

# The Relationship Between Communication Skills and Student Learning Activities with the IPAS Learning Outcomes of Grade IV Elementary School Students

Hasna Luthfiyah<sup>1\*</sup>, Eka Titi Andaryani<sup>1</sup>

<sup>1</sup> Elementary School Teacher Education, Faculty of Education and Psychology, Universitas Negeri Semarang, Semarang, Indonesia.

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Corresponding Author:

Hasna Luthfiyah

[hasnaluthfiyah0802@students.unnes.ac.id](mailto:hasnaluthfiyah0802@students.unnes.ac.id)

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**Abstract:** The ability to communicate functions as a guide for students in learning, while active learning leads to knowledge that is actively obtained in the learning process. Both have a great influence on optimal learning outcomes. Therefore, this study examines the relationship between communication skills and learning activity with the learning outcomes of science students in grade IV of SD Cluster Melati, Bulakamba District, Brebes Regency. The method used in this study is quantitative with a type of correlation. The research population consisted of 95 students in class IV. The sampling technique uses saturated sampling, with data collection through observation, interviews, questionnaires, and documentation. This study found that there was a strong relationship between communication skills and learning activity on students' social studies learning outcomes. It is recommended that teachers and schools work together to improve communication skills and learning activity through classroom learning and school activities to support the development of student learning outcomes.

**Keywords:** Communication skills; Social studies learning outcomes; Students' learning activity

## Introduction

Education is an important vehicle in improving the quality of human resources that play a role in the progress of the nation (Tugiah & Jamilus, 2022). In the education system in Indonesia, the curriculum is the main foundation (Ginanjar et al., 2024). The curriculum has an important position in determining the educational process and outcomes. The learning process organized by some schools in Indonesia, especially in the Bulakamba District area in general, has referred to the latest curriculum using the independent curriculum, which is the Independent Curriculum in Permendikbudristek No. 12 of 2024 covering various aspects such as learning flexibility, strengthening the Pancasila student profile, and an approach centered on the needs of students (Kemendikbud, 2024). In this Independent curriculum, there are several updates, one

of which is the integration of Natural Sciences (IPA) and Social Sciences (IPS) subjects into one new subject, namely Natural and Social Sciences (IPAS). With this integration, students are encouraged to think critically, develop complex problem-solving skills, and understand natural and social sciences at the same time. Thus, with the existence of this science and technology subject, it is hoped that it can change the behavior of students well in learning (Indarta et al., 2022).

Wahyuni et al. (2021) that learning is said to be successful and quality if all or at least most (75%) of students are actively involved, both physically, mentally and socially in the learning process. However, it only happens to a few students and of course it is different for each student because the character is also different, thus affecting the learning outcomes. Learning outcomes are student achievements achieved from conscious efforts

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made to achieve changes in knowledge, skills, and attitudes (Rizqi et al., 2023).

Chailani et al. (2024) emphasized that learning is not just about doing activities, but must involve meaningful behavior change. Changes in the learning process of each individual can be influenced by two factors, namely internal factors and external factors, internal factors arise from the individual himself while external factors from outside the individual (Rahmayanti et al., 2022). In Communication skills and student learning activity are an internal part of a student that will have an impact on their learning outcomes.

The learning outcomes of students are certainly inseparable from the teacher's communication skills to support the learning process. A fun and effective learning process will certainly have a good impact on student learning outcomes. One of them is communication skills (Idrus et al., 2024). Communication is a social process used to convey ideas or feelings aimed at influencing others (Ningrum et al., 2021). Therefore, the ability to communicate is needed for the purpose of achieving success in the learning of students. The importance of communication skills is also needed to achieve student learning outcomes, especially in science and science subjects because with students who have communication skills, it will be easier for students to communicate various things related to learning materials, both orally and in writing. In fact, it is still found that students at every level of education still have a low level of communication skills. This low communication ability is due to the limitation of communication skills, it can cause problems such as the delivery of information, ideas or messages that become ineffective and this will affect the learning outcomes of students. Communication skills must be stimulated with learning that is able to explore the abilities possessed by students, such as by conducting discussions because discussions can stimulate students' abilities as well as show students' activeness. This is in line with the opinion (Zulkifli et al., 2023). Students should be able to show their learning activity when the learning process takes place.

