METODIK DIDAKTIK:
Jurnal Pendidikan Ke-SD-an
JURNAL UPI Journal homepage: https://ejournal.upi.edu/index.php/MetodikDidaktik/index

The Effect of Implementing Teams Game Tournament Learning Model Assisted by Wordwall in Improving Students' Social Skills

Anisya Rizki Ramadhan, Zainal Arifin, Ridha Hidayani*

[1] Universitas Pendidikan Indonesia, Bandung, Indonesia
*Correspondence: E-mail: anisyarizkiramadhan@upi.edu

ABSTRACT

Social skills are important for students to build positive interactions with others. However, these skills are still low because learning tends to focus on cognitive development. The solution offered is the implementation of a cooperative learning model of the Teams Game Tournament (TGT) type, assisted by Wordwall. Describing and analysing the differences in social skills between students who use the TGT model assisted by Wordwall and students who use the Number Head Together (NHT) model is the purpose of this study. Using a quantitative approach with a nonequivalent control group quasi-experimental design. Data were collected through tests and observations involving 43 fourth-grade students from SDN 177 Cipedes, using the total sampling technique. The data analysis showed that the control group obtained a gain score of 5.06, while the experimental group obtained a gain score of 9.80. The hypothesis test yielded a significance value < 0.005, and the effect size using Cohen's d formula was 1.08, which falls into the large category. Based on those statements, it can be concluded that there is a significant difference in students' social skills (basic aspects of interaction, communication, team building, problem solving) between students who use the TGT model assisted by Wordwall and the NHT model, and the team games tournament learning model has a strong effect on improving students' social skills.

ARTICLE INFO

Article History:

Received 30 November 2025
Revised 15 December 2025
Accepted 15 January 2025

Keyword:

Cooperative Learning Model,
Teams Games Tournament Learning Model,
Wordwall,
Social Skills,
IPAS.

1. INTRODUCTION

Education is the process of knowledge transfer through training, learning, or research to achieve specific goals. Helping educators develop students' social skills so they can face and solve various problems is one of the goals of education (Gunawan & Indriyani, 2021). However, in practice, there are still learning activities that focus on developing students' knowledge potential but do not optimize development in other aspects, such as the affective domain, which relates to social skills. Social skills are the extent to which a student can create and maintain appropriate social relationships, be accepted by others, build and maintain friendships, and end negative relationships.

The development of social skills is necessary because they do not emerge instantly but through a process of habituation shaped by the student's environment (Rahayu et al., 2016). Students with good social skills tend to adapt more easily to their surroundings and develop their potential. This statement is supported by Iswaningtyas (2017), who emphasizes that students with good social skills more readily develop qualities such as self-confidence, cooperation skills, and academic achievement. Students with poor social skills usually have difficulty controlling themselves, showing empathy, and interacting with others (Surya, 2018). (Murtafiah & Sahara, 2019) also argue that students need social skills to meet their social interaction needs and adapt to their surroundings.

The IPAS subject, which covers material on social sciences, is closely related to social skills. This is in line with the learning objectives of IPS, which aim to shape students into good citizens by developing knowledge, social skills, and social awareness that benefit themselves, society, and the country (Puspitaningdyah, 2018). The IPS learning material at the elementary school level not only covers knowledge about social sciences, but also includes various things that are beneficial for students' personal development and relevant to their current and future lives, especially in the context of the diversity of aspects of their living environment (Aulia et al., 2023).

Based on the results of a preliminary study conducted at SDN 177 Cipedes through interviews with fourth-grade homeroom teachers, several problems were identified in the learning process, particularly those that could impede the development of students' social skills. These problems include students who are selective in choosing friends, students who bully and tease their friends, students' who interrupt their friends' conversations, students who hesitate to ask teacher questions when they do not understand the learning material, students who are unable t take responsibility for completing tasks when studying in groups, and students who are unable to respect differences of opinion.

