Vol 5 No 1 January 2024

e-ISSN 2722-7790



The Effect of the Teams Games Tournament (TGT) Model and Motivation on Understanding Pancasila Philosophy

Hadi Suryanto^{1*}; Abd. Ghofur²; Akhmad Qomaru Zaman³

^{1,3} Faculty of Social Sciences and Humanities, Universitas PGRI Adi Buana Surabaya, Indonesia ²Faculty of Economics and Business, Universitas PGRI Adi Buana Surabaya, Indonesia ^{1*}Corresponding Email: hsuryanto32hgmail.com, Phone Number: 0857 xxxx xxxx

Article History:

Received: Aug 23, 2023 Revised: Nov 02, 2023 Accepted: Nov 15, 2023 Online First: Jan 02, 2024

Keywords:

Pancasila Philosophy, Learning Motivation, PPKN Study Program, TGT Model.

Kata Kunci:

Filsafat Pancasila, Model TGT, Motivasi Belajar, Program Studi PPKN.

How to cite:

Suryanto, H., Ghofur, A., & Zaman, A. Q. (2024). The Effect of the Teams Games Tournament (TGT) Model and Motivation on Understanding Pancasila Philosophy. *Edunesia*: *Jurnal Ilmiah Pendidikan*, 5(1), 402-423.

This is an open-access article under the CC-BY-NC-ND license



Abstract: The effect of the Teams Games Tournament learning model and motivation on understanding the ideology of Pancasila in the Civics Study Program was studied using a non-equivalent group pretest-posttest research design. The PPKN study program, totalling 30 people, was the subject of this research. Questionnaires and tests are used to gather information about research findings. The research investigation was carried out using the independent sample t-test technique, with a significance level 0.05. The study's findings show that the total count is 5.509. Here, the t value exceeds the 2.048 t table value. These findings suggest that cooperative learning models of the TGT kind effect student learning motivation. Based on the Independent Samples Test on "Assumption of Equal variances," the Sig is known. (2-tailed) of 0.000 < 0.05 to be the basis for decision-making in the Independent Sample T-Test. As a result, there is a relatively significant difference in learning outcomes between students taught using the conventional learning model (control class) and students taught using the TGT learning model. The Pancasila ideology is different in applying the Teams Games Tournament learning model to the standard learning model. Second, the Teams Games Tournament learning style can increase learning motivation because of active participation.

Abstrak: Pengaruh model pembelajaran Teams Games Tournament dan motivasi terhadap pemahaman ideologi Pancasila pada Program Studi PPKn Universitas PGRI Adi Buana Surabaya. Penelitian ini melibatkan 30 orang dalam program PPKN. Ujian dan kuesioner digunakan dalam penelitian untuk mengumpulkan data tentang hasil penelitian. Studi tersebut dilakukan menggunakan teknik uji-t sampel independen dengan tingkat signifikansi 0,05. Hasil penelitian ini mengungkapkan bahwa thitung sebesar 5,509. Nilai thitung disini lebih tinggi dibandingkan dengan ttabel sebesar 2,048. Hasil penelitian menunjukkan bahwa terdapat perbedaan antara model pembelajaran kooperatif TGT dengan motivasi belajar mahasiswa. Berdasarkan Independent Samples Test pada "Assumption of Equal variances" diketahui nilai Sig. (2-tailed) sebesar 0,000 < 0,05 sehingga dapat menjadi dasar pengambilan keputusan pada Independent Sample T-Test. Hasilnya, dapat dinyatakan bahwa terdapat perbedaan hasil belajar yang cukup besar antara siswa yang diajar menggunakan model pembelajaran konvensional (kelas kontrol) dengan siswa yang diajar menggunakan model pembelajaran TGT. Hasil penelitian menunjukkan bahwa ideologi Pancasila mempengaruhi bagaimana menerapkan model pembelajaran Teams Games Tournament dibandingkan dengan model pembelajaran konvensional. Kedua, partisipasi aktif dalam pembelajaran dapat meningkatkan motivasi siswa untuk belajar.



A. Introduction

Student involvement in the cooperative learning paradigm through games in the form of Teams Games Tournaments (TGT). The learning model in the form of games is undoubtedly more interactive. The TGT type of cooperative learning model has the following characteristics: a) Students Work in Small Groups; b) Tournament games; c) Group Awards. The benefits also include increasing student activity so they are more dominant in learning activities, increasing respect for others, and increasing student motivation to learn ongoing lessons.

TGT-type cooperative learning consists of 5 stages, namely: Stages of class presentation (class presentation); Stages of group learning (group learning), Stages of the game (games); Stages of match (class presentation); and Stages of group rewards (group awards) and (team recognition) (Arends, 2012; Lindsey, 1999). This teaching method allows pupils to collaborate to solve an issue (Cacciamani et al., 2018; Ellis et al., 2020; Soto Gómez et al., 2019). Learning activities with games created in the TGT model's cooperative learning model allow students to study more comfortably while encouraging responsibility, cooperation, healthy competition, and learning engagement.

TGT is a method of instruction in which students are placed in study groups of 5-6 individuals with varying abilities, genders, and nationalities. Learning in Groups TGT is a Cooperative Learning strategy that stresses activities and interactions between students to motivate and assist one another in acquiring subject matter and achieving maximum accomplishment. The teaching and learning process will be more effective if the teacher also masters and recognizes the principles of cooperative learning, including 1) Students must perceive that they are sinking and swimming together.; 2) Students have responsibilities towards other students in their group and are responsible for themselves in studying the existing material. 3) Students must believe they are all working toward the same goal; 4) Students must equitably distribute jobs and responsibilities among group members. 5) Students will be given an evaluation or prize, which will impact the group's overall evaluation; 6) Students will take turns leading while learning how to collaborate; 7) Students will be challenged to account for the material learned in cooperative groups individually. (Arends, 2012) Social skills in learning practice must involve students to play an active role in direct experience by involving all aspects of learning (Ajeng, 2021; Supriyanto, 2020; Suryanto et al., 2021).

The cooperative learning approach can enhance students' academic performance and social attitudes through student collaboration (Bonwell & Eison, 1991; Diaconu-Gherasim et al., 2019; Shih et al., 2010). Learning that requires students to collaborate and engage in group projects actively is known as cooperative learning. The interactional approach of cooperative learning can help individuals develop their social skills (Suryanto, 2020; Yang, 2015). One type of cooperative learning that emphasizes student group work in small groups is the TGT cooperative learning paradigm. With the help of this cooperative learning strategy, known as the TGT model, students study in diverse, self-reliant, and positively interdependent small groups of four. Every week or two, an assessment is

conducted to ascertain the team members' academic knowledge. Each team member utilizes an academic worksheet (student worksheet), after which they assist one another in mastering the instructional materials through individual or group discussions or questionand-answer sessions.

