



DOI: <https://doi.org/10.20372/mhsr.v1i2.1641>
 Medical and Health Sciences Research Journal
 Med. Health Sci. Res. J., July – Dec. 2024, 1(2), 18-26
 Journal Homepage: <https://journals.wgu.edu.et>
 ISSN: 2520 – 7695 (Print)
 ISSN: 3005 – 7523 (Online)

Original Article

Improving Second-Year Midwifery Female Students' Classroom Participation at Wollega University: An Action Research

Worku Fikadu^{1*}, Segni Mulugeta¹, Firezer Belay Keno¹, Adisu Ewunetu¹

¹School of Public Health, Institute of Health Sciences, Wollega University, Nekemte, Ethiopia

Abstract	Article Information
Background: Active student participation in the classroom is crucial in today's education system. There are many ways to facilitate student engagement, including by offering high-impact practices. However, higher education institutions are facing different challenges regarding student engagement in the teaching and learning process. Among them, the most basic one is student participation in the classroom, particularly among female students. Thus, there is a strong need to create active and responsible citizens who could participate in achieving core objectives. Therefore, this study aims to improve the participation of female students in the classroom by creating different mechanisms. Methods: This action research was conducted among second-year Midwifery female students to improve classroom participation. Data were collected through observations and interviews using a mixed method. The collected data were analysed, and the identified gaps indicated potential areas for intervention. Finally, the educational intervention was implemented; activities in learning progress were monitored, and the outcome was analysed using SPSS version 25 and qualitative data were thematised. Results: One female student participated in the course each day, which accounts for 7% during the baseline assessment. The absence of proper guidance was the main factor (48.79%) that influenced female involvement, followed by a lack of confidence. Moreover, the lecture technique was the most frequently used method of teaching. To enhance student engagement during class, the implemented strategies involved presenting the upcoming session's topic and encouraging students to prepare a brief note on it, which they would read aloud. This process aimed to stimulate idea generation. Additionally, students experiencing anxiety due to various factors received tailored psychological support. As a result of these interventions, female students' participation in the classroom rose by 36%. Conclusion: The level of class participation among students is significantly influenced by a lack of confidence, language difficulties, inadequate teacher follow-up, the delayed delivery of teaching materials, the use of various active teaching methods, and the availability of different rewarding mechanisms. The intervention has a positive impact on improving female students' participation in the classroom. Hence, teachers should implement strategies in the intervention to boost students' involvement.	Article History Received: 11-08-2024 Revised: 07-11-2024 Accepted: 19-12-2024 Keywords: Midwifery, classroom participation, Wollega University *Corresponding Author: Worku Fikadu E-mail: wfikadu2@gmail.com

Copyright ©2024 MHSRJ Wallaga University. All Rights Reserved.

INTRODUCTION

Education is one of the fundamental elements for social, cultural and economic development of a country, which changes in values and attitudes. Learning leads to a knowledge structure or reorganisation and reconstruction of that learner's existing knowledge. This change occurs as connections are made between new material and prior knowledge, and then integrated into the learner's existing knowledge base (1).

Learning has remained a defining human characteristic despite the complexities and differences surrounding the concept and how it takes place in practise. Consequently, it has been a subject of research and a distinct field of study in theoretical psychology. Scholars summarise theories of learning into behaviourist, cognitivist, constructivist and social-psychological theories. The main concern of behaviourists is how to shape the behaviour of organisms as desirable responses to the environment. Cognitive psychologists consider learning as the reaction, processing and manipulation of information. For constructivists, the essence of learning is the engagement of learners in expressive experiences. In social psychology, the main concern is with the effects of the social organisation of the classroom on learning (2).

Recently, there have been changes in academia in the last previous years or so is a shift from lecture-based classes to courses that encourage a student-centred approach as per the direction from the Ministry of Education (MoE) (3). Action research can be used to understand practise; how to make practise better, realise how to accommodate outside change in one's practice and recognise how to change the outside to make practice better. It has been claimed that active student participation in higher educational institutions using classroom facilities has limitations both in terms of acquirement of

knowledge and the development of problem-solving skills regardless of there is very little empirical evidence to either confirm or deny this perspective. Recent literature on higher educational institutions gives considerable focus on the limitations of the lecture method of teaching and the need for more active students' participation in the classroom (4).

Ethiopia is taking different measures to use education for development, including expanding the universities, increasing the intake capacities of universities, creating a university-industry linkage, and making the intake capacity of universities. According to Education Sector Development Programme IV (ESDP IV), it is necessary to shift attention to quality concerns in general and to those inputs and processes which translate more directly into improved student learning and which help change the school into a genuine learning environment like a quality-focused school supervision, internal school leadership, increased student participation, and school-community partnerships (5).

