

Collaborative Learning: A Veritable Tool for Promoting Classroom Participation Among Pre-Service Teachers in Rural Universities in South Africa

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ABSTRACT

The benefits of collaborative learning (CL) in teaching-learning have been well-documented. According to existing literature, it will help students and teachers learn from one another, develop good communication skills, foster a sense of community, trust and respect, and retain and apply the information in their future studies. Unfortunately, observation coupled with research shows that pre-service teachers' participation in South Africa's rural universities is at its lowest ebb – a potential source of concern to education stakeholders given its futuristic implications in the light of CL benefits. Less pre-service teachers' participation has been linked to cultural influence, environmental factors and students' backgrounds and have negatively impacted students' academic achievement. This paper seeks to typify CL as a panacea to pre-service teachers' apathy toward learning. In doing this, social constructivism theory (SCT) was adopted to underpin the study. Drawing from the principles of participatory action research, fifteen undergraduate students were randomly selected, and data was gathered with the instrumentation of semi-structured interviews and focus groups. The study revealed the think-peer-share strategy, group work strategy, micro-teaching strategy, positive feedback and encouragement, learner-centred method, and inquiry method as strategies for improving participation among pre-service teachers in rural universities. Recommendations were made in line with the findings of the study.

KEYWORDS

Collaborative learning; pre-service teachers; classroom participation; rural universities.

INTRODUCTION

Collaborative learning (CL) is widely recognized as a pedagogical practice that promotes inclusion and socialization among students. Several existing literatures have established evidence of the effectiveness of collaborative learning practices in schools and universities around the globe (Le et al., 2017; Omodan, & Addam, 2022). Not only does it offer alternative strategies to engage learners in class other than traditional participation, but it also incorporates collaborative learning strategies that encourage students to build stronger connections. Moreover, several forms of learning have been observed to promote critical thinking, problem-solving, and communication skills through novel real-world assignments such as group projects, debates, or even competitive events like tournaments or games. (Laal & Ghodsi, 2012; Laal & Laal, 2012; Le et al., 2017).

CL is a type of teaching method that involves the coming together of students to collaboratively work hand-in-hand with their peers to solve a problem, construct new ideas, and acquire critical skills by engaging in classroom activities (Azar et al. 2021). This pedagogical practice has long been associated with self-discovery among students (Smith & MacGregor, 1992).

As a lecturer in a rural university, the researcher observed a trend that shows less participation in collaborative learning among pre-service teachers. Over the years, I have observed that students do not ask questions during lecture presentations nor approach their colleagues for clarifications on concepts they do not understand, instead, they prefer visiting lecturers' offices to ask questions after lectures. This attitude of less participation among pre-service teachers has been linked with factors such as norms, family background, culture, and religion (Omodan & Ige, 2021; Al-Ghafri, 2018). Based on the above premise, this study observes the participation of pre-service teachers in one of the rural universities in the Eastern Free State province in South Africa where the study was contextualized. It is believed that interrupting teachers to ask questions or holding a contrary opinion while a class is in progress was disrespectful. It is a general belief that when elders talk, youngsters should listen without questioning their instructors.

Notably, pre-service teachers need to be actively involved in collaborative learning rather than being passive and allow cultural norms to take a negative toll on their career; instead, they should strike a balance between effective classroom practice and societal beliefs (Zakrajsek, 2017). As Omodan (2020) stated, South African pre-service teachers should take advantage of cultures that bring positive change (ubuntu: spirit of oneness) into an existing problem by coming together to identify and provide necessary solutions to the problem. Also, in a study, Barkley et al. (2014) observed that CL is more beneficial to racial and ethnic minority students than their counterparts from other backgrounds.

A number of negative effects can occur when learners are apathetic in collaborative learning situations. First, it can lead to a decrease in the overall quality of the learning experience. When one or more students are not engaged in the learning process, it can drag

down the quality of the experience for everyone else. Second, apathy can lead to tension and conflict among students. When students are not working together effectively, it can create an atmosphere of frustration and competition. Additionally, apathetic learners are less likely to form positive relationships with their classmates, which can impact their social and emotional development. Finally, apathetic learners are more likely to disengage from their learning altogether, leading to academic difficulties. Similarly, Rocca (2010) associated CL apathy with a deficiency in communication, social interaction and self-esteem.