Student learning activities are required for TGT cooperative learning, and learning is more enjoyable (Shih et al., 2010). In reality, TGT is carried out in four-person learning teams diverse in performance level, gender, and ethnicity. Students are motivated to complete the tasks given because TGT learning allows them to use their creativity (Markova et al., 2020; Soto Gómez et al., 2019; Suryanto et al., 2021). After the instructor concludes the session, students work in groups to ensure everyone has grasped the material. Finally, each student receives notes and an exam on the subject matter. During the test, students are not allowed to help one another (Arends, 2012; Bonwell & Eison, 1991). Cooperative learning entails doing something together as a group or as a team and assisting one another (Ellis et al., 2020; Tadesse et al., 2020).

Students' interest in participating in the learning process can be raised using models adapted to their needs and the content being taught. The degree of knowledge that is the aim of learning will be easily attained when pupils appreciate what they are learning. (Anderson & Krathwohl, 2001). Each student and team is given a score based on how well they understand the course materials. Students who score perfectly or make considerable progress are rewarded. Occasionally, if a team meets a set of requirements or standards, some or all teams receive an award (Shih et al., 2010; Ukkonen-Mikkola & Varpanen, 2020). Interaction occurs as long as they study together and share ideas that motivate all pupils to do the assigned assignment (Suryanto, Warring et al., 2021; Webb et al., 2017).

Internalization of values is a process of self-improvement. However, the stimulus from the process of instilling values in oneself can be done through institutional doors, namely through existing institutional institutions such as schools, families, and community forums formed by community members. Internalization of values can also be done through a personal door, namely through an individual door, especially the teacher (teacher). Three stages can be done in the internalization process that interacts with students: (1) Educators use the value transformation stage to provide students with information about excellent and bad grades. Only verbal contact in one direction (monologue) occurs between instructors and students throughout the internalization stage; (2) the value transaction stage, namely the value education stage through two-way communication between educators and students or reciprocal interactions; and (3) the transinternalization stage, which is carried out not only verbal communication but also mental attitude and personality (Muhaimin, 1996).

Learning Pancasila Philosophy as character education for every Indonesian citizen is essential in realizing an advanced and dignified Indonesia. Pancasila education is essential, especially for students. Giving Pancasila Education courses to students as a form of character and moral formation by the values of Pancasila every time they open a radicalism course that endangers the state so that every student can understand and practice

the values of Pancasila. According to Soekarno (1965) "Pancasila is the content of the Indonesian nation's essence from generation to generation, which was only covered by Western civilization in the Middle Ages." Thus, Pancasila is not only a state philosophy but, more broadly, the soul of all Indonesian people who have provided life and power to the Indonesian nation, according to history's ideology. Pancasila can guide efforts to pursue a better physical and spiritual life. The Indonesian nation is to achieve justice and live a prosperous life.

Character and moral education in line with Pancasila ideals is one of the primary features of national character education based on Pancasila. Pancasila education teaches how to develop into a morally upright and responsible citizen. Understanding Pancasila philosophy can uplift the nation's morality and identity while educating its citizens. Pancasila Philosophy Learning is learning values that aim to shape positive attitudes and behaviour of humans or students by the values contained in Pancasila. Students are excellent seeds that, in time, will be born world leaders. Therefore, it is necessary to study Pancasila, which will help shape students' personalities. Learning Pancasila is intended to produce individuals who possess political awareness and state insight, as well as national identity and morality, consistent with the moral principles included in the Pancasila precepts.

The government must make the most of Pancasila-based character education available to all levels, including elementary, junior high, and university students. Since Pancasila is the foundation for all Indonesian culture and contains moral lessons and high ideals, primary school students must learn it. Pancasila is also the essence of all Indonesians. Given that the nation's successors are forgetting the significance of Pancasila in their lives due to the fast-expanding technology, it is also critical for kids to learn the Pancasila ideology in high school. Because students are the nation's seeds and future, universities are significant for teaching philosophy. It is believed that by adopting Pancasila, Indonesian citizens will be able to understand, analyze, and respond to the difficulties that society, nations, and governments face. Countries encounter obstacles regularly. Problems of national ideals and goals as outlined in the Preamble to the 1945 Constitution.

One of the problems that occur in Indonesian society today is the values of Pancasila, which are starting to fade in the lives of Indonesian people. Entering a new era, or the era of globalization, the lives of Indonesian people have undergone many changes. The era of globalization has brought many foreign cultures into Indonesia. People lack knowledge of Pancasila's genuine significance, and they only see Pancasila as a symbol of the state. As a result, Pancasila's values in the Indonesian nation's life are eroding.

The many foreign cultures that enter Indonesia contribute to the withering of Pancasila values in the Indonesian nation's essence. The entry of foreign cultures into Indonesia causes people to imitate the behaviour of Westerners. Due to a lack of awareness regarding the elaboration of each Pancasila principle, many people still regard Pancasila solely as the foundation of the state. Of the many consequences caused by the loss of Pancasila values, several alternative solutions can be done to regenerate the faded Pancasila values. Some of these alternative solutions include: 1) the government, society, and the

younger generation must be able to filter out foreign cultures that enter Indonesia. In this case, The government's participation is quite essential. The government can use the media to inform the public about the positive and harmful effects of foreign cultures, and the government must be able to select which foreign cultures are allowed to enter Indonesia so that not all foreign cultures are allowed to enter. 2) The government must continue to maximize the nation's Pancasila-based character education in every school from elementary to junior high, high school, and college; 3) the younger generation must be able to pass on Pancasila's ideal values to the generations below it by demonstrating the importance of cooperation, problem-solving through deliberation, and introducing the nation's culture, in order to instil a sense of nationalism, unity, and unification in the younger generations. Therefore, in this article, the title "Growing Pancasila Values Through Pancasila-Based National Character Education" was chosen. (Therefore, in this article, we will discuss Pancasila-Based National Character Education).

Character education and civic education are carried out to develop private and public character. Personal character traits include moral responsibility, discipline, respect for others, and human dignity. Meanwhile, public spirit, decency, respect for the law, critical thinking, and a readiness to negotiate and compromise are all examples of public character. Branson (1998) states that attention to character and civic education has existed for a long time in the United States. This public character is often called the collective character or national character. However, character education is not only the obligation of Citizenship Education but all subjects and all elements of society to work hand in hand and support each other.

