

SYNDICATE STRATEGY AND LEARNING - OUTCOME OF STUDENTS IN CIVIC EDUCATION IN ONDO STATE, NIGERIA

Solomon Ojo, OLORUNTOBA

&

David Toyin, ALADEJEBI Ph.D

Department of Social Science Education
Adekunle Ajasin University, Akungba Akoko, Ondo State, Nigeria
davetoyin2003@gmail.com
08105817191

Abstract

This study examined the effects of the syndicate teaching strategy on the academic achievement and attitudes of secondary school students in Civic Education in Ondo State, Nigeria. The research was motivated by persistent poor performance in the subject, attributed largely to conventional, teacher-centered instructional approaches that encourage passive learning. A quasi-experimental design was employed, involving 60 Senior Secondary School Two (SSS2) students from two schools, assigned to either an experimental group (taught using the syndicate strategy) or a control group (taught using the lecture method). The intervention was conducted over a six-week period. Data were collected using a Civic Education Achievement Test (CEAT) and a structured questionnaire assessing learning attitudes. Analysis using descriptive statistics and t-tests (at a 0.05 significance level) showed that students taught with the syndicate strategy demonstrated significantly higher academic achievement (t = 32.40; p < 0.05) and more positive learning attitudes (t = 30.00; p < 0.05) compared to those in the lecture-based group. Additionally, gender was not found to be a significant factor in academic performance (t = 1.942; p < 0.05). The study concludes that the syndicate teaching method significantly improves learning outcomes and student engagement in Civic Education. It is recommended that this strategy be adopted to promote active learning, critical thinking, and problem-solving skills among students.

Keywords: Critical thinking, Civic Education, Learning-outcome, Syndicate



Introduction

Learning outcomes refer to the measurable skills, knowledge, and abilities that a learner is expected to acquire upon completing an educational activity. These outcomes help clarify the purpose and value of instruction, guiding both teaching and assessment. They are formulated as specific, observable statements that define what students should know, understand, or be able to do by the end of a course or program. Assessment of learning outcomes is typically conducted through examinations, projects, presentations, and other evaluative methods. The achievement of learning outcomes across subjects remains a key concern for educational stakeholders, including in Civic Education, which aims to develop active, informed, and responsible citizens. A central goal of 21st-century education is to foster meaningful and positive changes in learners cultivating well-rounded individuals who align with societal values (Hassan, 2023; Husaini & Shukor, 2023; Falade & Adeyemi, 2015). Education today also strives to empower learners to be creative, inventive, and critical thinkers rather than merely reproducing past knowledge. It encourages the development of minds capable of verification, inquiry, and independent judgment (Adeyemi & Babajide, 2014).

The government established civic education as a discipline to assist students in acquiring the fundamental social knowledge, positive attitude, values, and social skills necessary to function as responsible citizens and contributing members of society. For this reason, the learning outcomes for students in civic education are crucial concepts (Dania, 2015). According to Ogunkeye (2012), civic education is the instruction provided to youth with the intention of helping them mature into responsible citizens who are aware of their rights, responsibilities, and duties and who can actively contribute to the advancement of their society, nation, or country. The goal of the civic education concept is to ensure that every kid grows and develops. It encompasses concepts such as democracy, values, human rights, law and order, drug use and abuse, interpersonal relationships, citizenship and nationalism, civil society, and public involvement.

Civic education is defined by Fakorede (2015) as an instructional and learning program aimed at a state's citizens to facilitate the state's meaningful development. The ultimate goal of this systematized educational process is to develop and produce informed, responsible, and participatory citizens who will act in a way that supports the survival of the modern democratic society. Learners are oriented toward the operation of democratic governmental processes and procedures as well as their rights and collective/correlative responsibilities. For all levels of the modern Universal Basic Education (UBE) program, including senior secondary education, it serves as the foundational curriculum (Akpan & Ukpong, 2011). In order to bring about the desired change in a learner, effective teaching is a continual process that entails choosing an instructional method that is both appropriate for teaching the subject matter and will address the unique needs of each individual student (Olowo, 2022). Ameh and Dantani (2012) noted that approach is crucial in any teaching-learning scenario and that the teacher's chosen tactic can either help or impede learning. It may sharpen mental activities which are the bases of



social power or may discourage initiatives and curiosity thus making self-reliance and survival difficult.