Surprisingly, there are good practices of pre-service teachers' participation in rural university classrooms despite the marginalization. According to Blanks et al. (2013), pre-service teachers in rural universities who had the opportunity to experience rurality were equipped with the necessary pedagogical approaches to help them through CL to teach in rural universities. Again, because both lecturer and student are in a rural university where poverty among students is noticeable, it has impacted teaching and learning through collaborative topics such that the impact of poverty was easy to relate to more, especially when contents are aligned to student's lives. Furthermore, Heeralal (2014) revealed that the experience of pre-service teachers in rural universities assisted them in developing the relevant skills to teach in classrooms. Given the paucity of studies on the instrumentation of collaborative learning in fostering and enhancing the teaching-learning process among pre-service teachers, this study explored collaborative learning as a strategy to promote cooperative learning and participation among undergraduates in rural universities (Madimabe, & Omodan, 2021).

LITERATURE REVIEW

Collaborative Learning and Socialization among Students

Collaborative learning is an excellent way for students to socialize and learn from each other (Hernández-Sellés et al., 2019). When students work together on projects, they have the opportunity to share ideas, learn new skills, and develop teamwork skills (Laal & Ghodsi, 2012). Collaborative learning also helps students to develop communication and conflict resolution skills. Working together on projects can help students to build relationships and understand each other better (Loes et al., 2017).

Collaborative Learning and Learning Outcomes

There is a growing body of evidence that suggests that collaborative learning can have a positive impact on students' learning outcomes. In a collaborative learning environment, students are typically required to work together in small groups to complete a task or solve a problem. This type of learning has been shown to promote higher-order thinking skills (Loes et al., 2017), such as analysis and synthesis, and to encourage students to take more responsibility for their learning. Additionally, collaborative learning can help students learn new information more effectively. Studies have shown that students who participate in collaborative learning activities retain more information than those who learn independently (Seli et al., 2016; Loes, 2022).

A number of factors contribute to the success of collaborative learning, including the structure of the tasks, the level of student involvement, and the level of support from the teacher. When designing collaborative learning activities, it is important to consider these factors to create an environment conducive to learning.

Statement of Problem

Classroom activities in the 21st century have evolved from monologue to dialogue. Still, collaborative learning practice remains alien among pre-service teachers in rural universities in South Africa due to their cultures, beliefs, shyness, climate factors and norms (Zakrajsek, 2017). The researcher affirmed this from personal experience and as applicable to her colleagues who are lecturers also. The importance of CL has been affirmed by scholars (Omodan, 2020) with its attendant negative influence on students' attitude. Some of the noticeable negative impacts of students' apathy towards collaborative learning include a decrease in the overall quality of the learning experience, tension and conflict among students, failure to establish positive relationships and lack of communication and social skills. Based on the identified lacuna, the study aims to explore how collaborative learning as a teaching strategy promotes pre-service teachers' participation in a rural university classroom.

Theoretical Framework

The study was underpinned by the social constructivism theory (SCT). Social constructivism is a sociological theory that assumes social interactions construct our social world (Fu & Hwang, 2018). This theory has its roots in the work of Lev Vygotsky (1978), who argued that our social world is created through our interactions with others (Nyikos & Hashimoto, 1997). The social constructivism theory makes several assumptions about the nature of reality and human cognition. First, it assumes that reality is socially constructed, meaning that our interactions with others shape our understanding of the world. Second, it assumes that human cognition is socially situated, meaning that our thought processes are influenced by the social context in which we find ourselves. Third, it assumes that knowledge is co-constructed, which implies that we construct our understanding of the world through interactions with others (Amanjee & Carmichael, 2015).

The rationale for adopting SLT in this is that the theory provides a useful framework for understanding collaborative learning. This is because social constructivism emphasizes the importance of social interaction in the learning process, views learning as a social process, and emphasizes the importance of learner interaction in learning. (Lombardo & Kantola, 2021). Theoretically, there is a nexus between collaborative learning and SCT.