The nation's character is the distinctive quality of a country's collective behaviour, as shown in its knowledge, understanding, taste, intention, and behaviour resulting from thoughts, hearts, feelings, and actions. Intentions, as well as an individual's or group's sport. In order for those who have been endowed with the Pancasila precepts to uphold the following principles: 1. Heart-born character, which includes religiosity and faith, truthfulness, justice, fairness, order, following the law, being responsible, compassionate, brave, taking chances, unwavering, willing to make sacrifices, and a sense of patriotism; 2. Thinking generates intelligent, inquisitive, critical, scientific, creative, inventive, productive, technology-focused, and contemplative people; 3. Sport produces tidy, fit, athletic, dependable, rugged, gregarious, cooperative, determined, competitive, joyful, and persistent characters. Humanity, cosmopolitanism, tolerance, respect for one another, nationalism, mutual aid, togetherness, friendliness, respect, caring, love for the homeland, pride in using Indonesian commodities and language, dynamic, hardworking, and work ethic are a few characteristics that emerge from sentiments and intentions.

David Kerr, on the other hand, claims that Citizenship Education or Citizenship is defined broadly to cover the preparation of young people for their roles and obligations as citizens, as well as the role of education (via schools, teaching, and learning) in that process. Civics is a comprehensive term that refers to training young people to carry out their tasks and obligations as citizens, as well as the function of education in the educational process,

which includes schooling, teaching, and learning. These citizens must be prepared. Budimansyah (2008), in his inaugural speech, stated, "Education's contribution to the development of character that distinguishes a citizen is defined as citizenship education." Furthermore, it is stated that Civics has three roles, the first of which is based on a psychopedagogical development approach, namely Civics as a curricular program in formal (schools/colleges) and non-formal (outside schools) educational institutions that serve as a breeding and empowerment vehicle.

National character is defined as relatively permanent personality traits, distinctive lifestyles, and ways of thinking, acting, and behaving by noble values originating from the culture of the Indonesian nation, which is imbued with the values of Pancasila. Pancasila is the nation's soul and individuality at the same time. Learning the philosophy of Pancasila must be by the potential possessed to become a good and intelligent citizen (competent and good citizen). Second, based on the socio-cultural development approach, Civics is a civic socio-cultural movement that acts as a citizen's self-actualization, both individually and in groups, to participate wisely and responsibly, in line with their rights, obligations, and the socio-cultural environment, through active participation.

Civics is a national political education program for state officials, members, and leaders of social and political groups that comes in various formats. It aims to improve civic knowledge, skills, citizenship abilities, and virtues. It is based on the socio-political intervention method. Citizenship education is a concept experts use to broadly translate citizenship education or civic education in the Indonesian context. Terminologically, Civics are interpreted as political education whose material focuses on the role of citizens in the life of the state, all of which are processed in the context of fostering that role by the provisions of Pancasila and the 1945 Constitution in order to become reliable citizens.

Learning Pancasila's philosophy can contribute to developing the nation's character, and we need to pay attention to three things, namely "curriculum content and learning strategies, civic education classes, and learning environments. First, judging from the content of the curriculum, the following topics are discussed in civic education: Indonesian Democracy, Pancasila Philosophy, Indonesian Geostrategy, Human Rights and Law Enforcement, National Identity, State and Constitution, Citizens' Indonesian Geopolitics, and Rights and Obligations, according to the Director General of Higher Education's Decree No. 43/Dikti/2006. The substance of Civics is the basis for building the character of citizens, which can be accumulated into the nation's character. The task of the teacher/lecturer is to develop material so that it is truly by the demands and developments of the times. At the same time, the school community and society must also be conditioned to become a "spiral global classroom" (Cogan, 1999). In this way, the gaps that cause controversy or paradoxes between what is learned in school and what happens in people's lives can be systematically minimized. It should be realized that character building is the task of all parties, starting from elements of the school (educational institution), parents, and the surrounding community.

TGTs are a simple cooperative learning paradigm incorporating game and reinforcement elements, involving all students, regardless of status, and using students as peer tutors. The features of this model include the following: A) The students, B do small-group work) tournament games, and C) group awards. Students in PPKN study programs find the application of TGT more appealing since it allows them to learn while having fun. For students enrolled in the Civics Study Program, learning in Indonesia is still primarily focused on memorization exercises, which dulls the subject matter (Degeng, 2013). Learning objectives become more challenging, and students become less motivated to finish the tasks they are given when they are not engaged in the activities being taught (Barnes, 2020; Grinfelde & Veliverronena, 2018; Tyng et al., 2017). The presence of motivation as a kind of encouragement from within and outside a person indicates that it exists (Bandura, 1982; Brindley et al., 2009; Donelan & Kear, 2018).

Diligent work (can work continuously for a long time, never stopping until the project is completed), perseverance in the face of adversity (does not give up quickly), displays interest in a variety of topics, prefers to work alone, and is quickly bored being all indicators of learning motivation. (Mechanical, just repetitive, so less creative), can persevere (if you do not believe in something), and do not give up easily (Cheon et al., 2020; Ramadhani et al., 2019; Suryanto et al., 2020). drives, needs, hopes, aspirations, appreciation, and respect (Cheon et al., 2020; Liu et al., 2011). Learning motivation is effected by six factors: Competence, Attitude, Need, Stimulation, Affection, and Reinforcement. Students with high learning motivation will pay close attention to the teacher's offered material in an engaging game style (Broadbent & Fuller-Tyszkiewicz, 2018). Extrinsic elements, such as the desire and desire to achieve, drive the need to study and hope for ideals, and external effects, including monetary incentives, an excellent learning environment, and engaging learning activities, can all contribute to learning motivation. Learning motivation can be effectd by a variety of factors, including (1) the need and drive to achieve, (2) the drive and need to learn, (3) goals for the future, (4) an appreciation of learning, (5) the availability of engaging learning opportunities; and (6) the presence of an envionment that supports learning and helps pupils learn successfully (Bandura, 1982; Fidalgo et al., 2020; Neroni et al., 2019).

This research aimed to discover how the TGT model may be used to form the values of the Pancasila philosophy character by involving students in interactive group work. The character of the Pancasila philosophy is formed in the practice of group work, respecting the opinions of others, being responsible and empathetic, and helping behaviour. This study will also examine how learning the TGT model impacts motivation and learning results. This research is solely focused on comprehending Pancasila philosophy, applying these values in the intensity of group work interactions, and how this learning model can effect their motivation towards understanding the Pancasila philosophy.

