AJVAH
e-ISSN: 2735-1165
DOI: https://doi.org/10.53797/ajvah.v6i2.4.2025

Final Year Students' Perception of Cooperative Learning in the Classroom in Universiti Pendidikan Sultan Idris (UPSI)

Mohd Zulkifli, Rashidah[1], Abdul Mutalib, Asilah[1*], Ismail, Zalina[1], & Che Man, Shaibatul ' Islamiah[2]

[1]Department of Agricultural Science, Faculty of Technical and Vocational, Universiti Pendidikan Sultan Idris, 35900 Tanjong Malim, Perak, MALAYSIA

[2]Centre of Studies for Landscape Architecture, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA, UiTM Puncak Alam, 42300 Puncak Alam, Selangor, MALAYSIA

*Corresponding author email: asilah@ftv.upsi.edu.my

Received 22 May 2025; Accepted 28 July 2025; Available online 26 August 2025

Abstract:

Cooperative learning is one of the learning methods that emphasizes teamwork skills. Teamwork skills are the most important element to complement individual soft skills that are competent and quality and balanced from an academic and interpersonal perspective. The effectiveness of cooperative learning can be affected by the challenges faced by students to perform the assigned tasks well. However, the issue of mastery of teamwork skills in students is still being talked about because among the complaints that are often raised by employers is the weakness of graduates in terms of soft skills such as teamwork skills, communication skills, leadership skills and self-confidence. This study aims to identify the perceptions of final year students of the Bachelor of Education (Agricultural Science) program, Universiti Pendidikan Sultan Idris (UPSI) towards the implementation of cooperative learning in the classroom and identify the challenges of implementing cooperative learning in the classroom for the final year students. This study applies a quantitative approach by using the questionnaire method as a data collection method. A total of 45 respondents consisted of final year students of the Bachelor of Education (Agricultural Science) program, UPSI. The findings of the study were analysed using *Statistical Packages for Social Sciences* (SPSS) version 27.0 as a data analysis step to find descriptive and frequency analyses. The findings of the study showed that students' perception of the implementation of cooperative learning was more dominant based on the mean score and standard deviation were improvement of communication skills (4.49±.589), cultivation of cooperative attitude (4.49±.549) and ease of understanding the content of the lesson (4.29±.695). In addition, the dominant challenges faced by students in the implementation of cooperative learning in the classroom were also identified through the mean score and standard deviation, namely the existence of free riders in the group (4.00±1.022), more interest in conventional learning (3.69±1.164) and differences of opinion creating conflicts in completing the assigned assignments (3.67±1.297). In conclusion, cooperative learning can motivate students in their studies, which is in line with teamwork skills because there is interaction in discussions and cooperation between students although there are several challenges that need to be faced to achieve the main goal in completing assignments.

Keywords: Perception, Final Year Students, Cooperative Learning

1. Introduction

Access, quality, equity, unity and efficiency are the aspirations that must be achieved in the effectiveness of the Malaysian education system as a whole in line with the Malaysian Education Development Plan 2013-2025. Therefore,

*Corresponding author: asilah@ftv.upsi.edu.my

education in Malaysia is a stimulus for the development of individual potential in a comprehensive and balanced and harmonious manner in physical, emotional, spiritual and intellectual aspects in line with the National Education Philosophy Policy. In this era of globalization, the competition to place graduates in sectors that offer job opportunities has become increasingly fierce. According to Hanapi *et al*. (2018), non-technical skills or known as soft skills are skills that are equivalent to technical skills where they are needed by employers in various sectors of the employment industry. The soft skills that employers take into account for today's graduates are teamwork skills, communication skills, critical thinking skills, problem-solving skills and leadership skills (Siti & Mohd, 2018). The collaborative element is one of the important elements in PAK21(student-centered learning approach implemented in Malaysia for the 21st century), it refers to activities that are carried out in groups. Collaborative is a collaboration carried out between instructors and students or between students and other students, the involvement is carried out actively and comprehensively where it focuses on the exchange of ideas, views, information to achieve the same goal in completing the assignments given. The implementation of cooperative learning is appropriate to be implemented in the classroom during teaching and facilitation (PdPc) sessions. According to Ghaith (2018), cooperative learning is based on teamwork, needing each other positively, where each student is not only responsible for their own assignments but also focuses on the tasks of their peers in the group to determine the success of themselves and their group. In addition, cooperative learning will make students listen, respect, share and exchange ideas, knowledge and agree to succeed in their assignments (Alghamdy, 2019).