Collaborative learning is a process where students work together to complete a task or reach a goal. This type of learning can be beneficial because it allows students to share ideas and learn from each other. Social constructivism theory suggests that knowledge is constructed through interactions with others. This theory can be applied to collaborative learning because students interact with each other in order to construct knowledge. Given SCT's principles, it is

deemed a veritable tool for fostering collaborative learning among pre-service teachers in rural universities.

Research Question

The overarching research question for this study was:

- How can collaborative learning be fostered among pre-service teachers in rural university classrooms?

Research Objective

The study aims to:

- Explore strategies that engenders collaborative learning among pre-service teachers in rural university classrooms.

RESEARCH METHODOLOGY

This study is located within the qualitative research approach, which seeks to understand a phenomenon from the perspective of the people who experience it. Qualitative research is often used to explore complex phenomena that are difficult to study using quantitative methods (Elo & Kyngäs, 2008). It is often conducted through in-depth interviews, focus groups, and participant observation. The study was viewed from transformative paradigm (TP), a way of thinking that emphasizes the need to bring about change in society. The paradigm holds that research should be used to improve people's lives, empower them, and promote social justice. Transformative researchers seek to challenge dominant paradigms and create new knowledge that can be used to empower marginalized groups (Bergold & Thomas, 2012). Given that this study focused on marginalized pre-service teachers in rural universities, the adoption of TP is justified (Kopp & Sexton, 2021).

Research Design

The Participatory Research (PR) was adopted for the study because of how it viewed the important of people of a community coming together to proffer solutions to an existing situation within their vicinity (Bergold & Thomas, 2012). PR is a type of methodology in qualitative research that systematically investigates, analyzed, and interpret the information gather in order to implement action plan that could better the lives of people by effecting a positive change (Havadi-Nagy, & Muntean, 2017). PR is known for its unique features of; giving priority to the concerned people to be involved in the affairs of their lives, that attention should be on people being empowered, there should be inclusion of knowledge and the need to educate people who are disadvantaged. The issues power differentiation and superiority of the researcher to give opportunity to the concerned people (pre-service teachers) in sharing their experiences without holding back. Hence, the relevance of PR in the study is to change the exiting situation of pre-service teachers by suggesting how collaborative learning can be used to alleviate the challenges of pre-service teachers' lack of participation in rural university classrooms. Their involvement as the concerned pre-service teachers in the project is the aim

and assumption of TP, that is, let the voice of people who are going through a particular experience be mostly heard.

Selection of Participants

The study made use of the convenience sampling technique (CST). Convenience sampling technique is a sampling method where the researcher selects the participants for the study from a population that is easily accessible. Based on proximity between the researcher and the participants as well as affordability (Stratton, 2021; Etikan et al., 2016). Fifteen participants were drawn from the Faculty of Education in a rural university in the Republic of South Africa. These participants included five lecturers with a minimum of five years of experience; five level three and five level four pre-service teachers who have spent at least three to four years in the university. These participants were prequalified based on their status as lecturers, pre-service teachers, and their years of experience in a rural university classroom. In view of this, they are better positioned to share their thoughts, observations, and feelings vis a vis students' attitudes towards CL.

Data Collection

The study used focus group discussion (FGD) and semi-structured interviews to generate data. FGD is a form of data collection method where participants with similar experiences, feelings, observations, and thoughts are gathered by the researcher to address particular topics and make maximum opinions within a short period (Nyumba et al. 2018). With this method, the selected participants (3rd and 4th year pre-service teachers) who are disadvantaged because of their rural university classroom were opportune through FGD to share their personal experiences of challenges encountered during classroom participation and should suggest solutions.

During the discussion, the researcher assumed the role of facilitator who coordinated activities among participants, ensuring that the topic under discussion aligned with the conversations and maintained a focus (Gundumogula, 2020). Since it is believed that people in comparable situations are in better positions to share their opinions regarding a topic compared to someone who is not. Sessions were tape-recorded with the consent of the participants. Both 3rd and 4th year students were grouped together under supervision of researcher, participants were free and open minded and shared their experiences without feeling intimidated by the presence of lecturers since the group was made up of pre-service teacher alone. Before the commencing the session, the researcher introduced herself welcomed everyone, introduced the aim of the study and the discussion, assured participants of their confidentiality and why participation of everyone would be appreciated. Sessions was recorded using video tape recorder, while the time schedule for each session was between 30 to 35 minutes.