In learning activities, the activeness of students plays a role in building knowledge. Students will be active in building an understanding of everything they face in the learning process. Nurwadani et al. (2021) states that active learning means a mental or psychological activity that takes place in active interaction with the environment, which results in changes such as understanding and skills in terms of knowledge and attitude values. Students' activeness includes: activeness to ask questions, express opinions, pay attention to learning time (Rizaldy et al., 2024). In addition to communication skills, learning activity also greatly affects students' learning outcomes because with

active students, both asking questions, actively answering teachers' questions, writing, listening and others. It will indirectly affect the learning outcomes of students (Yandi et al., 2023). In addition, it is also important for students to have high communication skills and learning activity because the content of IPAS lessons has a scope of subjects that delve into human social life (Hasibuan et al., 2022) and the content of IPAS lessons has the purpose of equipping students to be able to interact with the social environment and be able to solve social problems in the surrounding community life (Karsiwan et al., 2023). Therefore, the ability to communicate and actively learn students is needed. This study aims to find out the relationship between communication skills and learning activity and social studies learning outcomes of students in grade IV of SD Cluster Melati Pakijangan, Bulakamba District, Brebes Regency.

## Method

This study uses a quantitative method. This type of research is correlation research. In a study, there is a pattern of variable relationships to be studied. This relationship pattern is called the research paradigm. In this study, there are three variables, namely two independent variables; namely communication skills ( $X_1$ ) and learning activity ( $X_2$ ); the dependent variable is the learning outcome of social studies ( $Y$ ). The following is a description of the research paradigm.

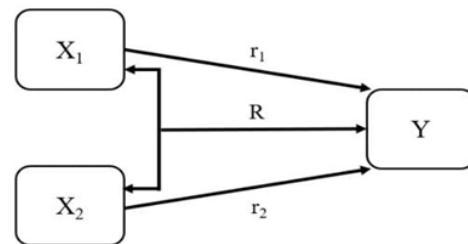


Figure 1. Correlation research design

Information:

- $X_1$  = Ability to communicate
- $X_2$  = Active learning
- $Y$  = Social Science Learning Outcomes
- $r_1$  = Relationship between learning communication and learning outcomes
- $r_2$  = Relationship between learning activity and learning outcomes of science and science
- $R$  = Relationship of  $X_1$  and  $X_2$  with  $Y$

The population in this study is all students in grade IV of SDN Gugus Melati, Bulakamba District, Brebes Regency. Melati Cluster Elementary School is one of the clusters located in Bulakamba District, Brebes Regency. The jasmine cluster was used as the object of research

and the grade IV students in the cluster were used as subjects in the research. This research was carried out in 4 elementary schools in the Melati Cluster of Brebes Regency with the following details:

**Table 1.** Population Data of Grade IV Students of SDN Cluster Melati Pakijangan

It	School Name	Number of students
1	SDN Pakijangan 01	28
2	SDN Pakijangan 02	28
3	SDN Pakijangan 03	18
4	SDN Pakijangan 04	21
Sum		95

Sugiyono (2019) explained that the sample is part of the number and characteristics of the population and can represent the population. The technique used in sampling uses a non-probability sampling technique in the form of a saturated sample, which is a sampling technique involving all members of the population used as a sample, because the number of populations used is relatively small. So that the sample in this study is all grade IV students of SD Melati Cluster, Bulakamba District, Brebes Regency which totals 95 students. The instrument used in the study is a questionnaire or questionnaire to obtain information about students' communication skills and learning activity, the questionnaire used in this study is in the form of a check list, in the form of a rating scale, and the filling is closed and direct. In the questionnaire, communication skills and learning skills used Likert scale data collection. For IPAS learning outcomes, documentation in the form of odd semester PAS scores in the form of grade IV cognitive learning outcomes in the 2024/2025 school year is used.