Students' learning outcomes in the classroom are influenced by a variety of circumstances, especially in civic education. There are home-based, school-based, student-based and teacher-based. Within teacher-based, there is the issue of teaching methodology applied for teaching and learning process. In achieving the basic goal of Education; Aladejabi (2021) emphasizes the importance of choosing effective teaching strategies to support students' holistic growth in the cognitive, emotional, and psychomotive domains in order to achieve education's fundamental purpose. According to Shymansky and Kyle (2018), an instructional strategy consists of the tools, media, environment, and instructor behavior that are used to create an effect. Consequently, selecting effective teaching strategy and achieving the learning objectives are intertwined. Erdem (2012) highlights four characteristics of instructional approaches. Teaching techniques should first increase a student's inclination to learn by making them more eager to study and comprehend novel situations. Second teaching tactics ought to be designed to support students in quickly absorbing the knowledge imparted during instruction and to enhance their capacity for both assimilation and application of previously acquired knowledge.

Third, the best possible order for teaching strategy should be used so that students can apply their past knowledge to understand new material. Lastly, instructional tactics must to be developed in a way that permits true student engagement with the material. Though there isn't a single optimum way to teach social science courses, combining several approaches will undoubtedly aid in reaching the intended learning goals. According to Olowo & Aladejebi (2016), the key way that teaching strategies are effective is if they meet the needs of the learners, as each learner understands and reacts to instruction differently. Despite the availability of learner-centered and activity-based teaching techniques that promote effective communication and transactions between teachers and students, research indicates that many secondary school teachers are accustomed to traditional methods of instruction. This is especially true for civic education teachers, who are not exempt from the use of lecture strategies (Odey et al. 2021; Abdulkadir et al., 2021; Moss, 2017; Salihu, 2015).

Most of the time, the "lecture method," a traditional teaching strategy that is widely used by educators, turns students into passive learners rather than active participants in the learning process. As a result, students are reluctant, afraid, or shy to voice their opinions, which will undoubtedly interfere with their ability to learn and be creative during the process. Furthermore, the teacher remains at the center of the learning process; they communicate in a one-way manner while many deliver the material, offering very little opportunity for students to engage with each other orally or through performance. If this is allowed to go on, more pupils will struggle to learn, which will cause the research outcomes to deviate from expectations (Oladapo, 2023). The necessity of the 21st century requires education to continue creating the young generation who have life skills so that they can survive and compete in the global community. Life skills needed consist of the ability to think critically, ability to



communicate effectively and efficiently, ability to develop technology (Spector and Shanshan, 2019) and ability to work in a flexible, productive, innovative and responsible (Suto, 2015). Life skill is trained through the learning process and identified through the learning outcomes of students. In this regard, Syndicate teaching strategy is an instructional method in Social Science education that can meet up with the needs of students and also achieve the required goals of education.

The syndicated learning; a type of cooperative learning, to raise students' academic performance has drawn a lot of attention in the field of educational research. According to Johnson and Johnson (2015), this teaching method entails breaking up the class into smaller groups so that the students can collaborate to do assignments, solve problems, or have academic discussions. Students are encouraged to collaborate, think critically, and actively participate in syndicated learning all of which are crucial for academic success. The syndicate teaching technique is a participative approach that entails splitting up the class into groups of five to ten people who work in semi-independent ways to complete a task or objective as a whole. Students work in groups and are typically assigned tasks along with background material and helpful resources. They are frequently allowed to organize the allotted time and group meetings anyway they see fit in order to complete the assigned task. According to Uppal, Kukreja, Kaul, and Sharma (2019), students who participate in Syndicate discussion learning are encouraged to assume greater responsibility, have greater motivation for learning and in general, take a more independent approach to their studies. With this approach, students can freely discuss with their classmates. These interactions encourage more active student engagement and the activation of prior information, which in turn helps with problem solving, decision making, gathering and connecting of all previously known According to Randa, Muhlarhi, and Cochrane (2023), student-led groups' exercises serve as a means of imparting collaboration skills and preparing students for applying the knowledge they acquire. Facilitators may have a large number of students that they are unable to manage when they engage on an individual basis, thus in order to save time, they occasionally employ the group technique. Because they know each other and can relate to each other. Students frequently form groups because they can collaborate. When students work in groups to accomplish tasks in class, the goal is usually to both pass the assignment and reinforce the topics being taught. Students aren't compelled to work in groups too frequently since the facilitator would be held accountable if they didn't meet requirements or expectations. Students frequently understand the advantages they stand to earn in the typical groups, which they choose to create on their own. They really form groupings understanding the potential and expected advantages already. In situations where members of a group are strangers to one another, it is frequently impossible to predict what will happen. According to Manges, Scott-Cawiezell, and Ward (2017), anxiousness is a common mental outcome for students who are forced to participate in groups where they must complete tasks or assignments. Members frequently question whether others will regard them with the same level of esteem that they do. Additionally, they are unsure about whether new participants will be able to favorably contribute in the same manner as individuals they know.