Based on these conditions, efforts are needed to improve social skills by implementing a learning model supported by learning media that can stimulate students' social skill development. Research by Eldiana (2022) shows that the use of the TGT learning model has a significant effect on the social skills of fourth-grade students at SDN 1 Tambahrejo. Another study by Lustari (2021) revealed that implementing the Teams Game Tournament Learning Model improved students' social skills, as evidenced by an increase in observation results from 50% in cycle I to 80% in cycle II. To maximize the success of implementing the cooperative learning model of the teams-game tournament type in developing students' social skills, learning media that can support this learning model, namely Wordwall, are needed. Research by Qalbi et al. (2025) shows that social studies learning in fifth grade, using Wordwall media, significantly improves students' cooperation skills.

One of the many learning models and media that can address the problems stated earlier is the implementation of the Teams Game Tournament (TGT) cooperative learning model, assisted by Wordwall. The team game tournament learning model put students together in small groups of 4-6 people with diverse backgrounds, starting with a class presentation, teams, a game, a tournament, and teams' recognition. The TGT learning model, which incorporates games into the process, encourages students to learn in a more relaxed manner while still emphasizing responsibility, honesty, cooperation, healthy competition, and engagement in learning (Fathurrohman, 2015). It is expected that implementing the TGT cooperative learning model, assisted by Wordwall, in the IPAS subject will improve students' social skills.

2. METHODS

The approach used in this research is quantitative, employing a quasi-experimental design with a nonequivalent control group, comprising two groups: a control group and an experimental group.

Table 1. Quasi-experimental method with a non-equivalent control group research

Group	Pre-test	Treatment	Post-test
Experimental	O_1	X	O_2
Control	O_3		O_4

This research was conducted through three meetings, with 3 JPs (lesson hours) per meeting (35 minutes @ 1 JP). Both groups will be given a pretest to determine their equivalence. Then treatment is given to the experimental group. The next step is to administer a posttest to both groups and compare the posttest scores with the pretest scores. This research involved 43 fourth-grade students at SDN 177 Cipedes as the population. The sample for this research was selected using the total sampling technique. There are two groups in this research: class IV A as the experimental group and class IV B as the control group.

Table 2. The experimental class and the control class

No	Class	Number of Students	Description
1.	IV A	22	Experimental Class
2.	IV B	21	Control Class
	Total	43	

The instruments used are tests (pretest and posttest) of social skills consisting of 32 multiple-choice questions and observation sheets. Normality tests, homogeneity tests, n-gain tests, and hypothesis tests (independent-samples tests) are the data analyses conducted in this research.

This study conducted construct and empirical validity tests—the construct validity test involved two expert judgements, resulting in the instrument being usable with revision. An empirical validity test was conducted through a trial of the instrument with students outside the research sample, namely all 55 fourth-grade students at SDN 212 Harapan.

The data obtained were then processed using Microsoft Excel and SPSS (Statistical Package for the Social Sciences), and the analysis used the Pearson Product-Moment Correlation. The

number of respondents in the trial test was 55 students, yielding an R-squared value of 0.265. Based on the validity test results from SPSS analysis of the 40 test items, 32 items were valid, and 8 were invalid. Based on these results, the research instrument used 32 valid items because they represented each aspect of the social skills being studied and had a sufficiently strong relationship with the measured variable.

The reliability test in this study used the Cronbach's Alpha technique. The results of the reliability test using Cronbach's Alpha or the Alpha coefficient with the assistance of SPSS version 28 are as follows:

Table 3. Reliability Statistics

Cronbach's Alpha	*N of Items*
.863	40

Based on Table 3.5, the reliability test results indicate an alpha coefficient of 0.863, which is higher than the r-table value (0.265), i.e., 0.863 > 0.265. It can be concluded that, overall, the items in the developed instrument are reliable and consistent for repeated use with the same subject under the same conditions, with a very high reliability level.

3. RESULTS AND DISCUSSION

The research was conducted during three meetings in each class (with 3JP (lesson hours) of each meeting (35 minutes @ 1JP)) by implementing the Teams Game Tournament (TGT) cooperative learning model assisted by Wordwall. The pretest was given to 21 students in the control group and 22 students in the experimental group on the same day. The results are:

Table 4. Pretest results for the control and experimental groups.