The traditional classroom regards learning as a process of student absorption of knowledge that has been pre-digested and imparted by the teacher. The contemporary approach emphasises active engagement from both students and teachers. Although there are some exceptions in higher education settings, the vital principle of active learning remains consistent across all levels of education. Scholars have highlighted the necessity for reforms in tertiary teaching and instructional design to enhance learning outcomes. This shift towards active engagement is increasingly regarded as a key indicator of 'quality' interaction within various teaching and learning contexts. Additionally, research suggests that students who participate actively tend to achieve greater engagement and higher levels of cognitive learning (6,7).

Today's educational landscape has evolved to view learning as a means to fulfill personal needs, which can be achieved

through active learning strategies. Historically, students were seen as passive recipients of knowledge, with teachers delivering content via lectures without involving learners actively. In this traditional model, students had little opportunity for participation or discussion (8).

Contrasting this view, the constructivist approach advocates that learners should actively participate in constructing their knowledge and take responsibility for their learning process. Proponents of constructivism believe that knowledge is best developed when students engage actively with content, their environment, and peers, making education more engaging and effective. Therefore, implementing active learning methods is essential to foster meaningful interaction and collaborative learning among students (9).

Ethiopia promotes the adoption of active learning approaches across universities. Despite the use of some active learning techniques in Wollega University, student participation remains low. Factors contributing to this include large class sizes, teachers' lack of awareness or training in active teaching methods, and students' low perception of the value of education (5).

Various strategies can enhance student engagement, such as high-impact practices, including brainstorming, case studies, problem-based learning, panel discussions, role plays, drama, and cooperative education (10). Teachers can further influence engagement by modifying their courses to address the cognitive, behavioural, and emotional aspects of participation(11). Oral participation, closely linked to behavioural engagement, can be encouraged by setting expectations and rewarding active verbal contributions, thereby fostering a more engaged learning environment (12) .

Research indicates that among inactive students, 90% tend to sit at the back of the classroom, with 94% of these being female students. Many choose the back seats under the assumption that teachers are less likely to call on them (13). Similarly, a study

conducted at the Northern Ethiopia located university reported 51 students present in a classroom; only one female student consistently participated. This highlights that female student participation remains significantly lower compared to their male counterparts (14-23).

An experimental action research study revealed that overall classroom participation was only 14% of the total student population, with no female students actively participating. Despite years of teaching experience, the researchers aim to address this issue and foster greater student involvement, which they believe will contribute to the country's development (24-28).

Despite government initiatives aimed at improving educational outcomes, various challenges persist in universities. Among these, the most pressing is the low level of active participation among students, especially females. There is a critical need to develop active and responsible citizens capable of contributing meaningfully to societal progress. Therefore, this study aims to enhance female student participation in the classroom by implementing various mechanisms and strategies.

METHODS

Target Group

The target groups of this research were second-year female students of the Midwifery Department at Wollega University. As one of the group members, WF observed those second-year Midwifery students while he was delivering one course. he observed that the female students' participation in the classroom was lower, and purposefully, this inspired us to conduct our action research on those second-year female students in this department.

Study Design

This study was a prospective interventional study with a mixed qualitative and quantitative method to collect relevant data.

Sample Size Determination and Sampling Techniques

The total number of second-year Midwifery female students was 15; all students were included in this study, because most scholars strongly recommend that if the total number of the study population is less than 100, it is advisable to use all study population as a whole.

Source of Data and Data Collection Instrument

The study used primary data by collecting through observation and interviews. The data collection instruments, like checklists and questionnaires, were prepared for both the quantitative data collection and interview guides for qualitative data collection. The questionnaires were designed to collect data on the challenges that avert active participation. The questions were carefully designed and administered in such a way each participant of the study choose the idea that most appropriately match with their feelings as strongly agree (5) & agree (4) to show their agreements with the ideas of the questionnaire, and disagree (2) and strongly disagree (1) to show there disagree with the ideas of the questionnaire and (3) to undecided, when they face difficulties to agree or disagree with the ideas of each questionnaire.

Method of Data Collection and Procedure

Data were collected through interviews and classroom observation. Classroom observation was conducted over two weeks to assess various aspects of student participation. Specifically, a checklist was employed for five days to record the number of female students participating at baseline. Face-to-face interviews were conducted with female students identified as inactive, whose limited engagement rendered them passive

participants. Additionally, interviews were conducted with students who typically sit at the back of the classroom. As part of the qualitative approach, in-depth interviews were conducted with selected students.