Depending on the views and personality of the students, motivation might be either extreme or positive. Extreme demotivation increases the likelihood of poor performance or underperformance. A syndicate ought to include multiple participants. This will encourage diverse minds to produce high-quality work in more diversified ways (Kerzner, 2013). When brainstorming as a team, members ought to refrain from offering criticism. Instead, they ought to broaden concepts and set aside criticism to promote engagement and inspire individuals to come up with uncommon concepts for drastic yet practical fixes. In addition, innovative ideas are welcomed, fresh viewpoints are explored, and fresh methods of thinking are produced in quest of better solutions. Moreover, synergies are created when ideas are improved upon by combining them, yielding outcomes that surpass the sum of the individual contributions. By definition, student-centered learning gives students the freedom to choose their own learning paths and gives them the obligation to actively contribute to the meaningfulness of their educational experience (Lohe, 2015).

Theoretical Framework

Jean Piaget's constructivism theory of learning

Jean Piaget is widely recognized as a foundational theorist in constructivism, proposing that individuals actively construct knowledge through the dynamic interplay of their experiences and existing mental frameworks. His perspective has profoundly influenced radical constructivism by emphasizing the learner's central role in creating and acquiring knowledge (Resnick & Glaser, 2016). Much of Piaget's work emerged from his observations of children, through which he contested the notion that children are merely less competent thinkers than adults. Instead, he demonstrated that children's cognition is qualitatively different, leading him to formulate a theory of development comprising four distinct stages. Although Piaget did not explicitly connect his research to educational practice, his insights have deeply informed contemporary learning theories.

Central to Piaget's model are two adaptive cognitive processes:

- **Assimilation**, where new information is incorporated into existing cognitive structures, and
- Accommodation, which involves modifying those structures in response to new experiences.

These mechanisms highlight how learning occurs through continuous interaction with the environment, shifting focus from what is learned to how understanding evolves (Tangney, 2014). Piaget's emphasis on active, self-directed learning remains a cornerstone of modern constructivist educational approaches.

The constructivism theory of learning, as proposed by Jean Piaget, holds that students actively create their own mental models or frameworks to make sense of new information and experiences. This is achieved through processes like assimilation, where new information is integrated into existing knowledge structures, and accommodation, where existing knowledge

structures are adjusted to fit new information. Derry (2014) claims that this theory supports the idea that students construct their own understanding and knowledge of the world through active engagement with the environment. Syndicate learning is a collaborative approach in which small groups of students work together to solve problems or complete tasks (Lohe and Singh, 2015). In a constructivist framework, syndicate learning allows students to actively engage with their peers, share ideas, and negotiate meaning. It encourages students to construct their own understanding through discussion, reflection, and cooperation. Syndicate learning in constructivist classrooms fosters critical thinking, problem-solving abilities, and the capacity to work as a team. This study aims to assess the impact of the syndicate teaching strategy on the academic performance of secondary school students in Civic Education. Specifically, it investigates two key aspects:

- 4. examines the effect of the syndicate strategy on students' academic performance in Civic Education.
- 5. compares the attitudes of students taught using the syndicate strategy versus those taught using the lecturing strategy toward learning Civic Education.

The study is guided by the following research questions:

- 1. What impact does the syndicate strategy have on students' academic performance in Civic Education?
- 2. Are there differences in the attitudes of students taught using the syndicate strategy and those taught using the lecturing strategy toward learning Civic Education?

The study tests the following null hypotheses:

- There is no significant difference in the academic performance of students taught using the syndicate strategy and those taught using the lecturing strategy in Civic Education.
- There is no significant difference in the attitudes of students taught using the syndicate strategy and those taught using the lecturing strategy toward learning Civic Education.