Group	Total Score	Average	Lowest Score	Highest Score
Control	1656,25	78,86	43,75	96,87
Experimental	1803,12	81,96	65,62	96,87

The control group's pretest results obtained a total score of 1656,25 with an average score of 78,86. The minimum score in the control group was 43,75 and the maximum score was 96,87. In the experimental group, the total score obtained was 1803,12 with an average score of 81,96. The minimum score in the experimental group was 65,62 and the maximum score was 96,87. The posttest was given to 21 students in the control group and 22 students in the experimental group on the same day. The results are:

Table 5. The post-test results in the control group and the experimental group

Group	Total Score	Average	Lowest Score	Highest Score
Control	1762,5	83,92	62,5	96,87
Experimental	2018,75	91,76	78,12	100

The control group's posttest results obtained a total score of 1762,5 with an average score of 83,92. The minimum score in the control group was 62,5 and the maximum score was 96,87. The experimental group obtained a total score of 2018,75 with an average score of 91,76. The minimum score in the experimental group was 78,12 and the maximum score was 100. The experimental and control group gain score results are:

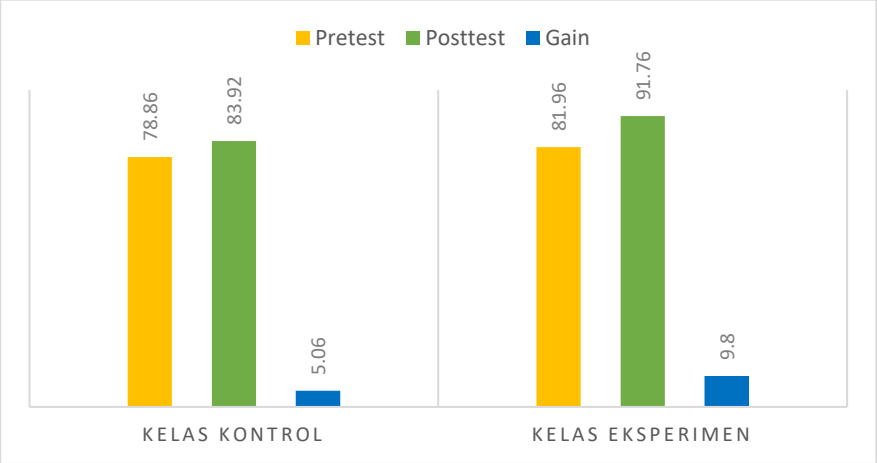

Figure 1. The experimental and control group gain score results are

The control group obtained a gain score of 5,06 and the experimental group obtained a gain score of 9.80. Based on these gain scores, both the control class and the experimental class experienced an increase. However, the increase in the experimental class exceeded that of the control class. The experimental and control group n-gain score results are:

Table 6. The experimental and control group n-gain score results

Group	Total N-Gain	N-Gain Average	N-Gain Percentage (%)
Experimental	12,56	0,57	57,13%
Control	2,75	0,13	13,11%

The experimental class obtained a total n-gain of 12,56, an average n-gain of 0,57, and an n-gain percentage of 57,13%, and was classified as quite effective. Meanwhile, the control class obtained a total n-gain of 2,75, an average n-gain of 0,13, and an n-gain percentage of 13,11%, and was classified as ineffective. This shows that the treatment, implemented through the TGT cooperative learning model assisted by Wordwall in the experimental class, was effective in improving students' social skills. The following shows the differences in the pretest, posttest, and gain scores of the experimental and control groups in graphical form for basic interaction skills:

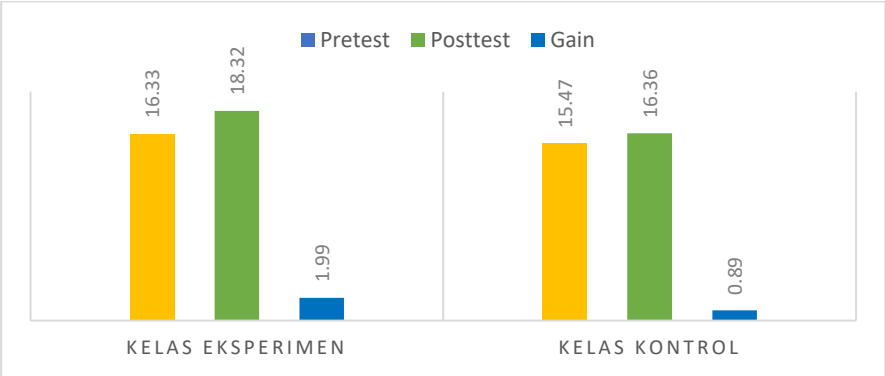

Figure 2. The differences in the pretest, posttest, and gain scores of the experimental and control groups for basic interaction skills