The challenge faced by educational institutions in this era is to produce graduates who are able to compete and have the characteristics desired by employers in various job sectors. Teamwork skills show poor performance which is a cause for concern because this skill is one of the skills needed by graduates (Zafir *et al.* 2015). This statement can be supported when Fadillah *et al.* (2021) stated that the majority of complaints submitted by employers are difficulties in getting used to the teamwork environment. Poor mastery of soft skills competencies such as teamwork, communication, critical thinking, problem-solving and leadership skills are contributing factors to the failure of graduates to be placed in jobs. Team skills can be polished through a cooperative learning style because cooperative learning is a learning method that involves teamwork to solve tasks or problems collaboratively to achieve a common goal. Based on the problems stated, the objectives of this study were to (i) identify the perception of final year students of the Bachelor of Education (Agricultural Science) program towards the implementation of cooperative learning in the classroom and (ii) identify the challenges of implementing cooperative learning in the classroom for the final year students of the Bachelor of Education (Agricultural Science) program, UPSI.

2. Literature Review

2.1 Cooperative Learning Theory

In general, cooperative learning is a teaching and learning strategy that involves small groups of students interacting together in the learning process to complete the assignments given. This statement can be supported by Slavin (1982) who stated that cooperative learning is a teaching method that requires students from various abilities to work together in small groups to achieve a common goal. . According to Slavin (1992), Toeri Motivation and Confitative Theory are the main theories in cooperative learning. From the perspective of Motivation Theory, cooperative learning focuses on the effects of reward structure and group goals , for example, a student will feel that the goal is achieved when his group also achieves the same goal. Meanwhile, the Cognitive Survey emphasizes the impact of interaction between students in the process of completing assignments together.

2.2 Constructivism Learning Theory

Constructivism Learning Theory is defined as a generative approach, which is the ability to create meaning from what is learned (Umam, 2019). Among the pioneers of this theory of constructivism is Lev Vygotsky. Vygotsky (1978) stated that a person's cognitive development can be developed through social interaction. *Scaffolding* is the guidance given to students in learning new skills, but the guidance provided will be reduced when students can master a skill on their own (Basir *et al*., 2021). This aims to make students more independent and try to master things on their own.

2.3 Implementation of Cooperative Learning in the Classroom

According to Noor Azliza (2016), active learning approaches such as group discussion methods, presentation methods and jigsaw cooperative methods can improve the level of students' soft skills. Azman's study (2018); Bhavani & Zamri

(2017) have proven that cooperative learning has succeeded in improving students' soft skills through active involvement of students in groups by involving students to give their opinions, collaborate in good conditions and become more focused and enthusiastic students. In addition, a study from Sabri et al. (2022) shows that cooperative learning methods affect teamwork skills because it requires cooperation between individuals and others in the process of performing tasks as a team. Furthermore, the findings of a study in a study by Ghufron & Ermawati (2018) on university students found that the method of implementing cooperative learning has made students more active in group work. This is because the cooperative learning style has a positive impact on students because it will allow them to interact well as reduce annoyance and anxiety when doing teamwork.

3. Methodology

3.1 Research Design

In this study, the study design used was quantitative, namely by using a survey method, namely a questionnaire. Quantitative research is a method where data obtained in the form of numbers or statements will be evaluated and analyzed using statistical analysis (Hermawan, 2019).