Intervention and follow-up

To improve students' participation in the class, many strategies were employed. Introducing the next session topic and instructing them to prepare a short note on that topic, and finally helping them to come up with some idea; this can be done by giving a handout and telling them to read in a one-to-five group arrangement. For those students who are afraid of different factors, corresponding psychological advice was given depending on the issues that make students inactive by the instructors. Asking for new hands or for some new students to speak, asking to learn students' names and calling them by their names and asking students for meaningful questions, trying to use pleasing words like "thank you very much, keep it up", it was helpful for students. Trying to use body languages, for example actions for the learners to get the meaning of words, Improve the effectiveness of Active learning Methods that promotes female students' social interaction, positive interdependence, confidence, self-esteem and achievement, Improve the awareness of all female students about ALMs, give clear instructions, and explain how they work together and asses effectively, assigning the students with different tasks like facilitating, note taking, time keeping, leading, observing, reporting or tasks specific to the topic.

Data Analysis

The participation status of female students in the classroom was recorded both at baseline and after the implementation of the educational intervention. Data were analysed

using SPSS through descriptive statistics, including means, frequencies, and percentages. Various challenges influencing female students' participation were identified and presented using frequencies and percentages. After identifying the challenges, interventions were implemented to enhance female students' classroom participation, and the outcomes were compared with baseline data using frequencies and percentages. Qualitative data were triangulated and analysed thematically through narrative

methods, and were supplemented by quantitative findings.

RESULTS

Level of Participation

On average, 14 female students (93.3%) attended the class each day. On average, nearly one female student participated in the course (Measurement of Health and Disease (Biostatistics and Epidemiology)) each day. The overall female engagement in the class was 7% (Table 1).

Table 1. Female students' classroom participation status before the Intervention, 2023.

Day	Number of female students	Number of Students who participated	Students who did not participate	Remarks
D1	15	1	13	1 absent
D2	14	2	12	1 absent
D3	15	1	14	No absent
D4	13	1	12	2 absent
D5	15	1	13	1 absent

Factors that Hinder/Enhance Students' Classroom Participation

Many issues are raised in this action research to identify the problem that influences female involvement in the classroom. Around 41.8 % agree that the students' lack of confidence was a factor in their failure. However, roughly 39.2% disagree and 11.5 % strongly disagree on the subject of whether students' lack of confidence affects female involvement in the classroom.

The absence of sufficient guidance was the next element that influenced female involvement in the classroom, with 48.79% agreeing and 13.4 % strongly agreeing. Another element that influences female student is their gender (Table 2).

Teaching Method of the Instructor

The teaching method revealed a great impact on students' participation in class, and some

students attributed their inactivity to the teaching methods that teachers used. Even if the university is practising active teaching methods, not all of the instructors are implementing them correctly as it was planned, as the information we got from informal discussions. Moreover, the female students' participation in the classroom is influenced by the way that instructors teach. For example, employing the lecture technique always followed by a case study affected their engagement by 47.05% and 35.29%, respectively (Table 3).

Results of Data Obtained Through In-depth Interview

A depth interview was conducted with 2nd year Midwifery students; we identified the following major challenges that hinder the

successful participation of females in the classroom.

1. Lack of awareness about the advantages of Active learning Methods

2. Language problem
3. Fear of speaking in the class.

Table 2. Factors affecting the participation of female students in the classroom, 2023.

Factors	Rating scale				
	SDA	DA	N	A	SA
Lack of confidence	11.5	39.2	5.3	41.8	2.2
Language difficulty	15.2	40.5	2.3	37.4	4.6
Lack of educational materials	5.8	29.6	10.8	42.23	12.07
Lack of proper guidance	16.06	21.75	-	48.79	13.4
Difficulty of education	20.8	41.25	5.75	24.98	7.22
Students' attitude towards ALMs	23.95	30.72	13.82	28.05	3.46
Lack of follow-up of teacher	1.62	42.56	10.43	36.5	8.89
Lack of adequate effort of students	17.64	22.64	7.2	38.65	13.87
Uncomfortable seating arrangement of students	23	37.7	2.5	20	16.8

Note: SD: Strongly Disagree, DA: Disagree, N: Neutral, A: Agree, SA: Strongly Agree

4. Lack of confidence.

5. Teaching methods employed.

“A 23-year-old female student said that active participation is asking questions, taking notes while the teacher speaks, and debating about the topic with peers in the classroom. For me, active classroom participation is important for the teaching and learning

process. Factors that affect my classroom participation include instructors' preference for teaching method, lack of confidence and language barrier. Teaching methodologies like group discussion and brainstorming motivate me to actively participate in the class.”