B. Method

The quasi-experimental design was chosen because of the diverse backgrounds of the research subjects. Because the respondents' backgrounds differed, a quasi-experimental

method was adopted. The data acquired during the inquiry was obtained using a non-equivalent group pretest-posttest design. In this study, a non-equivalent group pretest-posttest research approach was used. With this design, the experimental and control classes are compared. The following diagrams depict the research design:

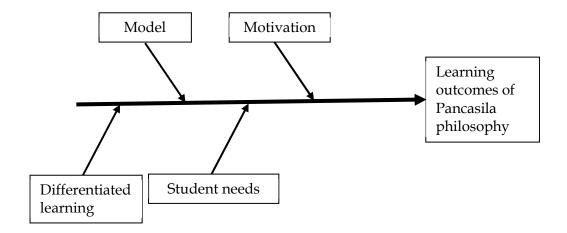


Figure 1. Research design

Information:

NR1 = Experimental group

NR2 = control group

O1&O3 = Pre-test (experimental and control

groups before treatment).

X1&X1 = Treatment

O2&O4 = Post-test (Experimental and control groups after treatment)

While the control class receives treatment via the conventional/lecture route, the experimental class receives therapy utilizing the TGT learning model. The experimental and control groups were given the Pancasila Philosophy lesson.

Research Subject

The Pancasila Philosophy Learning course at PGRI Adi Buana University PPKn Study Program consists of two concurrent classes with a maximum of 30 students each. Using the TGT learning model, the Control Class may have up to 15 students, while the Experiment Class may have up to 15 students. The students in these classes are research subjects.

Research Instruments

Research instruments include surveys and tests. Throughout the study, this tool was utilized to gather data. The test aimed to gather data regarding Pancasila Philosophy's

learning objectives. Additionally, a questionnaire was given to students to ascertain their motivation for taking part in TGT learning.

Data Analysis

The hypothesis was investigated using the SPSS 23 for Windows application and a 0.05 significance level for an independent sample t-test. The experiment was tested to determine if it worked, and control post-test scores differed significantly.

C. Result and Discussion

Result

The study's findings provided details on the learning objectives in the experimental and control classes, elucidating the relative merits of each class. The following table describes the research results' descriptive statistical table:

Table 1. Details of Control Class Motivation in Test

Statistics								
Class Motiva	ation Test							
N Valid								
missing	15							
	59.67							
	58.00							
	50 a							
viation	9,248							
e	85.524							
	29							
ım	50							
um	79							
	Class Motiva Valid missing viation re							

The motivating post-test results for the control class were grouped to generate the following scores: The average (mean) of the 15 students who replied was 59.67; the median was 58; the mode was 50; the standard deviation was 9,248, the variance was 85,524, the data range was 29, and the maximum score was 79.

Table 2. Grouping of Control Class Motivation Test Scores

No	Student scores	Motivation Category	Amount
1	Bigger than 80	Very high/ Very Good	0
2	60 to 79	High/ Good	7
3	50 to 59	Low/ Less	0
4	Less than 49	Very Low/ Very Less	8

It is clear from Table 2 that none of the students fit the description of having an extremely high learning drive. Seven pupils score in the range of 60–79 for high motivation.

Here, there is an increase, where in the pre-test, only two students have high motivation. There are no students with a low level of motivation. There are eight respondents in the category of shallow motivation. Here there is a reduction, where previously there were 11 students in this category.

It is clear from the results that, despite not significantly improving, student learning outcomes are positive when taught by traditional techniques. The post-test results of the students in the control class are displayed in the bar chart below:

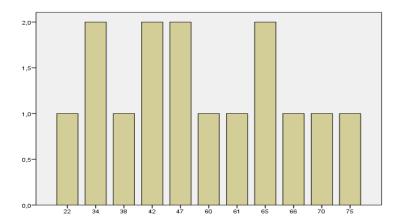


Figure 2. Bar Chart of Control Class Post-Test Scores

The table shows that the control class's highest post-test score was 75, while the lowest was 22. There was one student each who got that score. The highest scores obtained by students were 34,42,47, and 65, with two students each getting that score. After obtaining a score, students will be grouped according to predetermined criteria.

The bar chart below shows the post-test scores of students in the experimental class:

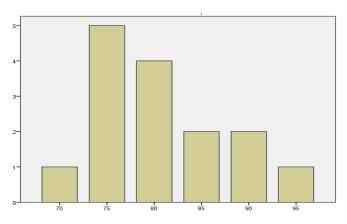


Figure 3. Bar Diagram of Experimental Class Test Scores

Table 3. Details of Experimental Class Motivation in Test

	Statistics							
N								
	missing	15						
Mean.	75.13							
Mediar	78.00							
Mode		66 a						
Std. De	11,313							
Varian	127,981							
Range.		35						
Minim	um.	58						
Maxim	um.	93						

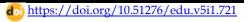
The experimental class-motivated pre-test results were averaged, and the resulting scores were used to calculate the following: Amounts: 35 for the data range; 58 for the minimum score and 93 for the maximum; 11.313% for the standard deviation; 127.581 for the variance; 75.13 for the average value (mean); 78 for the median; 66 for the mode; There was a variation of 127-981 with a standard deviation of 11.313.

Table 4. Grouping of Experimental Class Motivation Test Scores

Not	Student scores.	Motivation Category.	Amount
1	Bigger than 80	Very high/ Very good.	9
2	60 to 79	High / Fine.	6
3	50 to 59	Low / Less.	0
4	Less than 49	Very Low/ Very Less.	0

Students classified as having very high learning motivation increased to nine people, as Table 4 illustrates. Regarding kids who exhibit strong motivation, six have scores between 60 and 79. No pupil has an exceptionally low or low motivation level. As a result, employing the TGT cooperative learning approach improved student learning results significantly.

After explaining in detail the scores for each class, a descriptive statistical table of research results is described in the table below:



The effect of the TGT type cooperative learning model and motivation of the learn Pancasila philosophy

Table 5. The effect of the TGT type of cooperative learning model on learning motivation

	Independent Sample Test									
		for	ene's Test Equation Variance			t-test for E				
	F		Signature	Т	df	Signature (2-tail)	Difference Means	Std. Error Difference	95 Confid Interv Diffe	dence val of
Post Motivation	The same variance is assumed	.326	.573	5.509	28	.000	19,667	3,570	26,980	
Test	Equal variance is not assumed.			5.509	27,693	.000	19,667	3,570	12,350	26,983

Table 5 presents a comparison of the learning motivation of the experimental class with the control class. The Sig value is found in the "Equal variances assumption" part of the Independent Samples Test result table. In the Independent Sample T-Test (two-tailed) of 0.000 0.05, it can be argued that Ha is accepted and H0 is rejected as the foundation for decision-making. In light of this, students who get instruction using the TGT Type Cooperative Learning Model and those who receive instruction using the Standard Learning Model (Control Class) exhibit markedly different motivations to learn.