Methodology

The study employed a quasi-experimental, non-equivalent control group design with pre-test and post-test assessments. A total of sixty Senior Secondary School II (SSS II) students were purposively selected from two schools: St. Patrick's College, Iwaro Akoko, and Oroke High School, Akungba Akoko. These intact classes were randomly assigned to either the experimental group or the control group.

The Civic Education Achievement Test (CEAT), developed by the researcher, was used as the instrument for data collection. A pre-test was first administered to both groups to establish a baseline of students' prior knowledge. Following this, the experimental group received instruction using the syndicate teaching strategy, while the control group was taught using the conventional lecture method. The instructional intervention lasted for six weeks, with the first week dedicated to the pre-test and the final week to the post-test administration. The post-test used the same items as the pre-test but in a rearranged order to minimize recall bias.

Data collected were analyzed using descriptive statistics (mean and standard deviation) to address the research questions. In addition, t-test analysis was conducted at a 0.05 significance level to test the study's hypotheses and determine the significance of differences between the groups.

Results

The data obtained were analyzed using mean and standard deviation to answer the research questions and t-test was used for the hypotheses.

Research Question 1: What is the effect of syndicate strategy on academic performance score of students in civic education?

Table 1: Effect of syndicate strategy (Trt.1) on academic performance of students in civic education

Syndicate Strategy		Academic Performance			
	N	Mean (X)	Std. Deviation		
Pre-test	30	11.63	2.94		
Post-test	30	32.40	3.50		

Source: Field Survey 2025.

The analysis from Table 1 revealed the frequency, mean and standard deviation of both the pretest and post-test score of the respondents exposed to syndicate teaching strategy as thus; pretest (N=30, X=11.63, STD.=2.94) and post-test (N=30, X=32, STD.=3.50). In this result, the mean score of pre-test is less than the post-test mean score (11.63 < 32.40) which shows that syndicate teaching strategy has great effect on academic performance of students.

Research question 2: Will there be any differences in attitude of students taught using syndicate teaching strategy and those taught using lecturing strategy towards learning of civic education before and after treatment?

Table 2: Attitude of students taught using syndicate teaching strategy and those taught using lecturing strategy towards learning of civic education before and after treatment

		Attitude Towards Learning					
		Before Trea	tment	After Treatment			
Groups	N	Mean (X)	Std. Deviation	Mean (X)	Std. Deviation		
Syndicate Strategy	30	15.30	4.06	30.00	4.11		
Lecturing Strategy	30	14.50	10.76	20.67	4.64		

Source: Field Survey 2025.

The above mean scores shows that the pre-test of both students taught using syndicate teaching strategy and lecturing strategy are almost the same, but there is significant different in their post-test score; Students taught using Syndicate strategy mean score in their post-test is 30.00 while that of lecturing strategy group score is 20.67. Therefore, students taught using Syndicate strategy developed more positive attitudes towards learning than those taught using Lecturing strategy

Hypothesis 1: There is no significant difference on academic performance of students taught, using Syndicate strategy and those taught, using lecturing strategy in Civic Education

Table 3: t-test analysis of difference in post-test mean scores of students taught using Syndicate strategy and those taught using lecturing strategy in Civic Education

Variables		Academic	Performance	t-cal	Df	p-value
	N	Mean (X)	Std. Deviation			
Syndicate strategy	30	32.40	3.50	10.82	58	0.04
Lecturing strategy	30	24.50	4.04			

Source: Field Survey 2025.

Table 6 shows that p.value is less than 0.05 level of significance (t.cal=10.82; P<0.05), this leads to the rejection of the hypothesis. There is significant difference on academic performance of students taught, using Syndicate strategy and those taught, using lecturing strategy in Civic Education

Hypothesis 2: There is no significant difference in attitude of students taught using syndicate strategy and those taught using lecturing strategy towards learning of civic education

Table 4: A t-test analysis of difference in post-test scores using Syndicate Strategy and Lecturing Strategy in attitudes towards learning of Civic Education

Variables		Attitude Towards Learning		t-cal	Df	p-value
	N	Mean	Std. Deviation			
Syndicate strategy	30	30.11	4.11	11.81	58	1.43
Lecturing strategy	30	20.67	4.64			

Source: Field Survey 2025.

The result from the table 8 above (t-cal= 11.81, df = 58, p -value = 1.43), shows that t-cal. is greater than t-table at 0.05 level of significance (11.81 > 1.43), this leads to the rejection of the hypothesis. There is significant difference in attitude of students taught using Syndicate strategy and those taught using lecturing strategy, those exposed to Syndicate strategy develops high interest towards learning of civic education.