Table 3. Impact of Teaching Methods on Female Students' Classroom Participation in 2023.

Teaching Methods	Frequency		
	Always	Sometimes	Not at all
Guiding group work and the individual student	23.52	52.94	23.52
Discussion	23.52	58.82	17.64
Case study	35.29	47.05	17.64
lecturing method	47.05	29.41	23.52

“A 19-year-old female student said that active participation is speaking in the class while the teachers ask the questions. For me, active classroom participation is not as important for the teaching and learning process, as we come to the class in order to get information directly from the instructors. The barriers to our participation include language difficulties, fear of speaking, Lack of awareness about the advantages of Active learning Methods, etc. Teaching methodologies like brainstorming, case study and group discussion motivate me to actively participate in the class.”

“A 21-year-old female student said that active participation is asking and answering the questions raised by students and teachers. For me, active classroom participation is very important for the teaching and learning process. The barriers which hinder our participation include fear of speaking,

language difficulties, male dominance, etc. On the other hand, teachers’ learning methods like using group discussion were motivating me to actively participate in the class.”

Intervention (Action Taken) Results

93.3% of females attended the intervention, and 5 students participated per day in the course of Epidemiology and Biostatistics on average; that means, on average, 10 students were inactive on a day. After the intervention, female students' classroom participation increased by 36% from the total number of female students in the classroom. As a result of implementing the aforementioned strategies, our female students' inactivity was mostly changed, and the intervention was quite pleasant. However, more research and effort are needed to make a significant Improvement in female student participation (Table 4).

Table 4. Female students’ classroom participation status after the intervention, 2023.

Day	Number of female students	Students who participated	Students who did not participate	Remarks
D1	15	4	10	1 absent
D2	14	7	6	2 absent
D3	15	5	10	*
D4	13	4	9	2 absent
D5	14	8	6	1 Absent

CONCLUSIONS

Student participation in class is influenced by factors such as lack of confidence, language barriers, insufficient teacher follow-up, early delivery of materials, use of active teaching methods, and available incentives. This study employed interventional action research to enhance student engagement. Initially, female students’ participation was only 7%, indicating very low involvement. After

implementing targeted strategies, participation increased by 36%, demonstrating the effectiveness of the interventions. The results suggest that these actions significantly improved female students’ classroom engagement. Based on these findings, it is recommended that the university adopt similar strategies for sustainable improvement. Teachers should provide clear instructions, appropriate

activities, role-sharing, and supportive resources to foster active participation. It would be advisable for Instructors to assess every member's involvement in teamwork, assignments, presentations and other project work using a cross-check approach rather than giving an equal mark to all group members. Students shall participate in the class with full confidence, despite their language correctness, to improve their speaking ability and educational skills. Also, each student could feel a sense of responsibility and might develop a habit of learning from teamwork, group discussion and class participation.

Data availability

Relevant data are available from the corresponding author upon reasonable request.

References

1. Holter NC. Team Assignments Can Be Effective Cooperative Learning Techniques. J Educ Bus. 1994;70(2):73–6.
2. Darling-Hammond L, John B. Preparing teachers for a Changing World. 2005.
3. Martin J, Oksanen R, Takala T, Omollo B, Kelly R, Hemming R, et al. Preparation of the Education Sector Development Program in Ethiopia. Vol. 3, OECD Journal on Budgeting. 2000. 163-173.
4. Stringer EET. Action research in Education [Internet]. Action Research in Education. 2004. Available from: http://sutlib2.sut.ac.th/sut_contents/H112461.pdf
5. Ministry of Education of Federal Democratic Republic of Ethiopia. Education Sector Development Program IV (2010/2011-2014/2015) Program Action Plan /PAP. 2010;
6. Biggs J. What the student does: Teaching for enhanced learning. Int J Phytoremediation. 1999;21(1):57–75.
7. John B, Catherine T. John Biggs and Catherine Tang, 2011. Teaching For Quality Learning At University [Internet]. Vol. 2011. 2011. 418 p. Available from: http://books.google.se/books/about/Teaching_for_Quality_Learning_at_Univers.html?id=XhjRBrDAESkC&pgis=1
8. Clark J. Philosophy of Education in Today's World and Tomorrow's: A View from "Down Under." Paideusis. 2020;15(1):21–30.
9. Dagar V and Yadav A. Constructivism: A Paradigm for Teaching and Learning. Arts Soc Sci J. 2016;7(4).
10. M, Kumar S. Active Learning Methods. NTTC Bull [Internet]. 2012;19(1):3–5. Available from: <https://eric.ed.gov/?q=ED538497&ft=on&id=ED538497>
11. Veiga F. Students Engagement in schools, Differentiation and Promotion [Internet]. Educación, Aprendizaje y Desarrollo en una Sociedad Multicultural. 2011. p. 4627–35. Available from: <http://repositorio.ul.pt/handle/10451/5458.12>. Miller R, Amsel E, Kowalewski B. Promoting Student Engagement. Volume 1: Programs, Techniques and Opportunities. Soc Teach ... [Internet]. 2011;1. Available from:

Consent for publication:

Not applicable

Competing interests

The author declares that he has no competing interests.

Funding

No funding was obtained for this study.

Author contributions

All authors contributed to the conception of the research question, planned study design, data collection, statistical analysis, and data interpretation and were involved in the drafting, writing, and editing of the manuscript.

Acknowledgment

We would like to thank Wollega University Institute of Health Sciences Higher Diploma Program Office for providing this opportunity.

- <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=ED533155>
13. Kasa Y. Yosef Kasa . Improving Student ' s Participation in the Classroom in Chemistry Improving Student ' s Participation in the Classroom in Chemistry Freshman Students at Assosa University : An Experimental Action Research. 2021;1(January 2016):5–10.
 14. Worku A. Enhancing Students Class Participation in the Case of Second Year Tourism Management Students on ?Research Methods in Tourism. J Hotel Bus Manag. 2016;5(1):4–9.
 15. Menelek Asfaw D, Kedir A, Asmare B, Adem M. Experimental Action Research on Improving Student's Classroom Participation: The Case of Samara University Economics Students of 2019 G.C. Sci J Educ. 2021;9(2):50.
 16. Alexander WA. Review Reviewed Work (s): What Matters in College ? Four Critical Years Revisited . by Alexander W . Astin Review by : Kenneth A . Feldman Source : The Journal of Higher Education , Vol . 65 , No . 5 (Sep . - Oct . , 1994), pp . 615-622 Stable URL : ht. 1985;65(5):615–22.
 17. Bonwell CC, Eison JA. Active Learning: Creating Excitement in the Classroom. 1991 ASHE-ERIC Higher Education Reports. ASHE-ERIC Higher Education Report. 1991. 1-121 p.
 18. Fayombo GA, Ogunkola BJ, Olaleye YL. Cross Institutional Study of the Causes of Absenteeism among University Students in Barbados and Nigeria. J Educ Dev Psychol. 2012;2(1):122–36.
 19. Mafa O. Challenges of imple menting inclusion in Zimbabwe' s Education System. Online J Educ Res. 2012;1(2):14–22.
 20. Kishore Kumar M. Challenges of Implementing Student-centered Strategies in Classrooms. Int Res J Eng Technol [Internet]. 2016;3(12):1224–7. Available from: www.irjet.net
 21. Biggs J. Aligning teaching for constructing learning John Biggs Keywords What is constructive alignment ? Defining the ILOs. Education [Internet]. 2003;94(11):112106. Available from: http://egusdsecondaryed.pbworks.com/f/aligning_teaching_for_constructing_learning.pdf
 22. McIlrath D, Huitt W. The teaching-learning process: A discussion of models. 1995. 45-49 p.
 23. Johnson RT, Johnson DW. Student-Student Interaction: Ignored but Powerful. J Teach Educ. 1985;36(4):22–6.
 24. Kaplan D, Kuger S. The Methodology of PISA: Past, Present, and Future. 2016. 53-73
 25. Kaufman DB, Felder RM, Fuller H. Accounting for Individual Effort in. J Eng Educ. 2000;89(April):133–40.
 26. Oakley B, Felder RM, Brent R. Turning Student Groups into Effective Teams. J Student Centered Learn. 2004;2(1):9–34.
 27. Coon L. Improving Work Skills of Cooperative Work Students through Time Management Strategies. 2002; Available from: <http://search.ebscohost.com.ezproxy.liv.ac.uk/login.aspx?direct=true&db=eric&AN=E D465927&site=eds-live&scope=site>
 28. Macan TH, Dipboye RL, Phillips AP, Shahani C. College Studenta Time Management Correlations With Academic Performance and Stress.Pdf>. J Educ Psychol. 1990;82(4):760–8.