Data Analysis

This study adopted Thematic Analysis (TA) as a method of data analysis. (TA) is widely used in qualitative research because it entails reading through a set of collected data having categorized

them into themes (Braun & Clarke, 2012). Thematic analysis has been described as a frequently used analytical tool in qualitative research to capture sociality data (Guest et al.). Braun and Clarke (2006) state that TA typically involves six steps. The six steps are (1) data reduction, (2) data display, (3) initial coding, (4) identifying themes, (5) refining and defining themes, and (6) writing up. In a bid to make sense of the data in a manner that respond to the research question, the researcher adopted Braun and Clarke's six steps of TA. However, TA according to Belotto (2018) can be referred to as the learning of patterns of meaning. That is, with TA, it was easy for researcher to breakdown data into pattern and to identify meaning within data collected as supported by Braun & Clarke, (2006) that, for better understanding of data analysis, six steps of data analysis below should be followed. "That researcher gets to know the data, to generate codes for the data, to search for themes, to review themes, to define themes and to produce evidence". It is thereby assumed that; TA is concise, logical and coherent when adopted.

Ethical Considerations

This study adhered to research ethics as approved by the University of the Free State with approval number UFS-HSD2021/2085. The researcher ensured that the rights and welfare of participants were protected, that the research was conducted responsibly and ethically, and that the research results were accurately reported. Personal data collected were confidentially and securely stored, while risks to participants were minimized. All the participants were adequately informed about the objectives of the study through a consent letter, which they acceded to as well as verbal communication (Thompson et al., 2021) and were also informed that they have the right to withdraw from participation should they feel uncomfortable at any point.

RESULTS AND DISCUSSION

This section presents the analysis and presentation of data generated according to the objective of the study. The study aimed to explore strategies that engender collaborative learning among pre-service teachers in rural university classrooms. The following themes emerged during data analysis; micro-teaching and group work, think-pair-share, positive feedback and encouragement, lecturer-student relationship, student-centered approach, and provision of infrastructure. The study suggested how CL as a strategy could be used to promote pre-service teacher participation in rural university classrooms. Consistent with the principle of confidentiality and anonymity in research, lecturer participants in the study were denoted with L1- L5 while pre-service teachers were denoted with S1-S10. The data were presented and discussed below.

Micro-teaching cum Group Work Strategy

The data indicated that micro-teaching cum group work could be used to foster the culture of collaborative learning among pre-service teachers in universities located in rural areas. Some participants believe that if students are grouped into smaller groups with tasks such as

presentations and micro-teaching, they would have reasons to interact through feedback time and questions and answer session. The following are excerpts from interviews with the participants:

L3: I think there is a need for settings like group work, micro-teaching or similar classes where students can participate in teaching one another.

S6: Students can organise class presentations where they might have recordings and then play it for others to make suggestions and highlight what is good in the presentation.

S2: If lecturers can engage students in teaching methods like group work, it will promote collaborative learning because they will end up participating.

S10: I think CL can work if students can have a brief discussion in smaller groups or pairs, then everyone can talk and engage. This will create some space for them to engage with the lecturer and content

L1: Lecturers need to encourage students to have group work. Through that, they can communicate in their own languages without thinking of speaking English, which encourages participation.

Drawing from the above, the data suggest that micro-teaching engenders collaborative learning among students. This is consistent with the findings of Golightly and Westhuizen (2016), who reported that having the opportunity to observe and give feedback on fellow students' micro-teaching sessions in a collaborative environment enabled student-teachers to expand their capacity to reflect on their teaching practices and that of their peers. The result confirms that Griffiths (2016) found a correlation between micro-teaching strategy and collaborative learning.

Think-Pair-Share Strategy

The result also revealed that lecturers could adopt the think-pair-share strategy to inculcate collaborative learning culture among pre-service teachers. The think-pair-share strategy is a collaborative learning technique that can be used to promote student engagement and critical thinking. This strategy involves giving students time to think individually about a question or prompt before they share their thoughts with a partner. Once students have a chance to share their ideas with a partner, the entire class can share their thoughts on the topic (Cooper et al. 2021; Prah, 2017). The result indicated that it could instil collaborative learning in students if well structured, planned, monitored, and implemented. According to some of the participants,

L5: One CL approach I know that can promote the participation of students is the think-pair-share strategy where you (lecturer) group students, give them a topic and other students give them initiatives regarding the topic.