Furthermore, it is known from the output table above that the tcount is 5.509, and the t-table value.

The Effect of the TGT Learning Model and Motivation of Philosophy of Pancasila

Table 6. The Effect of the TGT Learning Model and Motivation of Philosophy of Pancasila

	Pre-Test Control Class	Pre-Test Experiment Class	Post-Test Control Class	Post Test
N	15	15	15	15
IN -	15	15	15	15
Means	51.65	52.42	63.28	84.64
median	46.00	47.00	60.00	82.00
Mode	50 a	71	34 a	75
Std. Deviation	9,248	10,279	15,848	7.037
Difference	85.524	105,667	251.171	49,524
Distance	29	31	53	25



	Pre-Test Control Class	Pre-Test Experiment Class	Post-Test Control Class	Post Test	
Minimum	50	66	22	70	
Maximum	79	97	75	95	

The comparison table for learning outcomes and motivation components between the experimental and control courses includes standard deviation and mean values. A statistical parameter called the standard deviation is used to assess how equally distributed the sample's data are and how near each data point is to the sample mean. While the control class's standard deviation is also 9.248 and its average value is also 59.67, the experimental class's standard deviation is 9.248, and its average value is 59.67. The standard deviation in the experimental class is 10.279, whereas the average is 79.33. The mean value is more significant when the standard deviation is smaller. Based on the student learning motivation data analysis, the experimental class that employed the TGT cooperative learning model had an average motivation level higher than that of the control group that used the traditional learning model. The classic learning paradigm shows that the experimental class's learning motivation is higher than the control class's. The control class's standard deviation for the learning outcomes variable is 15,848, with an average value (mean) of 51.20. The experimental class's standard deviation was 7.037, with an average of 80.67. Compared to the control class, the average value of the learning outcomes for the experimental class using the TGT-type cooperative learning model is higher. This implies that compared to standard learning models, the TGT-type cooperative learning model significantly impacts learning outcomes.

The impact of the TGT cooperative learning paradigm on Pancasila philosophy.

Table 7. The Effect of the TGT Learning Model on Pancasila Philosophy

				Indep	endent	Sample To	est			
		Levene	e's Test for							
		Equ	ation of			t-test f	or Equality	of Means		
		Va	riance							
									95	%
						Cianatuus	Difference	Ctd Emmon	Confidence	
		F	Signature	T	df	0	Difference Means		Interval of	
			-			(2-tail)		eans Difference	Diffe	rence
									Lower	On
	The									
	same									
V	ariance	16,187	.000	6.581	28	.000	29,467	4.477	20,295	38,638
Post	is									
Test as	ssumed									
Score	Equal									
V	ariance			6 581	19,314	.000	29,467	4.477	20.106	38 827
	is not			0.561	19,314	.000	29,407	4.477	20.100	30,021
as	ssumed.									

The Sig value is known based on the Independent Samples Test output table in the "Assumption of Equal variances". Since the 2-tailed value is 0.000 < 0.05, Ha is accepted, and H0 is rejected as the foundation for the Independent Sample T-Test decision-making process. Therefore, students taught using the TGT learning model and the standard learning model (control class) had significantly different learning results. In addition, Table 6 above indicates that the total count is 6.581. It was discovered that 6.581 > 2.048, or tcount > ttable, with a ttable value of 2.048. Therefore, it is possible to conclude that Ha is accepted and H0 is rejected based on comparing the values of tcount and ttable, suggesting that the learning outcomes of the control class differ significantly. The regular and TGT learning models achieved the experimental class learning outcomes. Thus, the TGT learning paradigm, in conjunction with Pancasila Philosophy Learning, significantly affects the learning outcomes of Pancasila Philosophy Learning fourth-grade students.

Table 8. T-Test Results for Motivating Factors and Learning Objectives are Compared

Independent Sample Test										
Levene's	s Test for Equ	ation of	Variance.	T-test for Equality of Means.						
		F	Signature	Т	df	Signat ure (2- tail)	Differen ce Means	Std. Error Differen ce	Confi Inter	dence val of rence
	The same	.336	.573	5.509	28	.000	19,667	3,570	12,354	26,980
Post Motivat ion Test.	variance is assumed. Equal variance is not assumed.			5.509	27,693	.000	19,667	3,570	12,350	26,983
Post- test learnin -	The same variance is assumed	16,18 7	.000	6.581	28	.000	29,667	4.477	20,495	38,638
g outcom es.	Equal variance is not assumed.			6.581	19,314	.000	29,667	4.477	20.206	38,827

When comparing the t-count findings on learning outcomes and motivational variables, the effect of the TGT type of cooperative learning model is strengthened. The fourth-grade pupils of Pancasila Philosophy Learning benefit from the TGT Type Cooperative Learning model in terms of increased learning motivation and Pancasila

philosophy, according to the findings of the t-count of learning outcomes and learning motivation, with a significant threshold of 0.05.

Discussion

The Effect of the TGT Learning Model on Learning Motivation

The findings showed that the experimental class was more motivated than the control class to learn Pancasila philosophy. This data was derived from learning motivation questionnaire responses. Ten of the fifteen students in the experimental class were found to have shallow motivation based on the pre-test results. Five, however, are classified as having very high and high motivation levels. Using cooperative strategies in collaborative learning boosts students' motivation and interest in the covered material. (Bandura, 1982; Barnes, 2020; Stevanović et al., 2021). Seeing these results, it can be said that the level of student motivation in the control class has a low score. Pancasila philosophy learning is value-based learning where character values are developed, so it is necessary to involve them in direct practice through active and fun discussion and group work so that their collaborative activities become very intense.

This is adversely correlated with the findings of the classification of the experimental class's students' motivation levels at the time of the post-test, which revealed that six students fell into the very high group and nine students into the very high category. It follows that the TGT learning technique raises students' motivation to study. The TGT learning style significantly affects students' motivation to study.

During the trial, the TGT learning model produced a tount of 5.509. Here, tount has a value that is higher than t table 2.048. These findings suggest that the TGT kind of cooperative learning model impacts students' learning motivation in the PGRI Adi Buana University PPKn Study Program. One benefit of cooperative learning is that it can help students become more adept at testing their theories and comprehension and taking feedback (Ellis et al., 2020; Zacharia et al., 2011). Learning that involves students' experience directly makes learning more interesting so that the learning outcomes obtained also increase (Eryadini, 2021; Nurdiana & Suryanto, 2021; Supriyanto, 2020; Sutarum et al., 2021). Additionally, the cooperative learning model impacts motivation because the TGT learning model includes elements that stimulate students' drive for learning. In addition to extrinsic factors like money received after learning, prizes, competitiveness or competition in learning, ego-involution, evaluation results after learning, and praise given, students' intrinsic interest in learning drives their incentive to learn. By educators to pupils who receive the best grades (Suryanto et al., 2021).