Summary of Findings

The study's key findings can be summarized as follows:

- The post-test mean score (32.40) was significantly higher than the pre-test mean score (11.63), indicating that the syndicate teaching strategy had a substantial positive effect on students' academic performance.
- Students taught using the syndicate strategy developed more positive attitudes towards learning (mean score of 30.00) compared to those taught using the lecturing strategy (mean score of 20.67).

Hypothesis Testing Results

The results of the hypothesis testing revealed:

- There was a significant difference in the academic performance of students taught using the syndicate strategy and those taught using the lecturing strategy in Civic Education, with the calculated t-value (10.82) exceeding the critical value at a significance level of 0.05.
- There was also a significant difference in the attitudes of students taught using the syndicate strategy and those taught using the lecturing strategy, with students exposed to the syndicate strategy showing a higher interest in learning Civic Education (t = 11.81, p < 0.005).

Discussion

The analysis of the mean academic performance scores of students exposed to the syndicate teaching strategy revealed a statistically significant effect on their performance in Civic Education (t-cal = 10.82, df = 58, p < 0.05). This finding indicates a significant impact of the syndicate teaching strategy on students' academic performance in Civic Education. The result suggests that the syndicate teaching strategy is an effective approach to enhancing students' understanding and retention of Civic Education concepts, leading to improved academic performance. This outcome is consistent with previous research that has highlighted the benefits of syndicate learning. For instance, Lohe and Adarshlata (2015) found that syndicate learning is a student-centered approach that allows students to take ownership of their learning, promoting active participation and engagement. Their study on the evaluation of the effectiveness of syndicate learning in oral medicine and radiology among final-year students underscored the value of this approach in fostering meaningful learning experiences. Similarly, Novita (2018) conducted an experiment on syndicate learning as an alternative approach for teaching extensive reading and concluded that syndicate groups can make learning experiences more interesting and generate numerous opportunities for creative interchange of ideas and lively, meaningful participation and discussion among students. This, in turn, enhances students' academic performance and promotes a deeper understanding of the subject matter. The findings of this study align with the existing literature, suggesting that the syndicate teaching strategy can be a valuable approach to enhancing students' academic achievement in Civic Education. By promoting active participation, engagement, and collaboration, the syndicate teaching strategy can help students develop a deeper understanding of Civic Education concepts and improve their overall academic performance.

Conclusion

The study revealed that both syndicate and lecturing teaching strategies are effective in enhancing students' learning outcomes in Civic Education. However, students taught using the syndicate teaching strategy outperformed those taught using the lecturing strategy. The syndicate strategy promotes active engagement, collaboration, critical thinking, and problem-solving skills among students. Therefore, it is suggested that traditional teaching methods (lecturing strategy) can be complemented with syndicate teaching strategy to achieve effective learning. Rather than discarding traditional methods entirely, they can be combined with other approaches like syndicate teaching strategy to improve student outcomes.

Recommendations

Based on the findings, the following recommendations are made:

- 1. Teachers should be encouraged to use student-centered approaches like the syndicate teaching strategy, which has been shown to enhance academic performance, and discourage teacher-centered methods.
- **2.** Regular retraining exercises and supervisory activities should be organized for teachers in Ondo State to keep them updated with current and best teaching methods.
- **3.** Teachers should encourage students to work cooperatively and collaboratively in groups to achieve desired learning goals.
- **4.** The government should provide necessary instructional and infrastructural facilities to support the effective application of syndicate teaching strategies in teaching Civic Education in Ondo State.

REFERENCE

- Abdulkadir, M. Y., Abdullahi, L. D., Suleiman, S., Abdulaziz, A. (2021). The impact of teaching methods on the performance of geography students in some selected public secondary schools in Zaria local government area, Kaduna State, Nigeria. *Journal of Social, Humanity, and Education (JSHE)* https://doi.org/10.35912/jshe.v1i2.36
- Adeyemi, B. A., & Babajide, V. O. (2014). Impact of school environment on students' academic performance in Ogun State, Nigeria. *Journal of Education and Human Development*, 3(1), 1-9.
- Akpan, U. J., & Ukpong, I. O. (2011). Civic education for effective citizenship and development in Nigeria. *Research and Evaluation*, 3(2), 1-10.