For quantitative data analysis, the following statistical methods will be used: Descriptive Statistics: The use of descriptive statistics to present basic data such as averages, medians, modes, and standard deviations of test and survey scores; Correlation Analysis: Using Pearson correlation analysis using person product moment to determine the relationship between communication ability and learning outcomes and the relationship between students' learning ability and learning outcomes and learning outcomes: multiple correlation analysis to determine the relationship between communication ability and learning activity with learning outcomes of social studies grade IV SDN Gugus Melati, Bulakamba district, Brebes district: Multiple Regression Analysis: to determine how much change is in the relationship between students' communication skills and learning activity and science learning outcomes.

## Results and Discussion

The first hypothesis test (Table 2) "the relationship between the variables of communication ability (X1) and the learning outcomes of IPAS (Y)" refers to the calculation of the analysis of the hypothesis test which can be seen from the results of the correlation analysis of the product moment, the relationship between communication ability and the learning outcomes of IPAS is obtained by 0.616 (calculated), while the table is at the significance level of 5% with N-95 of 0.202. The results of the analysis showed that the calculation > the table ( $0.732 > 0.202$ ) and the significance value was smaller, namely  $0.000 < 0.05$ , which means that the relationship between the variables was significant. From these results, it can be concluded that there is a relationship between the ability to communicate and the learning outcomes of social science students in grade IV of SD Cluster Melati Pakijangan, Bulakamba District, Brebes Regency. There is a relationship that means that the higher or stronger the communication ability, the better the learning results of science and technology will be obtained or obtained.

**Table 2.** Results of Product Moment Correlation Analysis of X1 and Y Relationship

		Learning outcomes	Communication skills
Learning outcomes	Pearson Correlation	1	0.616**
	Sig. (2-tailed)		0.000
	N	95	95
Communication skills	Pearson Correlation	0.616**	1
	Sig. (2-tailed)	0.000	
	N	95	95

Based on the results of the calculations in table (2), the researcher concluded that there was a strong and significant relationship between the ability to communicate and the learning outcomes of science students in grade IV of SD Gugus Melati, Bulakamba District, Brebes Regency. Communication skills contribute to optimizing social science learning outcomes. Students with good communication skills can easily interact and relate or communicate in learning activities and are even able to increase student participation in the classroom so that the learning results obtained from social studies will also be more optimal. The position and role of communication skills are very important as a supporting factor for the learning outcomes obtained by students. Therefore, as educators, participation is needed to help the development of each student's communication skills in order to improve the learning outcomes of science and science.

Referring to the second hypothesis test research (table 3) "the relationship between the variable of students' learning ability (X2) to the learning outcomes of IPAS (Y)" which can be seen from the correlation analysis of product moment, the relationship between students' learning activity and IPAS learning outcomes is obtained by 0.651 (calculated), while the table is at a significant level of 5% with N=95 of 0.202. The results of the analysis show that the calculation  $>$  the table ( $0.651 > 0.202$ ) and the significance value is smaller, namely  $0.000 < 0.05$ . From these results, it can be concluded that  $H_0$  was rejected by  $H_a$  accepted, so that  $H_a$  was proven that "There is a relationship between the learning acuity of students and the learning outcomes of social science students in grade IV of SD Cluster Melati Pakijangan, Bulakamba District, Brebes Regency".