3.2 Research Instrument and Data Collection

The questionnaire used in this study consists of 3 parts, namely Part A contains questions related to the respondents' demographic data, Part B is related to the perception of Bachelor of Education (Agricultural Science) final year students towards cooperative learning in the classroom and Part C is related to the challenges of Bachelor of Education (Agricultural Science) final year students to implement cooperative learning in the classroom. This instrument also used the *Nominal* scale for part A items, namely the demographics of respondents consisting of final year students of Bachelor of Education (Agricultural Science), UPSI. For Parts B and C, a five-point Likert scale of 1 to 5 (strongly disagree, disagree, uncertain, agree and strongly agree) is used to get answers from respondents. In this quantitative study, data were collected using a structured questionnaire distributed through Google Forms to the final year students of the Bachelor of Education (Agricultural Science) program over a three-month period from March to June 2023. This study aims to identify the perceptions of final year students towards the implementation of cooperative learning in the classroom. Students' perception is a subjective experience that varies in degree rather than being present or absent. A five-point Likert scale allows students to express different levels of perception.

3.3 Population, Sample and Sampling Technique

This study was conducted at Universiti Pendidikan Sultan Idris (UPSI) involving 51 final year students of Bachelor of Education (Agricultural Science), Faculty of Technical and Vocational, UPSI as the study population. For the survey of the minimum sampling of respondents required in this study based on the Sample Sizing Table made by Krejcie and Morgan (1970) was a total of 44 respondents. Therefore, by using a simple random sampling technique, the questionnaire was distributed online through Google Form and as a result, a total of 45 respondents successfully completed the questionnaire set distributed. Due to inherent limitations in the research such as restricted participant availability, the final sample size was smaller than initially intended. However, it is methodologically acceptable for the sample size to be smaller than the population. The appropriate sampling technique was employed to ensure representativeness and validity of the findings.

3.4 Validity and Reliability

The set of questionnaire questions used for this study were verified by two (2) evaluators from Universiti Pendidikan Sultan Idris who hold positions and are qualified as Doctor of Philosophy in the field of language and education. A pilot study was conducted to assess the reliability before conducting the actual study where the reliability of the data is intertwined with the construct and content of the questionnaire items (Mohd Syaubari & Ahmad Yunus, 2018). A pilot study was conducted on 15 final year students of Bachelor of Education (Agricultural Science) consisting of Semester 7. The data obtained from the pilot test were evaluated by reliability analysis conducted using the *Statistical Package for the Social Science* (SPSS) with Cronbach's Alpha values. Based on the Rasch measurement model, an acceptable Cronbach's Alpha score ranges from 0.71 to 0.99 (Bond, 2015). The results of the research are shown in Table 1 and Table 2.

Table 1: Cronbach's Alpha (α) for Division B; Perception

Cronbach's Alpha (α)	Cronbach's Alpha Based on Item Uniformity	No. Item (N)
0.919	0.926	10

Table 2: Cronbach's Alpha (α) for Division C; Challenge

Cronbach's Alpha (α)	Cronbach's Alpha Based on Item Uniformity	No. Item (N)
0.913	0.901	10

3.5 Data Analysis

The findings of the two study objectives were analysed using the *Statistical Packages for the social Science* (SPSS) software version 27.0. Descriptive and frequency analysis was obtained through the data analysis method where all the data and information obtained were discussed in detail through the graph and scheduling method.

4. Analysis and Discussion

In this section, the discussion of the findings of the study were carried out based on three main parts, namely Part A: Demographics of Respondents, Part B: Identifying the Perspectives of Final Year Students of the Bachelor of Education (Agricultural Science) Program on the Implementation of Cooperative Learning in the Classroom and Part C: Identifying Challenges in the Implementation of Cooperative Learning in the Classroom for Final Year Students of the Bachelor of Education (Agricultural Science) Program. The data analysis process and the decisions made are based on the scope of the study that has been determined. In this study, a total of 45 respondents were involved as a study sample. All data collected were processed and analyzed using *the Statistical Package for the Social Science* (SPSS) software version 27.0.

4.1 Demographic Analysis of Respondents

The demographic section of the respondents will discuss the frequency and percentage (%) of each item in the questionnaire part A. This demographic section involves a total of 45 samples of Bachelor of Education (Agricultural Science) final year students.

i. Age

Table 3 shows the distribution of frequency and percentage (%) of respondents consisting of two categories, namely 22-25 years and 26-29 years. The frequency of respondents for 22-25 years was 24 people (53.3%) and 26-29 years old was 21 people (46.7%).