The Effect of the TGT Learning Model on Pancasila Philosophy

In order to evaluate the post-test results between the class taught with the conventional learning model and the class taught with the TGT learning model, the researcher took into account the results of the study conducted on the control and experimental classes. The t-test result of 6.581 indicates the compared findings. 6.581 > 2.048,

or tcount > ttable, is the difference concerning the value of the ttable. Moreover, 0.000 is the outcome, as indicated by the value of Sig. (2-tailed). Since the significance value is less than 5% (0.05), there is a significant difference between learning with standard learning models and with the TGT-type cooperative learning model. Pancasila's learning philosophy, when combined with collaborative learning and opportunities for direct participation in learning, can help students increase their creative abilities (Jenkins et al., 2019; Suryanto et al., 2021; Wang & Nickerson, 2017). As a result, the TGT learning paradigm considerably impacts Pancasila Philosophy for fourth-grade students of Pancasila Philosophy Learning.

Based on the study of data using parametric statistical analysis techniques, the students' average learning scores were 80.01 after being in the experimental class. Testing hypotheses show that the TGT learning paradigm significantly effects Pancasila philosophy learning outcomes because game-based learning contains playful levels that encourage learning, and students participating in the Civics Study Program like this technique (Daniela, 2015; Zumbrunn et al., 2019).

The improvement in post-test results indicates that Pancasila Philosophy Learning has benefited from the TGT learning technique. When the pre-test was administered, the average pre-test score for the fifteen students in the experimental class was 53.27, according to the pre-and post-test scores. Following applying the TGT learning paradigm, a post-test was administered, and the average score for 15 students was 80.67. This indicates a 51.43 per cent improvement in learning outcomes. These results indicate that the TGT learning methodology significantly impacts Pancasila Philosophy in the PGRI Adi Buana University Civics Study Program. The following learning objectives regarding knowledge, attitudes, and abilities modifications may be seen and quantified (Darwin, 2011; Nemiro, 2021). Change may be seen as an advancement and growth that is preferable to what was previously known; for instance, going from ignorance to knowledge, being impolite to being kind, and so on.

The Effect of the TGT Model and Motivation on the Pancasila Philosophy

The results revealed a substantial difference between the control class's learning motivation using the conventional learning model and the experimental class's learning motivation using the TGT learning model. Similar to this, notable differences exist between the Pancasila philosophy used in the experimental class with the TGT learning model and the control class with the standard learning model. In order to accomplish learning objectives, the features of students as learning objects must be considered while choosing learning models. (Bandura, 1982; Cheon et al., 2020; Elliot & Moller, 2003). Four of the fifteen students had high or very high motivation levels, while the remaining eleven fell into the shallow motivation level categories. These findings were derived from the study conducted in the control class, which provided the researchers with the results of a student learning motivation questionnaire at the time of the pre-test. Following instruction using traditional learning models, seven of the fifteen students in the control group fit into the high motivation category, and eight fell into the deficient motivation category, according to the

results of the motivation questionnaire. If the teacher dominates the learning while the students are reading, many students become bored and lose interest in learning (Donelan & Kear, 2018; Neroni et al., 2019; Suryanto et al., 2021). This indicates that the traditional learning approach does not impact raising students' learning motivation.

In the experimental class using the TGT learning paradigm, varying degrees of motivation were observed. The answers to the learning motivation questionnaire support this. Based on the pre-test results, it was found that 10 out of the 15 students in the experimental class have shallow motivation. Five individuals are classified as having high or highly high motivation. Six students had high motivation levels, and nine had extremely high motivation levels following therapy, which included using the TGT learning paradigm. Thus, the TGT learning approach may boost students' motivation to study. Engagement of students in the learning process (Hulleman & Cordray, 2009; Xue & Churchill, 2019). The TGT-type cooperative learning approach significantly impacts students' learning motivation.

The results of the experimental class using the TGT learning model differ from those of the control class using the traditional learning model. It was found that t-count = 6.581, a significant value, indicates the difference in learning outcomes. The significance level is 0.05. The average value of Pancasila philosophy in the control class on the pre-test was 49.67, and the average post-test score was 51.2. The increase was limited to 3.08%. In the experimental class, the average Pancasila philosophy at the pre-test was 53.27, and the average learning outcome after applying the TGT learning model (post-test) was 80.67. A rise of 51.43% was observed. Increased motivation may have an impact on student's comprehension of the subject matter, classroom dynamics, and individual traits that should be taken into account while creating lesson plans (Aydın & Michou, 2019; Brindley et al., 2009; Wirthwein et al., 2019). The findings show that students who use TGT learning have considerably higher achievement motivation than those who use the traditional learning model (F= 79.790; p0.05). Second, students who were taught using TGT learning had considerably superior Pancasila Philosophy than students who were taught using the traditional learning approach (F= 41,804; p0,05). Third, students who participate in TGT Type Cooperative Learning have much higher accomplishment motivation and Pancasila philosophy than students who follow the traditional learning paradigm. The following conclusions can be formed based on the above analysis and discussion: To begin with, there are variances in Pancasila philosophy between students who study using the TGT learning model and students who study using traditional learning models.

D. Conclusion

Because all program participants are involved in the learning process, the TGT learning approach enhances learning results for the Pancasila philosophy. In addition, their learning motivation to participate in learning increased because of their direct involvement in fun learning.

Involving participants by providing hands-on experience for them to work together in groups and complete student assignments together enhances life skills. These life skills are helpful for them in actual life practice.

Collaborative and working skills and shared responsibility are easier to understand if experienced directly. The application of TGT should consider student differentiation so that they can share experiences and knowledge about the themes being studied, which will increase their knowledge as a group.