L4: CL can be used to promote participation by exploring different teaching and learning approaches such as pairing students together.

Apart from the fact that this strategy involves students' participation, it is assumed that the think-pair-share strategy motivates students to participate in class discussion and also

serves as feedback to the instructor to detect what students know and where to adjust and improve communication skills (Raba, 2017). Similarly, Fauzi et al. (2021) found in a quasi-experimental study that the think-pair-share strategy as a collaborative learning technique effectively improves learners' critical thinking skills. It follows that the think-pair-share strategy would be a veritable tool for fostering collaborative learning among pre-service teachers in universities in rural settlements.

Positive Motivation

Positive motivation emerged from the dataset as a strategy for engendering collaborative learning among pre-service teachers who are lethargic towards classroom participation. Positive motivation and collaborative learning go hand-in-hand. When students are positively motivated, they are more likely to be engaged in the learning process and to collaborate with their peers. Positive motivation can come from various sources, including a teacher's positive reinforcement, a student's interest in the subject matter, and a sense of accomplishment from mastering a challenging task. Below are statements from participants in the study:

S9: Lecturers should have a positive approach when they come to the class. They should know that students are not inferior, and they are not superior as perceived.

S7: The lecturer can give incentives such as hand clapping and marks to encourage student participation.

L2: Students need to be motivated to understand the importance of independent learning. If we can get them motivated, we can get them to understand that they also contribute to their learning

S2: How can they give students feedback while responding to questions? For me to participate in class, I must have positive feedback from my lecturer.

S4: They are here at the university to help us reach our potential of getting a degree, so they should treat us like adults, not kids.

The result shows that incentives like positive motivation and feedback enhance students' classroom participation. Incentives are a great way to promote collaborative learning among students. Students who work together towards a common goal are more likely to be engaged and motivated (Adebola et al., 2020). Incentives can also help to foster a sense of student cooperation and teamwork. Also, incentives can take different forms, such as rewards, privileges, or recognition. Whatever the form, incentives can be a powerful tool to encourage students to work together and learn from each other. Confirming this finding, Aziz et al. (2018) found that motivation promotes collaborative learning, improves communication skills, and promotes higher-order thinking. Similarly, Tampubolon (2018) found a correlation between student motivation and collaborative learning in a study entitled "Improving students' motivation in speaking through collaborative learning."

Learner-centred Approaches

Adopting a learner-centred approach emerged as a strategy for promoting collaborative learning among pre-service teachers in rural university classrooms. A learner-centered approach is an approach to education that focuses on the individual learner's needs. In a learner-centred environment, students are encouraged to actively participate in their own learning. The data set indicated that this approach could benefit students as it can help them better understand their individual learning needs.

Below are excerpts from interviews and focus groups pointing to that:

S4: Lecturers should use approaches that allow students to participate, such as the learner-centred or discussion method

L2: As a lecturer, we need to be creative in the ways we teach, let go of the traditional approach and involve our students more in their learning.

L5: Lecturers need to make opportunities available for students to learn independently so they can also have the sense that they are contributing.

S:10 I think lecturers are still much more on a teacher-centred approach, but they have to adopt a student-centred approach so that they can involve students in their teaching.

Based on the result, it is evident that lecturers need to adopt teaching approaches that involve students interacting with the content, lecturer, or their peers, especially while in classrooms. A growing body of evidence suggests that collaborative learning and learner-centered approaches are more effective than traditional, teacher-centered approaches (Zhou et al., 2019). In a collaborative learning environment, students work together to solve problems, share ideas, and learn from one another. This environment fosters critical thinking and creativity and allows students to take more ownership of their learning. Learner-centred approaches, such as problem-based learning, are more effective than traditional approaches. In a learner-centred approach, the focus is on the student and their needs and interests. This approach allows students to be more engaged in their learning and see the relevance of what they are learning.