**Table 3.** Results of Product Moment Correlation Analysis of X2 and Y Relationship

		Learning outcomes	Active Learning
Learning outcomes	Pearson Correlation	1	0.651**
	Sig. (2-tailed)		0.000
	N	95	95
Active Learning	Pearson Correlation	0.651**	1
	Sig. (2-tailed)	0.000	
	N	95	95

With a strong and significant relationship in table (3), it means that the higher or more active the students' learning, the better the learning results obtained. A way to increase student learning activity by recognizing and helping students who are less involved and analyzing the causes and finding solutions that can be applied in order to be able to optimize student activity, which is in

accordance with teaching and student needs. This is very important to optimize the effort and desire of a student to think actively during learning activities (Kamaruddin et al., 2023). Therefore, active learning is very closely related to learning outcomes, apart from being a reference in assessment, active students directly affect their learning outcomes, because basically active students are serious students in learning, so that the learning results they get are the acquisition of values from the student's efforts to the maximum.

Based on the results of the third hypothesis test (Table 4) "the relationship between communication ability and learning activity together with the learning outcomes of science students in grade IV of SD Cluster Melati Pakijangan, Bulakamba District, Brebes Regency" using a double correlation between communication skills and learning activity of students and learning outcomes of science and science, a price of 0.650 (calculated), while the table at a significant level of 5% with N=95 of 0.202. The results of the calculation show that the relationship between communication skills (X1) and students' learning activity (X2) and the learning outcomes of science (Y) that occurs is a relationship which means that the higher the communication ability and learning activity of students, the higher the learning outcomes of students' science and science. The value of 0.650 falls into the strong category in the range of 0.600-0.799. The calculation value is larger than the table ( $0.650 > 0.202$ ) and the significance value is smaller, namely  $0.000 < 0.05$ . So from these results, it can be concluded that there is a relationship between communication skills and learning activity together with the learning outcomes of science and science students in grade IV of SD Cluster Melati Pakijangan, Bulakamba District, Brebes Regency.

**Table 4.** Results of Multiple Correlation Analysis X1, X2 with Y

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.650a	0.500	0.410	7.894

**Table 5.** Results of F Test

Model		Sum of Squares	df	Mean Square	F	Mr.
1	Regression	4.196.872	2	2.098.436	33.671	0.000b
	Residual	5.733.612	92	62.322		
	Total	9.930.484	94			

**Table 6.** Results of Product Moment Correlation Analysis of X2 and Y Relationship

Model		Unstandardized Coefficients		Standardized Coefficients		t	Mr.
		B	Std. Error	Beta			
1	(Constant)	10.877	6.917			1.573	0.119
	X1	0.485	0.112		0.446	4.351	0.000
	X2	0.276	0.105		0.269	2.621	0.010

Based on the results of the calculation in table (4), that communication and learning activity have a

significant relationship with learning outcomes, it means that the higher or stronger the communication

ability and learning activity, the better the learning results of social studies will be obtained. According to Sardiman in Agustin et al. (2021) explained that activeness is a series of physical and mental activities that cannot be separated. In other words, active learning is a learning process carried out by teachers who are physical and mental which is to act and think as well as support the learning of students. In terms of learning agility, students are not only recipients of information, but also the main actors in the learning process. According to Nurhasanah (2023) Communication skills are skills, which are necessary because communication is very important for students to master, so that students can process the information received and convey that information appropriately so that there is precise meaning in learning. Therefore, the communication ability and learning activity of students have contributed to the improvement of IPAS learning outcomes (Hastiwi et al., 2023). The higher the communication ability and supported by high learning activity, the higher the learning outcomes of the students will also be.

## Conclusion

The conclusion of this study is as follows: There is a strong and significant correlation between communication skills and learning activity and social studies learning outcomes of grade IV students of SD Gugus Melati, Bulakamba District, Brebes Regency.

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## Author Contributions

Conceptualization, H.L; methodology, E.T.A; E.T.A. Validation; formal analysis, H.L; research, H.L; H.L. Resources; data curation, H.L: writing—preparation of the original draft, H.L; writing—review and editing, H.L: visualization, E.T.A. All authors have read and approved the published version of the manuscript.

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## Conflict of Interest

The author stated that there was no conflict of interest.