References

- Ajeng, S. (2021). The Efforts to Improve the Ability to Speak English through the Game" Snake and Ladder" in Grade VII-A Students at SMPN 3 Ngimbang. *Journal of Diversity in Learning (JDIL)*, 1(2), 55-61.
- Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching, and Assessing : a Revision of Bloom's Taxonomy of Educational Objectives*. England: Longman.
- Arends, R. I. (2012). Learning to Teach. USA: McGraw-Hill Education.
- Aydın, G., & Michou, A. (2020). Self-determined Motivation and Academic Buoyancy as Predictors of Achievement in Normative Settings. *British Journal of Educational Psychology*, 90(4), 964-980. https://doi.org/10.1111/bjep.12338.
- Bandura, A. (1982). Self-efficacy Mechanism in Human Agency. *American Psychologist*, 37(2), 122–147. https://doi.org/10.1037/0003-066X.37.2.122.
- Barnes, J. (2020). Promoting Student Agency in Writing: Reading Teacher, 73(6), 789–795. https://doi.org/10.1002/TRTR.1899.
- Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement In The Classroom*. 1991 ASHE-ERIC Higher Education Reports. ERIC Clearinghouse on Higher Education, The George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183.
- Borowski, P. F. (2021). Innovation Strategy on the Example of Companies Using Bamboo. *Journal of Innovation and Entrepreneurship*, 10(1), 1-17. https://doi.org/10.1186/s13731-020-00144-2.
- Branson, M. S. (1998). The Role of Civic Education: A Forthcoming Education Policy Task Force Position Paper from the Communitarian Network. Center for Civic Education.
- Brindley, J. E., Walti, C., & Blaschke, L. M. (2009). Creating effective collaborative learning groups in an online environment. *International Review of Research in Open and Distance Learning*, 10(3), 1–18. https://doi.org/10.19173/irrodl.v10i3.675.
- Broadbent, J., & Fuller-Tyszkiewicz, M. (2018). Profiles in Self-Regulated Learning and Their Correlates for Online and Blended Learning Students. *Educational Technology Research and Development*, 66(6), 1435–1455. https://doi.org/10.1007/s11423-018-

9595-9.

- Budimansyah, D. (2008). Peningkatan Mutu Pendidikan Melalui Penguatan Partisipasi Masyarakat. *Jurnal Educationist*, 2(1), 56-63.
- Cacciamani, S., Perrucci, V., & Khanlari, A. (2018). Conversational Functions for Knowledge Building Communities: A Coding Scheme for Online Interactions. *Educational Technology Research and Development*, 66(6), 1529–1546. https://doi.org/10.1007/s11423-018-9621-y.
- Cheon, S. H., Reeve, J., & Vansteenkiste, M. (2020). When Teachers Learn How to Provide Classroom Structure in an Autonomy-Supportive Way: Benefits to Teachers and Their Students. *Teaching and Teacher Education*. https://doi.org/10.1016/J.TATE.2019.103004.
- Cogan, J.J. (1999). Developing the Civic Society: The Role of Civic Education. Bandung: CICED.
- Daniela, P. (2015). The Relationship Between Self-Regulation, Motivation and Performance at Secondary School Students. *Procedia Social and Behavioral Sciences*, 191, 2549–2553. https://doi.org/10.1016/J.SBSPRO.2015.04.410.
- Darwin, S. (2011). Learning in Activity: Exploring the Methodological Potential of Action Research in Activity Theorizing of Social Practice. *Educational Action Research*, 19(2), 215–229. https://doi.org/10.1080/09650792.2011.569230.
- Degeng, I. N. S. (2013). Ilmu Pembelajaran: Klarifikasi Variabel untuk Pengembangan Teori dan Penelitian. Bandung: Aras media.
- Diaconu-Gherasim, L. R., Măirean, C., & Brumariu, L. E. (2019). Quality of Teachers' and Peers' Behaviors and Achievement Goals: The Mediating Role of Self-Efficacy. *Learning and Individual Differences*, 73, 147–156. https://doi.org/10.1016/j.lindif.2019.06.001.
- Donelan, H., & Kear, K. (2018). Creating and Collaborating: Students' and Tutors' Perceptions of an Online Group Project. *International Review of Research in Open and Distance Learning*, 19(2), 37–54. https://doi.org/10.19173/irrodl.v19i2.3124.
- Elliot, A. J., & Moller, A. C. (2003). Performance-Approach Goals: Good or Bad Forms of Regulation? *International Journal of Educational Research*, 39(4–5), 339–356. https://doi.org/10.1016/j.ijer.2004.06.003.
- Ellis, N. J., Alonzo, D., & Nguyen, H. T. M. (2020). Elements of a Quality Pre-Service Teacher Mentor: A Literature Review. *Teaching and Teacher Education*, 92. https://doi.org/10.1016/J.TATE.2020.103072.
- Eryadini, N. (2021). The Diversity of Students' Emotional Intelligence and its Effect on Student Activities in the Learning Process . *Journal of Diversity in Learning (JDIL)*, 1(3), 104 111.

- Fidalgo, P., Thormann, J., Kulyk, O., & Lencastre, J. A. (2020). Students' Perceptions on Distance Education: A Multinational Study. *International Journal of Educational Technology in Higher Education*, 17(1), 18. https://doi.org/10.1186/s41239-020-00194-2.
- Grinfelde, I., & Veliverronena, L. (2018). The Limits of Creative Approach: Conducting an Orchestra of Emotions in the Darkness. *Creativity Studies*, 11(2), 362–376. https://doi.org/10.3846/cs.2018.7183.
- Hulleman, C. S., & Cordray, D. S. (2009). Methodological Studies: Moving from the Lab to the Field: The Role of Fidelity and Achieved Relative Intervention Strength. *Journal of Research on Educational Effectiveness*, 2(1), 87–110. https://doi.org/10.1080/19345740802539325.
- Jenkins, E. M., Zaher, Z., Tikkanen, S. A., & Ford, J. L. (2019). Creative identity (re)Construction, creative community building, and creative resistance: A qualitative analysis of queer ingroup members' tweets after the Orlando Shooting. *Computers in Human Behavior*, 101, 14–21. https://doi.org/10.1016/j.chb.2019.07.004.
- Lindsey, D. (1999). Faith in Our Children. *Children and Youth Services Review*, 21, 1–6. https://doi.org/10.1016/S0190-7409(99)00002-X.
- Liu, C. C., Cheng, Y. B., & Huang, C. W. (2011). The Effect of Simulation Games on the Learning of Computational Problem Solving. *Computers and Education*, *57*(3), 1907–1918. https://doi.org/10.1016/j.compedu.2011.04.002.
- Markova, M., Modliński, A., & Pinto, L. M. (2020). Creative or Analitical Way for Career Development? Relationship Marketing in the Field of International Business Education. *Creativity Studies*, 13(1), 99-113. https://doi.org/10.3846/cs.2020.6625.
- Muhaimin. (1996). Teaching and Learning Strategies. Surabaya: Citra Media.
- Nemiro, J. E. (2021). Developing Collaborative Behaviours in Elementary School Students: A Comparison of Robotics Versus Maths Teams. *Educational Studies*, 47(5), 521–537. https://doi.org/10.1080/03055698.2020.1716209.
- Neroni, J., Meijs, C., Gijselaers, H. J. M., Kirschner, P. A., & de Groot, R. H. M. (2019). Learning Strategies and Academic Performance in Distance Education. *Learning and Individual Differences*, 73, 1–7. https://doi.org/10.1016/j.lindif.2019.04.007.
- Nurdiana, R., & Suryanto, H. (2021). Increase Creativity and Activity in the Creative Study of Problem Solving-Based Human Resource Management. *Journal of Diversity in Learning (JDIL)*, 1(4), 151 157.
- Ramadhani, R., Umam, R., Abdurrahman, A., & Syazali, M. (2019). The Effect of Flipped-Problem Based Learning Model Integrated With LMS-Google Classroom for Senior High School Students. *Journal for the Education of Gifted Young Scientists*, 7(2), 137–158. https://doi.org/10.17478/jegys.548350.