CONCLUSION AND RECOMMENDATIONS

The study's objective was to explore collaborative learning as a veritable tool for promoting classroom participation among pre-service teachers in rural universities in South Africa. The result revealed that micro-teaching strategy, think-pair-share strategy, student-centred approach, and motivation foster collaborative learning among pre-service teachers in universities located in rural areas. These findings are indication that participation among pre-service teachers in rural university classroom could be promoted using CL. However, the study concludes that despite the challenges faced by these pre-service teachers due to their environment, is it evidenced that CL tools mentioned in the study could enhance student's participation during class interaction, increase the ability of working together with peers to achieve success.

Based on the findings, the following are recommended:

- The use of micro-teaching methods should be encouraged among lecturers. This can be done through various activities, such as role-playing, simulations, or small-group discussions. This strategy is beneficial because it allows students to learn from each other in a more hands-on way. It also encourages them to be more active participants in their own learning, which can lead to deeper understanding and retention of the material. Additionally, micro-teachings can help build teamwork skills and foster a sense of community within the classroom.
- Lecturers should adopt the think-pair-share strategy to encourage collaborative learning among pre-service teachers. In doing this, lecturers should present a problem or question to the class and allow the student to think about the problem independently for a few minutes before turning to their colleagues to share their thoughts. Thereafter, the teacher should call on a few students to share their thoughts with the whole class.
- Student-centred approach as one of the prioritized teaching methods in South Africa should be enforced by education policymakers and prioritized by lecturers in the classroom. Since the student-centred approach to learning is based on the belief that students are best able to learn when they are actively involved in the learning process, it would engender collaborative learning through such interactions.
- Lecturers should adopt motivation as a collaborative learning strategy. When students are motivated to learn, they are more likely to be engaged in learning and open to new ideas. When students are motivated, they are also more likely to be willing to work together to achieve common goals. There are many ways to motivate students. Some teachers may use rewards or punishments to motivate students. Others may use positive reinforcement, such as praising students when they do well. Still others may try to create a positive learning environment where students feel safe to take risks and are supported in their efforts. Whichever approach is used, it is important to remember that motivation is an important part of the learning process. When students are motivated, they are more likely to be engaged in the learning process and open to new ideas. When students are motivated, they are also more likely to be willing to work together to achieve common goals.

REFERENCES

- Adebola, O. O. Tsotetsi, C. T. & Omodan, B. I. (2020). Enhancing students' academic performance in university system: The perspective of supplemental instruction. *International Journal of Learning, Teaching and Educational Research*, 19(5), 217-230. <https://doi.org/10.46303/jcve.2021.4>
- Al-Ghafri, M. S. R. (2018). *Exploring the factors that influence students' participation in English classrooms at Ibri College of Applied Sciences in Oman* (Doctoral dissertation, University of Leeds).

https://etheses.whiterose.ac.uk/20300/1/Al%20Ghafri%20M%20S_%20Education_%20PHD_%202018.pdf

- Amanjee, B. & Carmichael, T. (2015). Collaborative learning among South African MBA students. *Alternation Journal*, 22(1), 114-138.
<https://files.eric.ed.gov/fulltext/EJ1328531.pdf>
- Azar, A. S., Keat, O. B. & Arutus, J. S. (2021). Collaborative learning in the classroom: The study of Malaysian university students' attitude. *Ilkogretim Online*, 20(4). doi: 10.17051/ilkonline.2021.04.30
- Aziz, F. Quraishi, U. & Kazi, A. S. (2018). Factors behind Classroom Participation of Secondary School Students (A Gender-Based Analysis). *Universal Journal of Educational Research*, 6(2), 211-217. DOI: <https://10.13189/ujer.2018.060201>
- Barkley, E. F. Cross, K. P. & Major, C. H. (2014). *Collaborative learning techniques: A handbook for college faculty*. John Wiley & Sons. <https://download.ebookshelf.de/download/0002/5216/40/L-G-0002521640-0003712114.pdf>
- Belotto, M. J. (2018). Data analysis methods for qualitative research: Managing the challenges of coding, interrater reliability, and thematic analysis. *The Qualitative Report*, 23(11), 2622- 2633.
- Bergold, J. & Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *Historical Social Research/Historische Sozialforschung*, 1(13), 191-222.
<https://www.qualitative-research.net/index.php/fqs/article/view/1801/3334>
- Blanks, B. Robbins, H. Rose, D. Beasley, L. Greene, M. Kile, M. & Broadus, A. (2013). Why Rural Schools Are Important for Pre-Service Teacher Preparation. *Teacher Educators' Journal*, 20, 75-93. <https://files.eric.ed.gov/fulltext/EJ1085623.pdf>
- Braun, V. & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, research designs: Quantitative, qualitative, neuropsychological, and biological*, 57–71. American Psychological Association. <https://doi.org/10.1037/13620-004>
- Cooper, K. M. Schinske, J. N. & Tanner, K. D. (2021). Reconsidering the share of a think-pair-share: Emerging limitations, alternatives, and opportunities for research. *CBE—Life Sciences Education*, 20(1). <https://doi.org/10.1187/cbe.20-08-0200>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of advanced nursing*, 62(1), 107-115.
- Fauzi, F. Erna, M. & Linda, R. (2021). The effectiveness of collaborative learning through techniques on group investigation and think pair share students' critical thinking ability on chemical equilibrium material. *Journal of Educational Sciences*, 5(1), 198.
<https://doi.org/10.31258/jes.5.1.p.198-208>