Comparison of pretest and posttest results for basic interaction skills between the control and experimental groups. The gain obtained by the experimental group was 1,99 with a pretest average of 16,33 and a posttest average of 18,32. Meanwhile, the gain for the control group was 0,89, with a pretest average of 15,47 and a posttest average of 16,36. The following shows the differences in the pretest, posttest, and gain scores of the experimental and control groups in graphical form for communication skills:

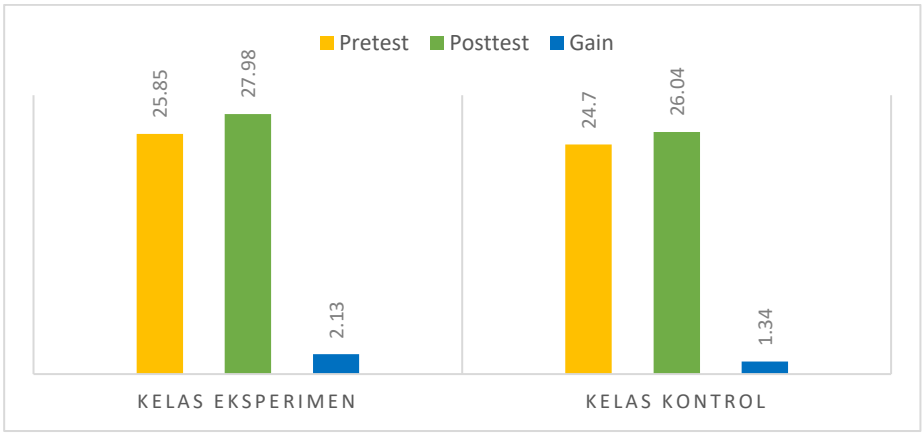

Figure 3. The differences in the pretest, posttest, and gain scores of the experimental and control groups are shown in graphical form for communication

Comparison of pretest and posttest results for communication skills between the control and experimental groups. The gain obtained by the experimental group was 2,13 with a pretest average of 25,85 and a posttest average of 27,98. Meanwhile, the gain for the control group was 1,34, with a pretest average of 24,70 and a posttest average of 26,04. The following shows the differences in the pretest, posttest, and gain scores of the experimental and control groups in graphical form for team-building skills:

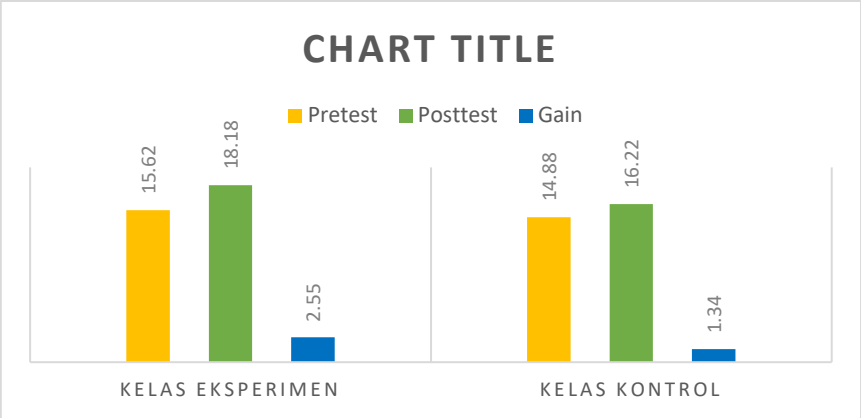

Figure 4. The differences in the pretest, posttest, and gain scores of the experimental and control groups are shown in graphical form for team-building skills

Comparison of pretest and posttest results for team-building skills between the control and experimental groups. The gain obtained by the experimental group was 2,55 with a pretest average of 15,62 and a posttest average of 18,18; meanwhile, the gain obtained by the control group was 1,34 with a pretest average of 14,88 and a posttest average of 16,22.