## References

Agustin, S., Sumardi, S., & Hamdu, G. (2021). Kajian Tentang Keaktikan Belajar Siswa Dengan Media Teka Teki Silang Pada Pembelajaran IPS SD. *PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 8(1), 166–176. <https://doi.org/10.17509/pedadidaktika.v8i1.329>

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Chailani, M. I., Fahrub, A. W., Rohmatilah, L. L. F., & Kurniawan, A. (2024). Teori Belajar Humanistik dan Implikasinya dalam Pembelajaran PAI. *Jurnal Pendidikan*, 33(2), 583–594. <https://doi.org/10.32585/jp.v33i2.5287>

Ginanjar, D., Fuad, F., Abduh, M., Mulyana, B. B., Rahman, A. M., & Nuraeni, H. (2024). Perkembangan Kurikulum di Indonesia: Adaptasi terhadap Perubahan Zaman dan Kebutuhan Masyarakat. *Garuda: Jurnal Pendidikan Kewarganegaraan dan Filsafat*, 2(3), 296–306. <https://doi.org/10.59581/garuda.v2i3.3980>

Hasibuan, A. R. H., Aufa, A., Khairunnisa, L., Siregar, W. A., & Adha, H. (2022). Implementasi Kurikulum Merdeka di Sekolah Penggerak SDN 104231 Sugiharjo Kecamatan Batang Kuis. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 7411–7419. Retrieved from <http://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/9513>

Hastiwi, F., Khasanah, U., & Wahyuningsih, S. (2023). Peningkatan Keaktifan dan Hasil Belajar IPAS Menggunakan Model Problem Based Learning Kelas IV SD Muhammadiyah Kleco 2 Tahun Ajaran 2022/2023. *Kalam Cendekia: Jurnal Ilmiah Kependidikan*, 11(2). <https://doi.org/10.20961/jkc.v11i2.75334>

Idrus, N. A., Nurfaizah, N., & Kalsum, U. (2024). Hubungan Persepsi Siswa tentang Kemampuan Komunikasi Guru dengan Hasil Belajar IPAS di Kelas V UPTD DSi Mora Kecamatan Karossa Kabupaten Mamuju Tengah. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 09(2), 3628–3640. <https://doi.org/10.23969/jp.v9i2.14453>

Indarta, Y., Jalinus, N., Waskito, W., Samala, A. D., Riyanda, A. R., & Adi, N. H. (2022). Relevansi Kurikulum Merdeka Belajar dengan Model Pembelajaran Abad 21 dalam Perkembangan Era Society 5.0. *Edukatif: Jurnal Ilmu Pendidikan*, 4(2), 3011–3024. <https://doi.org/10.31004/edukatif.v4i2.2589>

Kamaruddin, K., Setyowati, R., & Agusniarti, Y. (2023). Hubungan Antara Keaktifan Belajar Siswa Dengan Hasil Belajar Mata Pelajaran Ilmu Pengetahuan Sosial (Ips) Kelas V Sdn 5 Singkawang. *Journal of Educational Review and Research*, 6(1), 63. <https://doi.org/10.26737/jerr.v6i1.4447>

Karsiwan, Retnosari, L., Lisdiana, A., & Hamer, W. (2023). Pengaruh Pendidikan Karakter Melalui Pembelajaran IPS Berbasis Kearifan Lokal di Lampung. *Journal of Social Science Education*, 4(1), 39–52. <https://doi.org/10.32332/social-pedagogy.v4i1.6612>

Kemendikbud. (2024). Kurikulum Pada Pendidikan

Anak Usia Dini, Jenjang Pendidikan Dasar, Dan Jenjang Pendidikan Menengah. In *Permendikbud Ristek Nomor 12 Tahun 2024* (pp. 1-26). Jakarta: Kemendikbud.