- Fu, Q. K. & Hwang, G. J. (2018). Trends in mobile technology-supported collaborative learning: A systematic review of journal publications from 2007 to 2016. *Computers & Education*, 119, 129–143. <https://doi.org/10.1016/j.compedu.2018.01.004>
- Golightly, A. & Westhuizen, C. P. V. D. (2016). An assessment of hybrid collaborative learning in geography micro-teaching: A South African case study. *International Journal of Educational Sciences*, 12(2), 139–154. <https://doi.org/10.1080/09751122.2016.11890421>
- Griffiths, J. (2016). Bridging the school placement gap with peer micro-teaching lesson study. *International Journal for Lesson and Learning Studies*, 5(3), 227–238. <https://doi.org/10.1108/ijlls-11-2015-0035>
- Guest, G. MacQueen, K. M. & Namey, E. E. (2012). Introduction to applied thematic analysis. *Applied Thematic Analysis*, 3(20), 1-21. <https://dx.doi.org/10.4135/9781483384436>
- Gundumogula, M. (2020). Importance of focus groups in qualitative research. *International Journal of Humanities and Social Science (IJHSS)*, 8(11), 299-302
- Havadi-Nagy, K. X., & Muntean, D. O. (2017). Participatory Research. *QUALITATIVE RESEARCH IN REGIONAL GEOGRAPHY. A Methodological APPROACH*, 147.
- Hernández-Sellés, N. Pablo-César, M. & González-Sanmamed, M. (2019). Computer-supported collaborative learning: An analysis of the relationship between interaction, emotional support and online collaborative tools. *Computers & Education*, 138, 1–12. <https://doi.org/10.1016/j.compedu.2019.04.012>
- Heeralal, P. J. H. (2014). Preparing pre-service teachers to teach in rural schools. *Mediterranean Journal of Social Sciences*, 5(20), 1-5.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4, doi: 10.11648/j.ajtas.20160501.11
- Kopp, T. & Sexton, R. J. (2021). Farmers, traders, and processors: Buyer market power and double marginalization in Indonesia. *American Journal of Agricultural Economics*, 103(2), 543-568.
- Laal, M. & Laal, M. (2012). Collaborative learning: What is it?. *Procedia-Social and Behavioral Sciences*, 31, 491-495.
- Laal, M. & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia-Social and Behavioral Sciences*, 31(31), 486–490. <https://doi.org/10.1016/j.sbspro.2011.12.091>
- Le, H. Janssen, J. & Wubbels, T. (2017). Collaborative learning practices: Teacher and student perceived obstacles to effective student collaboration. *Cambridge Journal of Education*, 48(1), 103–122. <https://doi.org/10.1080/0305764X.2016.1259389>
- Loes, C. N. (2022). The effect of collaborative learning on academic motivation. *Teaching and Learning Inquiry*, 4(10). <https://doi.org/10.20343/teachlearningqu.10.4>