Table 3: Descriptive statistics of frequency distribution and percentage (%) for the demographic section; age

Age	Frequency	Percentage (%)
22 - 25 years	24	53.3
26 - 29 years	21	46.7
TOTAL	45	100.0

ii. Gender

Table 4 shows the distribution of frequency and percentage (%) for the gender of the respondents which consists of two categories, namely male and female. The frequency of respondents for males was 21 (46.7%) and 24 (53.3%) for females.

Table 4: Descriptive statistics of frequency distribution and percentage (%) for the demographic section; Gender

Gender	Frequency	Percentage (%)
Male	21	46.7
Female	24	53.3
TOTAL	45	100.0

iii. Race

Table 5 shows the distribution of frequency and percentage (%) for the respondent race which consists of two categories, namely Malay and other races. The frequency of respondents for Malays was 40 people (88.9%) and other races were 5 people (11.1%).

Table 5: Descriptive statistics of frequency and percentage (%) of the demographic section; Race

Race	Frequency	Percentage (%)
Malay	40	88.9
Others	5	11.1
TOTAL	45	100.0

iv. Highest Tuition Qualification

Table 6 shows the distribution of frequencies and percentages (%) of the highest qualifications which are categorised into three, namely matriculation, foundation and diploma. The frequency of respondents for matriculation was 7 people (15.6%), foundation 1 person (2.2%) and diploma 37 people (82.2%).

Table 6: Descriptive statistics of frequency and percentage (%) of the demographic section; Highest Tuition Qualification

Highest Tuition Qualification	Frequency	Percentage (%)
Matriculation	7	15.6
Asasi	1	2.2
Diploma	37	82.2
TOTAL	45	100.0

v. Respondents' Study Semester

Table 7 shows the distribution of frequencies and percentages (%) for the semester of study which is categorised into two categories, namely Semester 7 and Semester 8. The frequency of respondents for Semester 7 was 23 people (51.1%) and Semester 8 was 22 people (48.9%).

Table 7: Descriptive statistics of frequency and percentage (%) of the demographic section; Semester of study

Semester	Frequency	Percentage (%)
Semester 7	23	51.1
Semester 8	22	48.9
TOTAL	45	100.0

4.2 Analysis of Students' Perceptions of the Implementation of Cooperative Learning in the Classroom

This section answers the first question regarding the perception of Bachelor of Education (Agricultural Science) final year students towards the implementation of cooperative learning in the classroom. There are 10 items in section B to find out students' perceptions of the implementation of cooperative learning in the classroom. The scale used in this section is the five-point Likert scale (strongly disagree, disagree, uncertain, agree and strongly agree). Table F shows the results of the mean values and standard deviation values for each item of part B in the study instrument.

Table 8: Descriptive statistics part B (Perception of the Implementation of Cooperative Learning in the Classroom)

Item	Perception	Average	Standard Deviation
B1.	I was exposed to cooperative learning methods while in class.	4.40	.618
B2.	I understand the implementation of cooperative learning methods in the classroom.	4.29	.695
B3.	The group learning implemented in the cooperative learning method helped me understand the content of the lesson better.	4.47	.661
B4.	The interactions that occur during group learning in class can improve my communication skills.	4.49	.589
B5.	Cooperative learning in PdPc can create good relationships between group members.	4.47	.625
B6.	The cooperative learning method helps me solve problems easily together with group members.	4.47	.588
B7	Cooperative learning is more fun than learning alone.	4.33	.707

B8.	Cooperative learning trains me to give and receive opinions well.	4.42	.583
B9.	Cooperative learning trains me to collaborate with other peers.	4.49	.549
B10.	I gained better achievements through cooperative learning.	4.38	.650