Ningrum, A. R., & Putri, N. K. (2021). Hubungan Antara Keterampilan Berkommunikasi dengan Hasil Belajar IPS pada Peserta Didik Kelas V SD. *TERAMPIL: Jurnal Pendidikan Dan Pembelajaran Dasar*, 7(2), 177-186. <https://doi.org/10.24042/terampil.v7i2.6410>

Nurhasanah, A. (2023). *Motivasi Belajar Membaca Puisi dengan Media Musikalisasi Puisi pada Siswa Kelas IX 6 SMP Negeri 13 Kota Tangerang Selatan*. [Skripsi: UIN Jakarta]. Retrieved from <https://repository.uinjkt.ac.id/dspace/handle/123456789/74769>

Nurwadani, P. A., Syarifuddin, S., Gunawan, G., & Dusalan, D. (2021). Hubungan Model Pembelajaran Kooperatif Tipe Numbered Head Together (NHT) terhadap Minat dan Hasil Belajar Siswa di Kelas VII SMP Negeri 4 Kota Bima Tahun Pelajaran 2021/2022. *DIKSI: Jurnal Kajian Pendidikan Dan Sosial*, 2(1), 25-38. <https://doi.org/10.53299/diksi.v2i1.100>

Rahmayanti, D., Supriyanto, D. H., & Khusniyah, T. W. (2022). Pengaruh Keaktifan Bertanya Siswa Terhadap Hasil Belajar Siswa Sekolah Dasar. *Jurnal Holistika*, 6(1), 34. <https://doi.org/10.24853/holistika.6.1.34-40>

Rizaldy, M. F. A., Andini, D. W., & Wahdan, M. (2024). Upaya meningkatkan keaktifan belajar menggunakan media quizizz di Kelas I SDN Gunting Bantul. *Prosiding Seminar Nasional Pendidikan Profesi Guru Universitas Sarjanawiyata Tamansiswa*, 3(1). Retrieved from [https://seminar.ustjogja.ac.id/index.php/semnas\\_ppg\\_ust/article/view/2722](https://seminar.ustjogja.ac.id/index.php/semnas_ppg_ust/article/view/2722)

Rizqi, F. N. N. M., Supriyanto, T., Astuti, T., Ratnaningrum, I., & Andaryani, E. T. (2023). Pengaruh Penerapan Kurikulum Merdeka Dan Motivasi Belajar Terhadap Hasil Belajar Ipas Siswa Kelas IV SD Di Gugus Pangeran Diponegoro Kecamatan Pagerbarang kabupaten Tegal. *Journal of Elementary Education*, 5(2), 111-121. Retrieved from <https://journal.unnes.ac.id/sju/jee/article/view/77625>

Sugiyono. (2019). *Combination Research Methods (Mixed Methods)*. Bandung: Alphabeta.

Tugiah, T., & Jamilus, J. (2022). Pengembangan pendidik sebagai sumber daya manusia untuk mempersiakan generasi milenial menghadapi era digital. *Jurnal Sosial Teknologi*, 2(6), 498-505. <https://doi.org/10.59188/jurnalsostech.v2i6.350>

Wahyuni, E., & Fitriana, F. (2021). Implementasi Model Pembelajaran Project Based Learning (PjBL) Dalam Meningkatkan Hasil Belajar Peserta Didik Pada Mata Pelajaran Pendidikan Agama Islam SMP Negeri 7 Kota Tangerang. *Jurnal Kajian Islam Dan Pendidikan Tadarus Tarbawy*, 3(1), 320-327. <https://doi.org/10.31000/jkip.v3i1.4262>

Yandi, A., Putri, A. N. K., & Putri, Y. S. K. (2023). Faktor-Faktor Yang Mempengaruhi Hasil Belajar Peserta Didik (Literature Review). *Jurnal Pendidikan Siber Nusantara*, 1(1), 13-24. <https://doi.org/10.38035/jpsn.v1i1.14>

Zulkifli, M., Jannah, M., & Komaruddin, K. (2023). Strategi Peningkatan Keaktifan Siswa dalam Proses Pembelajaran PAI di SMP IT Al-Baqiyatusshalihat NW Santong. *Jurnal Ilmiah Profesi Pendidikan*, 8(4), 2517-2525. <https://doi.org/10.29303/jipp.v8i4.1666>