- Shih, J. L., Shih, B. J., Shih, C. C., Su, H. Y., & Chuang, C. W. (2010). The Effect of Collaboration Styles to Children's Cognitive Performance in Digital Problem-Solving Game "William Adventure": A Comparative Case Study. *Computers and Education*, 55(3), 982–993. https://doi.org/10.1016/j.compedu.2010.04.009.
- Soto Gómez, E., Serván Núñez, M. J., Trapero, N. P., & Pérez Gómez, Á. I. (2019). Action Research through Lesson Study for the Reconstruction of Teachers' Practical Knowledge. A Review of Research at Málaga University (Spain). *Educational Action Research*. https://doi.org/10.1080/09650792.2019.1610020.
- Stevanović, A., Božić, R., & Radović, S. (2021). Higher Education Students' Experiences and Opinion about Distance Learning During the Covid-19 Pandemic. *Journal of Computer Assisted Learning*, 37(6), 1682–1693. https://doi.org/10.1111/JCAL.12613.
- Sukarno. (1965). *Under the Flag of the Revolution, Volume II.* Jakarta: Publishing Committee Under the Flag of the Revolution.
- Supriyanto. (2020). The Effect of Realistic Mathematics Education Learning Models on the Learning Outcomes of Exponential Functions and Logarithmic Functions. *Journal of Diversity in Learning (JDIL)*, 1(1), 13-28.
- Suryanto, H. (2020). Hubungan interaksi sosial antar siswa dengan kreativitas belajar dalam memahami pelajaran IPS. *Journal of Creative Attitudes Culture*, 1(1), 19–33.
- Suryanto, H., Degeng, I. N. S., Djatmika, E. T., & Kuswandi, D. (2021). The Effect of Creative Problem Solving with the Intervention Social Skills on the Performance of Creative Tasks. *Creativity Studies*, 14(2), 323–335. https://doi.org/10.3846/CS.2021.12364.
- Suryanto, H., Degeng, N. S., Djatmika, E. T., & Kuswandi, D. (2020). The Effect of Creative Problem Solving Learning Strategy on Conceptual and Procedural Understanding Moderated by Social Skills. In *International Journal of Innovation, Creativity and Change*, 13(10), 1158-1175.
- Suryanto, H., Warring, S., Kartikowati, R. S., Rorimpandey, W. H., & Gunawan, W. (2021). Study Creativity with Diverse Social Skills to Support the Learning Process in Future Education. *JDIL Journal of Diversity in Learning*, 1(2), 85–89. https://doi.org/10.1300/J104v03n01_03.
- Sutarum, Zaman, A. Q., & Machsunah, Y. C. M. (2021). The Effect Community of Inquiry Assisted by Social Media on Problem-Solving Ability in Education Policy Courses. *Journal of Diversity in Learning (JDIL)*, 1(4), 143 150.
- Tadesse, T., Gillies, R. M., & Manathunga, C. (2020). Shifting the Instructional Paradigm in Higher Education Classrooms in Ethiopia: What Happens When We Use Cooperative Learning Pedagogies More Seriously? *International Journal of Educational Research*, 99. https://doi.org/10.1016/j.ijer.2019.101509.
- Tyng, C. M., Amin, H. U., Saad, M. N. M., & Malik, A. S. (2017). The Effects of Emotion on

- Learning and Memory. *Frontiers in Psychology*, *8*, 1454. https://doi.org/10.3389/fpsyg.2017.01454.
- Ukkonen-Mikkola, T., & Varpanen, J. (2020). Integrated Initial and Continuing Training as a Way of Developing the Professional Agency of Teachers and Student Teachers. *Teaching and Teacher Education*, 96. https://doi.org/10.1016/J.TATE.2020.103189.
- Wang, K., & Nickerson, J. V. (2017). A Literature Review on Individual Creativity Support Systems. *Computers in Human Behavior*, 74, 139–151. https://doi.org/10.1016/j.chb.2017.04.035.
- Webb, N. M., Franke, M. L., Ing, M., Turrou, A. C., Johnson, N. C., & Zimmerman, J. (2019). Teacher Practices that Promote Productive Dialogue and Learning in Mathematics Classrooms. *International Journal of Educational Research*, 97, 176-186. https://doi.org/10.1016/j.ijer.2017.07.009.
- Wirthwein, L., Bergold, S., Preckel, F., & Steinmayr, R. (2019). Personality and School Functioning of Intellectually Gifted and Nongifted Adolescents: Self-Perceptions and Parents' Assessments. *Learning and Individual Differences*, 73, 16–29. https://doi.org/10.1016/j.lindif.2019.04.003.
- Xue, S., & Churchill, D. (2019). A Review of Empirical Studies of Affordances and Development of a Framework for Educational Adoption of Mobile Social Media. *Educational Technology Research and Development*, 1231-1257. https://doi.org/10.1007/s11423-019-09679-y.
- Yang, Y. T. C. (2015). Virtual CEOs: A Blended Approach to Digital Gaming for Enhancing Higher Order Thinking and Academic Achievement Among Vocational High School Students. *Computers and Education*, 81, 281–295. https://doi.org/10.1016/j.compedu.2014.10.004.
- Zacharia, Z. C., Xenofontos, N. A., & Manoli, C. C. (2011). The Effect of Two Different Cooperative Approaches on Students' Learning and Practices Within the Context of a Webquest Science Investigation. *Educational Technology Research and Development*, 59(3), 399–424. https://doi.org/10.1007/s11423-010-9181-2.
- Zumbrunn, S., Broda, M., Varier, D., & Conklin, S. (2019). Examining the Multidimensional Role of Self-Efficacy for Writing on Student Writing Self-Regulation and Grades in Elementary and High School. *British Journal of Educational Psychology*, 90(3), 580-603. https://doi.org/10.1111/bjep.12315.