The following shows the differences in the pretest, posttest, and gain scores of the experimental and control groups in graphical form for problem-solving skills:

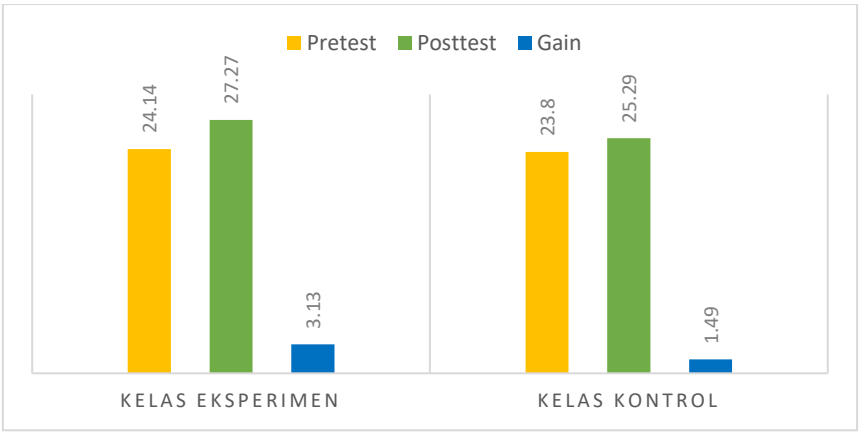

Figure 5. The differences in the pretest, posttest, and gain scores of the experimental and control groups are shown in graphical form for problem-solving skills

Comparison of pretest and posttest results for problem-solving skills between the control and experimental groups. The gain obtained by the experimental group was 3,13 with a pretest average of 24,14 and a posttest average of 27,27; meanwhile, the gain obtained by the control group was 1,49 with a pretest average of 23,80 and a posttest average of 25,29.

The research results based on observation are:

Table 7. The research results based on observation

	Experimental			Control		
	First Meeting	Second Meeting	Third Meeting	First Meeting	Second Meeting	Third Meeting

Score	854	936	996	795	832	879
Average	38,81	42,54	45,27	37,85	39,61	41,53
Percentage	80%	88%	94%	72%	82%	87%

In the first meeting, the control class obtained an average score of 37,85, which increased by 1,76 in the second meeting to 39,61, and by 1,92 in the third meeting to 41,53. In the first meeting, the experimental class obtained an average score of 38,81, which increased by 3,73 in the second meeting to 42,54, and by 2,73 in the third meeting to 42,57.

The normality test results show that the pretest and posttest data of both groups are normally distributed, with the control group obtaining significance values (sig.) of 0,345 and 0,366. Meanwhile, the pretest and posttest data of the experimental group obtained significance values (sig.) of 0,352 and 0,197.

Table 8. Tests of Normality

		Kolmogorov-Smirnov[a]			*Shapiro-Wilk*		
	Kelas	Statistic	df	Sig.	Statistic	df	Sig.
Hasil	Pretest Kelas Kontrol	.131	21	.200*	.950	21	.345
	Posttest Kelas Kontrol	.151	21	.200*	.952	21	.366
	Pretest Kelas Eksperimen	.136	22	.200*	.952	22	.352
	Posttest Kelas Eksperimen	.158	22	.163	.940	22	.197

**. This is a lower bound of the true significance.*

a. Lilliefors Significance Correction

The homogeneity test results showed that the data were homogeneous, with the homogeneity test results obtained by the experimental group and the control group being 0,052 > 0,05.

Table 9. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Hasil	Based on Mean	2.691	3	82	.052
	Based on Median	2.587	3	82	.059
	Based on Median and with adjusted df	2.587	3	65.848	.060
	Based on the trimmed mean	2.698	3	82	.051

The hypothesis test results obtained tcount of -3.589 with a degree of freedom of 41 and ttable of 2.019. Because tcount was negative, the ttable used was also negative, namely -2.019. In this general hypothesis test, it is known that tcalculated > ttable = -3.589 > -2.019, so H0 is rejected, and H1 is accepted. The hypothesis test also yielded a p-value of 0.001 < 0.05, so H0 is rejected, and H1 is accepted. The data analysis shows a difference in social skills in the IPAS subject in grade IV between students who use the Teams Game Tournament (TGT)

cooperative learning model, assisted by Wordwall, and those who use the Number Head Together learning model.