N=45

Based on the results of the analysis obtained in Table F, the mean and standard deviation for the questions representing the respondents on the perception of the implementation of cooperative learning in the classroom were obtained. Item B1 'I was exposed to the cooperative learning method while in class' recorded a mean score and standard deviation of (4.40±.618). In addition, for item B2 'I understand the implementation of cooperative learning methods carried out in the classroom' recorded a mean score and standard deviation of (4.29±.695). Next, item B3 'group learning implemented in the cooperative learning method helps me understand the content of the lesson better' recorded a mean score and standard deviation (4.47±.661). For item B4 'interactions that occur during group learning in class can improve my communication skills' recorded a mean score and standard deviation (4.49±.589). Meanwhile, for item B5 'cooperative learning in PdPc can create good relationships between group members' showed a mean score and standard deviation (4.47±.625). Next, item B6 'cooperative learning methods help me solve problems easily together with group members' with a mean score and standard deviation (4.47±.588). Item B7 'cooperative learning is more fun than learning alone' recorded a mean score and standard deviation (4.33±.707). In addition, item B8 'cooperative learning trains me to give and receive opinions well' recorded a mean score and standard deviation (4.42±.583). Not to forget, item B9 'cooperative learning trains me to collaborate with other friends' recorded a mean score and standard deviation (4.49±.549). Lastly, item 10 'I achieved better through cooperative learning' recorded a mean score and standard deviation (4.38±.650).

4.3 Analysis of the Challenges of Implementing Cooperative Learning in the Classroom to Students

This section answers the second question on the challenges of implementing cooperative learning in the classroom for Bachelor of Education (Agricultural Science) final year students. There are 10 items in section C to find out the challenges of implementing cooperative learning in the classroom for students. The scale used in this section is the five-point Likert scale (strongly disagree, disagree, uncertain, agree and strongly agree). Table 9 shows the mean results and standard deviation values for each part C item in the study instrument.

Table 9: Descriptive statistics part C (Challenges of Implementing Cooperative Learning in the Classroom)

Item	Perception	Average	Standard Deviation
C1.	My low self-esteem makes me less confident to voice my opinion during group discussions in class.	3.60	1.095
C2.	My shy attitude made it difficult for me to engage in cooperative learning while in class.	3.64	1.228
C3.	It's hard for me to contribute ideas even though a lot of ideas are playing in my head.	3.42	1.215
C4.	I find it difficult to think creatively quickly when a group assignment requires me to think spontaneously.	3.29	1.375
C5.	I am more comfortable completing tasks individually than in a group.	3.56	1.289
C6.	I am more interested in the direct learning method than the cooperative learning method.	3.69	1.164
C7	I feel stressed when assigned to work in a group in class.	3.04	1.278
C8.	I think my teammates' ideas are good, but my ideas are more thoughtful and need to be prioritized.	3.29	1.236
C9.	Differences of opinion can trigger problems in completing a given group assignment.	3.67	1.297
C10.	There are some group members who will be observers alone without doing group assignments in class.	4.00	1.022

N=45

Based on the results of the analysis obtained in Table G, the mean and standard deviation of the questions representing the respondents on the challenges of implementing cooperative learning in the classroom were obtained. Item C1 'low self-esteem makes me less confident to voice my opinion during group discussions in class' recorded a mean score and

a standard deviation of (3.60±1.095). In addition, for item C2 'shyness makes it difficult for me to engage in cooperative learning while in class' recorded a mean score and standard deviation of (3.64±1.228). Next, the C3 item 'I find it difficult to contribute ideas even though many ideas are playing in my mind' recorded a mean score and standard deviation (3.42±.1.215). For item C4 'I find it difficult to think creatively quickly when a given group assignment requires me to think spontaneously' recorded a mean score and standard deviation (3.29±1.375). Meanwhile, for item C5 'I am more comfortable completing tasks individually than in a group' showed a mean score and standard deviation (3.56±1.289). Next, item C6 'I am more interested in the direct learning method than the cooperative learning method' with a mean score and standard deviation (3.69±1.164). Item C7 'I feel stressed when assigned to work in a group in class' recorded a mean score and standard deviation (3.04±1.278). In addition, the C8 item 'I consider my teammates' ideas to be good, but my ideas are more thoughtful and should be prioritized' recorded a mean score and standard deviation (3.29±1.236). Not to forget, the C9 item 'differences of opinion can trigger problems in completing a given group assignment' recorded a mean score and standard deviation (3.67±1.297). Finally, item C10 'there are several group members who will be observers only without doing group assignments in class' recorded a mean score and standard deviation of (4.00±1.022).

