frequency of Student Learning Success
 Madrasah Aliyah Al-Iklhlas Poso

No.	Value (X)	F	P (%)
1.	7	30	54.5
2.	8	18	32.7
3.	9	7	12.7
Quantity		55	100

The table above shows that the tendency of student learning success at Madrasah Aliyah Al-Iklhlas Poso is at a value of 7 with a frequency (F) = 30 and a percentage = 54.5%.

With the success of student learning which is at a score of 7, it can be concluded that the category of student learning success is in the medium category.

The Influence of Teaching and Learning Interaction on Student Learning Success at Madrasah Aliyah Al-Iklhlas Poso

To conduct regression analysis, the raw score of the questionnaire results is first converted to adjust to the scale used on the student's learning success score, because the value of the learning outcome uses a scale of 10, the score from the questionnaire results is converted to a scale of 10 with the raw score formula: ideal maximum score x 10.

Furthermore, to test the hypothesis that there is a significant influence between teaching and learning interaction and student learning success at Madrasah Aliyah Al-Iklhlas Poso, the author tabulated the scores, as seen in the following table:

Table. 7
 Helper Table for Calculating Regression Equations
 About the Interaction of Teaching and Learning on the Success of Student Learning at Madrasah Aliyah Al-Iklhlas Poso

No.	X _i	Y _i	X _i .Y _i	X ²	Y ²
1	2	3	4	5	6
1	9	8	72	81	64
2	7	7	49	49	49
3	9	8	72	81	64
4	8	7	56	64	49
5	9	8	72	81	64
6	7	8	56	49	64
7	8	9	72	64	81
8	9	7	63	81	49
9	8	8	64	64	64

10	8	9	72	64	81
11	9	7	63	81	49
12	7	8	56	49	64
13	8	8	64	64	64
1	2	3	4	5	6
14	9	9	81	81	81
15	8	7	56	64	49
16	9	8	72	81	64
17	7	6	42	49	36
18	8	8	64	64	64
19	9	8	72	81	64
20	8	7	56	64	49
21	9	9	81	81	81
22	7	7	49	49	49
23	8	7	56	64	49
24	8	7	56	64	49
25	9	8	72	81	64
26	8	8	64	64	64
27	9	7	63	81	49
28	8	9	72	64	81
29	9	8	72	81	64
30	8	8	64	64	64
31	7	8	56	49	64
32	8	9	72	64	81
33	7	8	56	49	64
34	8	9	72	64	81
35	7	7	49	49	49
36	8	7	56	64	49
37	8	9	72	64	81
38	9	7	63	81	49
39	8	7	56	64	49
40	7	8	56	49	64
41	8	8	64	64	64
42	8	8	64	64	64
43	8	7	56	64	49
44	9	7	63	81	49
45	9	8	72	81	64
46	7	8	56	49	64
47	8	8	64	64	64
48	9	8	72	81	64

49	8	7	56	64	49
50	9	7	63	81	49
51	8	7	56	64	49
52	8	8	64	64	64
53	9	7	63	81	49
1	2	3	4	5	6
54	8	9	72	64	81
55	9	9	81	81	81
N			3497	3693	3362

The criteria used to test the hypothesis of this study are if $F_{cal} > F_{table}$, H_0 is rejected and if $F_{cal} < F_{table}$, H_0 is accepted.

To find out how big the constant prices (a) and (b) are, it can be seen in the following table:

Table. 8
 Constant (a) and Coefficient (b)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.52	.919	2.74	.008	
	VA	.618	.112	5.52	.000	
	R00001		.604			
			.8			
			2			

Source :SPSS Data Processing

Based on the table above, the price of constant (a) is 2.52 and coefficient (b) is 0.61, so that the regression equation is obtained as follows:

$$\hat{Y} = 2.52 + 0.61 X$$

Furthermore, to conduct hypothesis testing, it can be found with the help of the following list of ANAVA tables:

Table. 9
ANAVA Simple Linear Regression

Sum of Squares	Df	Mean Square	f	Sig.
10.001	1	10.0	30.4	.000
17.381	53	.01	98	
27.382	54	.328		

Source : SPSS Data Processing

Based on the simple linear regression ANAVA table above, it can be seen that $F_{cal} = 30.498$, while F_{table} at a significant level of 0.05/0.01 with numerator degree = 1 and denominator degree = 53 is 4.03/7.17. Because F_{count} is larger than F_{table} , which is $30.498 > 4.03 > 7.17$, H_0 is rejected and H_1 is accepted. Thus, the hypothesis in this study is accepted, this means that teaching and learning interactions affect the learning success of students at Madrasah Aliyah Al-Iklhlas Poso.

Based on the results of the above research, it can be concluded that teaching and learning interactions have an effect on the success of student learning at Madrasah Aliyah Al-Iklhlas Poso. While the correlation coefficient obtained from the relationship between teaching and learning interaction and teacher performance is $r = 0.604$ and the determination coefficient obtained is $r^2 = 0.365$, this means that 36.5% of student learning success is influenced by teaching and learning interaction. While the rest of 63.5% was influenced by other factors.

Conclusion

Based on the results of research and discussion on the influence of teaching and learning interactions on student learning success at Madrasah Aliyah Al-Iklhlas Poso, it can be concluded as follows:

1. The teaching and learning interaction between teachers and students at Madrasah Aliyah Al-Iklhlas Poso is in the very high category. This shows that the mutual relationship established in the learning process has taken place in a communicative, harmonious, and educational manner.
2. Student learning success as measured through the average score of report cards is in the medium category. These findings indicate that although teaching and learning interactions are very good, student learning outcomes are still influenced by various other factors outside of these interactions.
3. There is a significant influence between teaching and learning interactions on the learning success of students at Madrasah Aliyah Al-Iklhlas Poso. The contribution of teaching and learning interactions to student learning success is 36.5%, while

the remaining 63.5% is influenced by other factors such as students' individual abilities, learning motivation, family environment, and learning support facilities.

Thus, teaching and learning interactions have an important role in increasing student learning success, but need to be supported by other factors so that learning outcomes can be more optimal.

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