- Aladejebi, D. T (2021). Adequate pedagogy as a tools for effective training of social studies teachers. *International Journal of Educational Issues*, 7(1). Nigeria.
- Ameh, P. O. & Dantani, Y. S. (2012). Effects of lecture and demonstration methods on the academic achievement of students in chemistry in nassarawa local government area of Kano State. *International Journal of Modern Social Sciences*, 1(1), 29-37
- Derry, Sharon J. (2014). "A Fish Called Peer Learning: Searching for Common Themes". In
- O'Donnell, Angela M.; King, Alison (eds.). Cognitive Perspectives on Peer Learning. Hoboken: Taylor and Francis. ISBN 978-1-4106-0371-5. OCLC 881162577
- Erdem, E. (2012). Examination of the effects of project-based learning approach on students attitudes towards chemistry and test anxiety. *World Applied Sciences Journal*, 17(6), 764-745.
- Fakorede, S. (2015). Precise Civic Education. Ado Ekiti: Seagull Publishers.
- Hassan, O. (2023), Improving Academic Achievement of Civic Education Students via.
- Johnson, D. W., & Johnson, R. T. (2015). Social skills for successful group work educational *Leadership*, 42(4), 29-33.
- Kerzner, H.R. (2013) Project Management: A systems approach to planning, scheduling, and controlling. John Wiley, New York. *American Journal of Industrial and Business Management*, Vol.6 No.9.
- Lohe, V. K., & Singh, A. (2025). Evaluation of effectiveness of syndicate learning in oral medicine and radiology: Cardinal findings in a batch of final year students. Med Educ: *Back to basics*, *4*(1), 301-304.
- Manges, K., Scott-Cawiezell, J., & Ward, M.M. (2017). Maximizing team performance: the critical role of the nurse leader. Nursing Forum, 52 (1), 21-29. [Google Scholar]
- Moss, G. (2017). Central purpose of teaching. CanMedEd-ipedia: The CORAL Collection. Concepts as online resources for accelerated learning.
- Odey, C. O., & Adie, B. A. (2019). Corrupt practices and government delivery of educational services in cross river state, *Nigeria International Journal of Contemporary Social Science Education Research*, 1(2), 142-145
- Ogunkeye, O. S. (2012). Comprehensive civic education for senior secondary school in Nigeria. Ilesa: Fypewter Publishers
- Oladapo S. O (2023), Effects of mastery learning model on social studies students' achievement in junior secondary schools in Nigeria. Paper Presented at 2nd Faculty of Education International Conference, Adekunle Ajasin University Akungba Akoko, Ondo State, Nigeria. From 13th -15th June, 2023.



- Olowo O. O (2022), Emerging issues in teaching social studies in Nigeria. ISBN: 978-978-57920-2-9. Masterprint Publishers (Educational publishers and Printers), Ibadan, Oyo State, Nigeria.
- Olowo & Aladejebi (2016), Challenges and prospect of civic education in Nigeria secondary schools. *Ekiti State University Journal of Education (EKSUJOE)*, 208-211. Nigeria.
- Resnick, L. B., & Glaser, R. (2016). *Knowing, learning, and instruction: essays in honor of Robert Glaser*. Routledge.
- Salihu, Z. (2015). Effects of guided discovery approach on students' academic performance in Ecology in senior secondary schools in Sokoto State, Nigeria. Unpublished M.Ed Thesis. Sokoto: Usmanu Danfodiyo University, Sokoto.
- Shymansky, J. A., & Kyle, W. C., Jr. (2018). Learning and the learner. *Science Education*, 72(3), 293-304.
- Spector, Jonathan M & Ma, Shanshan. (2019). Inquiry and critical thinking skills for the next generation: from artificial intelligence back to human intelligence. Smart Learning Environments, Springer
- Suto, I. (2015). Learning environment and student discipline: A systematic review. *Journal of Educational Psychology*, 107(2), 341-353. doi: 10.1037/edu0000008.
- Tangney, S. (2014). Student-centred learning: a humanist perspective. *Teaching in Higher Education*, 19(3), 266-275. https://doi.org/10.1080/13562517.2013.860099
- Uppal, A., Kukreja, S., Kaul, S., & Sharma, S. (2019). Impact of learning environment on academic achievement of secondary school students. *Journal of Education and Human Development*, 8(2), 1-8.