4.4 Identifying the Perception of Final Year Students of Bachelor of Education (Agricultural Science), UPSI on the Implementation of Cooperative Learning in the Classroom

The findings of the study show that students' communication skills can be improved with the availability of cooperative learning methods in the classroom. This is so, through cooperative learning, students will be able to communicate with group members with each other to get a consensus to complete the assignments given to achieve a common goal. This statement can be supported through (Rasathi *et al*., 2021) which states that this cooperative learning method allows students to communicate and socialize properly as a result of sharing their thoughts and views boldly and freely through a combination of collaboration, sharing of information, ideas and knowledge. In conclusion, cooperative learning can improve communication skills in students because of the two-way interaction between students and other group members.

In addition, the attitude of cooperation in students can be instilled through the implementation of cooperative learning in the classroom. This is because students are required to find and become ideas and analyze the information obtained to complete the assigned assignment together with the group members. They need to work together as a team to create a creative solution to ensure that the assigned tasks can be produced with high quality. Mahlagha *et al.* (2018) which also acknowledges that cooperative learning will make each member collaborate in the problem-solving process with critical thinking and be able to build creative ideas, be a source of motivation and be able to share information to be able to produce innovations in something. In conclusion, cooperative learning can undoubtedly train and create a cooperative attitude in the team to solve problems to achieve the same goal.

Finally, the implementation of cooperative learning can also help students to understand the teaching content better. The understanding of the content of the lesson is easy for students to understand because through this cooperative learning, discussions and information sharing with group members will be carried out throughout the learning process. According to a study by Hidayati *et al.* (2018), students prefer the cooperative learning method because in their view, cooperation in a group makes it easier for them to understand something more easily and quickly than working alone. From the explanation above, it is clear that group learning implemented in cooperative learning makes it easier for students to understand the content of learning because the discussions that are carried out can motivate students to focus more on something to be solved.

4.5 Identifying Challenges in the Implementation of Cooperative Learning in the Classroom for Cooperative Learning of Final Year Students of Bachelor of Education (Agricultural Science), UPSI

Through the results of the study, the main challenge in the implementation of cooperative learning for students is the existence *of 'free riders*' in their groups. Students who do not cooperate in the group are known as '*free riders*' i.e. students who do not carry out the assigned tasks but still take the benefits and benefits of being a member of the group. This can lead to conflicts in the group because it can affect the progress of the assignment and can increase the burden on other group members to complete the assignment on behalf of the students who do not cooperate. In conclusion, group members who are not committed to completing assignments are a challenge in the implementation of cooperative learning in the classroom because they can add burden to other group members and will affect the quality of work and

the performance of other group members if it is not managed properly.

Furthermore, the results of the study also show that challenges will occur when there are some students who are more likely to be interested in conventional learning than cooperative learning. This cooperative learning method is a teamwork method, therefore usually the group members are not among their own friends but are randomly assigned. Because of this, students are more comfortable listening to and receiving the information provided by the instructor than having to work with group mates who are not familiar to them. It is undeniable that there are individuals among the students who do not like to do assignments or activities in groups. According to Abdul *et al*., (2021) the unfriendly relationship between group members is a factor that students do not choose cooperative learning as a teaching and facilitation method. In conclusion, to avoid collaborating with strangers, students are more interested in conventional learning because with that method they only listen and receive information and it does not burden students.

Finally, the results of the study show that differences of opinion between group members can lead to conflicts to complete assignments, contributing to the challenges of implementing cooperative learning in the classroom. Conflicts of ideas can occur due to a lack of skills to interact with group members and cause problems to arise because there is no consensus. According to (Rahmat, 2020), interaction can sometimes lead to disagreements among group members. Conflicts that occur within a group can lead to a decline in group productivity. Disagreements can occur when some group members make assumptions and misinterpretations during the discussion and do not understand the assignment as a whole. In conclusion, when differences of opinion arise in teamwork, cooperation fails to be established properly and this can cause the assigned tasks to take a long time to complete and the final result of the assignment may not be of good quality.