- Loes, C. N., Brian P. A., Kem S. & Ernest T. P. (2017). Does collaborative learning influence persistence to the second year of college?" *The Journal of Higher Education*, 88(1): 62–84. <<https://doi.org/10.1080/00221546.2016.1243942>>.
- Lombardo, E. & Kantola, J. (2021). Social constructivism. In *The Routledge Handbook of Gender and EU Politics*, 43-55. London: Routledge
- Madimabe, M. P., & Omodan, B. I. (2021). Investigating the effects of e-learning as a method of curriculum dissemination for rural TVET college students. *Research in Social Sciences and Technology*, 6(3), 82-92. <https://doi.org/10.46303/ressat.2021.27>
- Nyikos, M. & Hashimoto, R. (1997). Constructivist Theory Applied to Collaborative Learning in Teacher Education: In Search of ZPD. *The Modern Language Journal*, 81(4), 506–517. doi:10.1111/j.1540-4781.1997.tb05518.x
- Nyumba, T. Wilson, K. Derrick, C. J. & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9(1), 20-3, <https://doi.org/10.1111/2041-210X.12860>
- Omodan, B. I., & Addam, B. (2022). Analysis of Transformational Teaching as a Philosophical Foundation for Effective Classrooms. *Journal of Curriculum Studies Research*, 4(2), 15-29. <https://doi.org/10.46303/jcsr.2022.9>
- Omodan, B. I. (2020). Assessment of group tasks as a decolonial pedagogy in university classrooms. *Universal Journal of Educational Research*, 8(11), 5479-5488. <https://doi.org/10.13189/ujer.2020.081151>
- Omodan, B.I. & Ige, O.A. (2021). Sustaining collaborative learning among university students in the wake of COVID-19: The perspective of online community project. *International Journal of Learning, Teaching and Educational Research*, 20(1), 356-371. <https://doi.org/10.26803/ijlter.20.1.20>
- Prahl, K. (2017). Best practices for the think-pair-share active-learning technique. *The American Biology Teacher*, 79(1), 3-8.
- Raba, A. A. A. (2017). The influence of think-pair-share (TPS) on improving students' oral communication skills in EFL classrooms. *Creative Education*, 8(1), 12-23. DOI:10.4236/ce.2017.81002
- Rocca, K. A. (2010). Student participation in the college classroom: An extended multidisciplinary literature review. *Communication Education*, 59(2), 185-213. <https://www.csus.edu/indiv/s/stonerm/rocca-litrevenengagingstudents.pdf>
- Seli, P. Wammes, J. D. Risko, E. F. & Smilek, D. (2016). On the relation between motivation and retention in educational contexts: The role of intentional and unintentional mind wandering. *Psychonomic Bulletin & Review*, 23(4), 1280-1287. Doi: <https://doi.org/10.3758/s13423-015-0979-0>
- Smith, B. L. & MacGregor, J. T. (1992). What is collaborative learning. *Towards the Virtual University: International Online Learning Perspectives*, 217-232.

<https://www.evergreen.edu/sites/default/files/facultydevelopment/docs/WhatisCollaborativeLearning.pdf>

Stratton, S. (2021). Population research: convenience sampling strategies, *Prehospital and disaster Medicine, Cambridge Journal*, 36(4), 373-374, <https://doi.org/10.1017/S1049023x21000649>

Tampubolon, T. C. (2018). Improving Students' Motivation in Speaking through Collaborative Learning. *International Journal of English Literature and Social Sciences*, 3(2), 185–191. <https://doi.org/10.22161/ijels.3.2.10>

Thompson, A. Stringfellow, L. Maclean, M. & Nazzal, A. (2021). Ethical considerations and challenges for using digital ethnography to research vulnerable populations. *Journal of Business Research*, 124(c), 676-683. DOI: <https://10.1016/j.jbusres.2020.02.025>

Zakrajsek, T. (2017). Students who don't participate in class discussions: They are not all introverts. <https://www.scholarlyteacher.com/post/students-who-dont-participate-in-class-discussions>

Zhou, X. Chen, L.H. & Chen, C.L. (2019). Collaborative Learning by Teaching: A Pedagogy between Learner-Centered and Learner-Driven. *Sustainability*, 11(4), 1174. <https://doi.org/10.3390/su11041174>