Table 10. Independent Samples Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Nilai	Equal variances assumed	4.258	.045	-3.589	41	.001	-7.907	2.203	-12.356	-3.458
	Equal variances not assumed			-3.552	33.361	.001	-7.907	2.226	-12.434	-3.380

The effect of the Teams Game Tournament (TGT) model, assisted by Wordwall, on improving social skills aligns with the objectives of cooperative learning, which form the foundation of the TGT model. These objectives include encouraging students to improve their learning outcomes, helping them better accept individual differences, and fostering the development of social skills (Fathurrohman, 2015). This learning model provides students with lessons in cooperation and collaboration to prepare them to navigate their social environment.

The cooperative learning model of the Teams Game Tournament (TGT) type is one of the various cooperative learning models introduced by David DeVries and Keith Edwards, emphasizing learning in small groups. According to Slavin (2011), the TGT cooperative learning model emphasizes academic tournaments, using quizzes for both individual and group assessments. Group assessment is based on the team leader's role in guiding their members to compete with other groups studying the same material. During the research process, the implementation of the TGT cooperative learning model was supported by Wordwall media, particularly during the games and tournament phase.

The TGT cooperative learning model is easy to implement and engages all students equally, without differentiating based on status. It encourages student involvement as peer tutors, incorporates game elements to enhance enthusiasm, and includes reinforcement. When combined with Wordwall, the TGT model makes the learning process more engaging and enjoyable. Throughout the learning activities, students not only understand the material but also develop their social skills. Learning activities using the TGT model, assisted by Wordwall, place students into small groups where they must interact, collaborate, help one another, and show mutual respect. This is consistent with Fathurrohman (2015), who states that learning activities incorporating game elements designed within the TGT model provide opportunities for students to learn in a more relaxed environment while fostering responsibility, honesty, cooperation, healthy competition, and increased active participation.

In this model, students take on the role of peer tutors. At the same time, the game and tournament components provide opportunities for them to interact and exchange ideas as they solve problems. Consistent with Veloo and Chairhany (2013), implementing the Team Games Tournament model can enhance students' social skills. During the learning process, students are required to explain the material to group members who have not yet understood it; in other words, they act as peer tutors, which in turn contributes to the improvement of their social skills. The research conducted by Toifur and Kurniawan (2022) states that the

implementation of the TGT learning model has the potential to be effective in providing a significant positive influence on improving students' communication skills.

The influence of the TGT cooperative learning model, assisted by Wordwall, on improving students' social skills is evident in the combination of the model and media, which not only creates an enjoyable learning environment but also more efficiently supports the development of social skills. Throughout the learning process, students can participate in competitive and collaborative games. In addition, the group-based learning structure encourages students to actively collaborate and discuss while completing worksheets and answering questions during the games and tournament stages. Wordwall is simple, visually appealing, interactive, and straightforward, making students feel more enthusiastic during learning (Putra et al., 2021).

The effectiveness of the TGT cooperative learning model, assisted by Wordwall, in improving students' social skills is evident in behaviors such as more intensive peer interactions within small groups, respect for one another, collaboration to complete tasks, and mutual appreciation. These findings are based on the data obtained through pretests, posttests, and observations. The development of social skills is essential because they do not develop instantly; rather, they emerge through habitual practices shaped by the student's environment (Rahayu et al., 2016; Wulandari et al., 2025). Students who possess strong social skills are more likely to be accepted by their social environment and are better able to refine their competencies.

4. CONCLUSION

Based on the results of the research data analysis, it can be concluded that the implementation of the Teams Game Tournament (TGT) cooperative learning model, assisted by Wordwall, in the IPAS subject in grade IV has a significant effect on improving students' social skills. The data analysis also shows differences in students' social skills, including basic interaction skills, communication skills, team/group building skills, and problem-solving skills, between students who learn using the TGT cooperative learning model assisted by Wordwall and students who use the Number Head Together learning model. However, some relevant stakeholders may consider some recommendations:

a. Teachers are encouraged to incorporate the Teams Game Tournament (TGT) cooperative learning model in combination with interactive learning media such as Wordwall into the learning process. The integration of TGT and Wordwall has been shown to enhance students' social skills across multiple dimensions while fostering an active, engaging learning environment. The syntax of the TGT model, together with the game-based features provided by Wordwall, supports students in developing interaction, communication, collaboration, and mutual assistance. Consequently, this approach contributes not only to improving students' cognitive skills but also to developing their social skills.

b. Furthermore, to broaden the scope of inquiry, future studies are advised to apply this learning model to different educational levels, such as junior or senior high school. Such research would allow examination of the consistency and generalizability of the TGT model's effects, as assisted by Wordwall, across varied contexts and student populations.

5. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

6. REFERENCES

Aulia, L. R., Pebriani, Y. N., Arifin, M. H., & Wahyuningsih, Y. (2023). Mengembangkan Keterampilan Sosial dalam Kehidupan Melalui Model Pembelajaran IPS di Sekolah Dasar. *Jurnal Penelitian dan Pendidikan IPS (JPPI)*, *17*(1), 66–74.

Eldiana, Y. E. (2022). *Pengaruh Model Pembelajaran Kooperatif Tipe Team Games Tournament Terhadap Keterampilan Sosial Siswa Pada Pembelajaran Tematik Kelas IV SDN 1 Tambahrejo Pasca Pandemi Covid-19*. Universitas Lampung.

Fathurrohman, M. (2015). *Model-Model Pembelajaran Inovatif: Alternatif Desain Pembelajaran yang Menyenangkan*. Ar-Ruzz Media.

Gunawan, P. A., & Indriyani, L. (2021). Menerapkan keterampilan sosial siswa dengan menerapkan model pembelajaran berbasis masalah. *Jurnal Pendidikan Ekonomi*, *13*(1), 44-49.

Iswaningtyas, V. (2017). Penerapan Metode Bermain Peran untuk Meningkatkan Keterampilan Sosial Anak. *Jurnal Efektor, 4*(1), 41-43.

Lustari, D. (2021). *Peningkatan Keterampilan Sosial Siswa Dengan Menggunakan Model Pembelajaran Kooperatif Teams Games Tournament (TGT) Dalam Pembelajaran Tematik di Sekolah Dasar (Penelitian Tindakan Kelas Pada Siswa Kelas 4 SDN 023 Pasir Sialang)*. Universitas Pahlawan Tuanku Tambusai.

Murtafiah, A., & Sahara, O. A. (2019). Pelaksanaan Bimbingan Pribadi Sosial Dalam Mengembangkan Keterampilan Sosial Siswa Terisolir Di SMP Negeri 5 Banguntapan. *Konseling Edukasi: Journal of Guidance and Counseling*, *3*(2), 1-29.

Puspitaningdyah. (2018). Pengaruh Keterampilan Mengelola Kelas dan Keaktifan Belajar terhadap Hasil Belajar IPS SD. *Joyful Learning Journal*, *7(1)*, 39–47.

Qalbi, M. D., Agusta, A. R., Jannah, F., & Rafianti, W. R. (2025). Meningkatkan Aktivitas, Keterampilan Kerja Sama, Berpikir Kritis dan Hasil Belajar Peserta Didik Menggunakan Model Pembelajaran Cangkal dan Media Wordwall pada Muatan IPS Kelas V SDN Basirih 1 Banjarmasin. *Jurnal Pendidikan Sosial Dan Konseling*, *2*(4), 1277–1285.

Rahayu, D., Hamid, S. I., & Sutini, A. (2016). Peningkatan Keterampilan Sosial Anak Usia Dini Melalui Permainan Tradisional. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini*, *7*(2), 67-77.

Surya, Y. F. (2018). Penerapan Model Number Head Together untuk Meningkatkan Hasil Belajar IPS Kelas IV SD. *Jurnal Basicedu*, *2*(1), 135–139.

Toifur, A., & Kurniawan, W. D. (2022). Efektivitas Metode Pembelajaran Teams Games Tournament (TGT) Terhadap Kemampuan Komunikasi Siswa. *Jurnal Pendidikan Teknik Mesin (JPTM)*, *11*(02), 147–153.

Veloo, A., & Chairhany, S. (2013). Fostering Students' Attitudes and Achievement in Probability Using Teams Games Tournaments. *Procedia - Social and Behavioral Sciences*, *93*, 59–64.