5. Conclusion

In conclusion, the results of the study show that the implementation of cooperative learning in the classroom can have a positive impact on students such as being able to improve communication skills, cultivate a cooperative attitude and understand the content of the lesson more easily. This is because, with the implementation of cooperative learning in the classroom, social skills can be improved because the learning approach requires students to interact and collaborate with other group members to complete assignments to achieve the same goal. However, the existence of *free riders* in the group, some students prefer conventional learning methods and disagreements between group members are among the challenges faced by students to ensure the implementation of cooperative learning in the classroom runs smoothly. This causes problems in completing the assigned tasks and at the same time will result in a deterioration and quality of the tasks performed.

In summary, this study has achieved and answered the objectives and questions of the study that were planned and set at the beginning of the study. This study has proven that the perception of Bachelor of Education (Agricultural Science) final year students towards the implementation of cooperative learning in the classroom is at a good level and through this study, the researcher can also identify the challenges faced by students to implement successful cooperative learning in the classroom. In this regard, to further improve the effectiveness of this study, it is proposed for the researchers to conduct this study to a larger population in order to obtain more accurate and comprehensive results. In addition, other researchers can conduct studies related to cooperative learning based on the effectiveness of cooperative learning in the classroom by conducting pre-test and post-test in the study. By conducting such tests, researchers can then make comparisons about the effectiveness of cooperative learning. Furthermore, the next researcher is also suggested to diversify data collection methods and instruments such as qualitative methods, namely interviews. With that, the data obtained will also have stronger and more diverse support. Lastly, researchers can then conduct research by making observations on the effectiveness of the implementation of cooperative learning in universities. With the observations made, researchers can then conclude the frequency of use of cooperative learning styles in universities.

Acknowledgement

The work has carried out at the Universiti Pendidikan Sultan Idris, Malaysia for fulfilment of the requirements for the Bachelor of Education (Agricultural Science) with honours. We grateful to the Universiti Pendidikan Sultan Idris, Malaysia for the support and providing all the materials and facilities for this project.

Conflict of Interest

The author declares there is no conflict of interest

References

Abdul R, N., Meor F, N. A., Zaimal, N. A. H., Arias Yahaya, F. F., Zainol, Z. I., & Husin, M. R. (2021). Implikasi Gaya Pembelajaran Koperatif Subjek Sains Bagi Murid Tahap Dua di Sekolah Kebangsaan Bandar Baru Rawang.

Alghamdy, R. Z. (2019*).* EFL Learners' Reflections on Cooperative Learning: Issues of Implementation. *Theory and Practice in Language Studies*, 9(3), 271-277.

Azman, AB. R. (2018). Keberkesanan Pembelajaran Model Koperatif STAD Meningkatkan Minat, Keyakinan dan Pencapaian dalam Pendidikan Seni Visual. Universiti Pendidikan Sultan Idris.

Basir, N. K., Mohd Taher, F. I., & Jamaluddin, Z. S. (2021). Penggunaan teknik *scaffolding* melalui bimbingan berkelompok dalam meningkatkan kualiti tugasan pelajar. *Journal of Social Sciences and Technical Education*, 2(1), 18-33.

Bhavani, S. & Zamri. M. (2017). Keberkesanan pembelajaran koperatif terhadap pencapaian dan motivasi murid sekolah menengah dalam pembelajaran bahasa Melayu. *Jurnal Pendidikan Bahasa Melayu*, 7(1), 11-23.

Bond, T. (2015). *Applying the Rasch Model: Fundamental Measurement in the Human Sciences*, Third Edition (3rd ed.). Routledge.

Fadillah, I., Radin, H. M., Nur, R., & Dayana, K. (2021). Penguasaan Kemahiran Insaniah Melalui Penglibatan dalam Kokurikulum Pasukan Bomba Bantuan Institusi. *Research in Management of Technology and Business*, 2(1), 427-445.

Ghaith, G. M. (2018). Teacher Perceptions of the Challenges of Implementing Concrete and Conceptual Cooperative Learning. *Issues In Educational Research*, 28(2), 385-404.

Ghufron, M. A., & Ermawati, S. (2018). The Strengths and Weaknesses of Cooperative Learning and Problem-Based Learning in EFL Writing Class: Teachers' and Students' Perspectives. *International Journal of Instruction*, 11(4), 657-672. http://dx.doi.org/10.12973/iji.2018.11441a

Hanapi, Z., Mohd Shariff, M. S., Paijan, A., Mamat, A. B., & Abu Kassim, F. (2018). Indikator Kemahiran Employability dalam Kalangan Graduan Pendidikan. *Sains Humanika*, 10(3-3), 119–124.

Hermawan, I. (2019). Metodologi Penelitian Pendidikan (Kualitatif, Kuantitatif dan Mixed Method). (Hidayatul Quran, 2019), 37.

Hidayati, L. A., Kharisma, I., & Satriani, I. (2018). Students 'Perception in Applying Cooperative Learning in Efl Classroom. *Eternal English, Teaching, Learning, and Research Journal*, 4(1), 1.

Krejcie, R.V. & Morgan, D.W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.

Mahlagha, D., Levent, A. & Glauco, D, V. (2018). Emotional intelligence and creative performance:Looking through the lensof environmental uncertainty and cultural intelligence. *International Journal of Hospitality Management*, 44-51.

Mohd Syaubari Othman & Ahmad Yunus Kassim. (2018). Kajian Rintis bagi Pelaksanaan Komposisi Pengajaran Guru Pendidikan Islam Yang Mengintegrasikan Kemahiran Berfikir Aras Tinggi (KBAT) Menerusi Pendidikan Akidah Sekolah Rendah di Malaysia. *Malaysian Online Journal of Education,* 2(2), 55-60.

Noor Azliza, A. (2016). Penerapan Pembelajaran Aktif dalam Meningkatkan Pencapaian dan Kemahiran Insaniah Komunikasi Pelajar Matrikuulasi dalam Subjek Biologi. Master's Degree. Universiti Pendidikan Sultan Idris.

Rahmat, N. H. (2020). Conflict Resolution Strategies in Class Discussions. *International Journal of Education*, 12(3), 49.

Rasathi, S., Nurfaradilla, M. N, & Ahmad, Z. M. (2021). Kesan Kaedah Pembelajaran Koperatif Semasa Penghasilan Boneka Tongkat Terhadap Kemahiran Komunikasi dan Kemahiran Berpasukan Murid. *Jurnal Dunia Pendidikan*, 3(2), 72-83.

Sabri, S. A., Nazan, H. F. M., & Rafdi, N. J. (2022). Hubungan di antara Kaedah Pembelajaran Koperatif dengan Kemahiran Bekerja Secara Berpasukan dalam Kalangan Pelajar KUIS. *Journal of Management & Muamalah*, 12(1), 94-106.

Siti, H. N. & Mohd, F. J. (2018). Hubungan di antara Kemahiran Kerja Berpasukan dan Kemahiran Komunikasi dalam Kalangan Pelajar Semester Akhir Politeknik. *International Journal of Education*, Psychology and Counseling, 3(19), 1-18.

Slavin, R. E. (1982). Cooperative learning: Student teams. *What research says to the teacher*. Washington, D.C: National Education Association.

Slavin, R. E. (1992). When And Why Does Cooperative Increase Achievement? Theoretical and Empirical Perspectives. In R. Hertz Lazarowitz & N. Miller (Eds), *Interaction in cooperative groups: The theoretical anatomy of group learning* (pp. 145-173). New York: Cambridge Univ. Press.

Umam, K., Cahyono, R., & Ridha, A. A. (2019). Effectiveness of Training on Constructivism Learning Methods to Improve Teaching Skills Self Help Material for Early Childhood Education Teachers.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Cambridge, MA: Harvard University Press.

Zafir, M. M., Ishak, Y., & Abdul Hair Awangs. (2015). Antara realiti dan harapan – Kajian empirikal persepsi majikan. *Malaysian Journal of Society* and Space, 27-36.