COLLABORATIVE TEACHING AND LEARNING PRACTICES FOR ENTREPRENEURSHIP SKILLS ACQUISITION IN HOME ECONOMICS FOR QUALITY EDUCATION IN LAGOS STATE NIGERIA

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Abstract
This study explores the effectiveness of collaborative teaching and learning strategies for entrepreneurship skills acquisition among Home Economics students in Lagos State. The research focuses on the demographics of the participants, collaborative learning practices, the effects of collaboration in Home Economics entrepreneurship education, obstacles to collaborative learning and identifies the most effective collaborative learning practices for the 21st century. The population of this study consists of all levels' of home economics students in tertiary institutions in Lagos State, Nigeria. Purposive sampling technique was used to select three tertiary institutions offering home economics course in Lagos Mainland Local Government Area, Lagos State. The participants were drawn from the University of Lagos, Federal College of Education (Technical) Akoka, and Yaba College of Technology. The instrument used for this study was a structured questionnaire. Face validity of the instrument was ascertained by three experts in home economics.The reliability coefficient obtained through Cronbach alph formula was 0.84 which shows that the instrument was reliable. The descriptive statistics of mean and standard deviation were used for the research questions raised. The findings indicate that collaborative learning methods received positive feedback from the participants, suggesting agreement and support for these approaches. Collaborative learning was found to improve students' understanding, knowledge, engagement, confidence, motivation, problem-solving skills, and social awareness. Teacher support was identified as a crucial factor in facilitating collaborative learning experiences. However, several obstacles were identified, including communication difficulties, low levels of interaction, challenges in group formation, lack of collaborative skills, and time management issues. The study also highlights the most effective collaborative learning practices for Home Economics education, including Problem-Based Learning (PBL) in Foods and Nutrition,

Home Management Think-Pair-Share, and Guided Design in Textiles & Clothing. Recommendations are provided to address the identified barriers, including the need to teach collaboration skills acquisition explicitly and create a supportive and inclusive learning environment.

Key note: Collaboration, Entrepreneurship, Skills, Home Economics, Learning

Introduction

Collaborative learning is a pedagogical approach that involves students working together in small groups to achieve a common goal, taking responsibility for both their own learning and that of their peers. The concept of collaboration, rooted in the Latin verb collaborare (col- "together" + laborare – "to work"), emphasizes the importance of working collectively towards a shared objective (Sawyer, 2017). This method encourages students to engage socially and emotionally as they consider different perspectives, articulate their thoughts, and defend their ideas, fostering the development of independent and critical thinking (Srinivas, 2011).

The success of collaborative learning is contingent upon several key elements, as identified by Laal (2013). Positive interdependence, meaningful interaction, individual accountability, personal responsibility, social skills, and group self-evaluation are integral components that define a collaborative learning session. Without these elements, a social interaction cannot truly be considered a collaborative learning experience. In the context of Home Economics and the development of entrepreneurship skills acquision, various collaborative learning practices have been employed. Problem-Based Learning (PBL) is one such approach where students, usually in groups, are presented with a specific problem over an extended period. They work collaboratively to understand the issue and propose solutions, mirroring the research process. PBL encourages independent study and critical thinking as students define their learning goals based on triggers from the problem (Wood, 2003). Other collaborative learning practices include Think-Pair-Share, Guided Design, Case Studies, Simulations, Peer Teaching, Peer Editing, and the Jigsaw Strategy. These methods aim to engage students actively in the learning process, promoting teamwork, critical thinking, and practical application of knowledge.

Despite the success of collaborative teaching in Home Economics, challenges persist. One significant obstacle is the lack of collaborative skills among students, leading to misunderstandings, arguments, and non-cooperation within groups. Additionally, free-riding, where some members refrain from active participation, can disrupt group dynamics and place an undue burden on others. Competence status is another challenge, as students with low competency levels may hinder the overall success of collaborative tasks. Moreover, the social

dynamics within groups, influenced by factors such as friendship and interpersonal relationships, play a crucial role in collaborative learning. Unfriendly team members may hinder effective collaboration, as negative emotions and lack of trust impede the flow of ideas and collective effort. While collaborative learning offers significant benefits in developing entrepreneurship skills in Home Economics, addressing challenges such as lack of collaborative skills, free-riding, competence status, and interpersonal dynamics is crucial for ensuring the success of this pedagogical approach.

Home Economics, as an interdisciplinary, multi-disciplinary, and trans-disciplinary discipline, draws from various disciplines to enhance self-reliance and independent work in individuals, families, and communities. Rooted in human science, Home Economics has traditionally focused on the home and family, but its scope has expanded in the 21st century to address broader living conditions that impact individuals and families at multiple levels, from the local to the global community (McGregor, 2006). The overarching goal of Home Economics is to promote and preserve the well-being of individuals, families, and communities, emphasizing values for lifelong learning across paid, unpaid, and voluntary work.
In response to the escalating rate of youth unemployment, particularly in Nigeria, there has been a concerted effort to address this issue through the introduction of entrepreneurship subjects in secondary schools. In Lagos State, entrepreneurship subjects, including Home Economics, were introduced to align with the National Economic Empowerment and Development Strategy (NEEDS). This strategy aims to eradicate poverty, create wealth, and empower youth for employment generation, constituting a form of citizen empowerment (Abusomwan, 2019). Home Economics, as an entrepreneurship subject, plays a crucial role in equipping students with the necessary skills to create jobs and generate wealth (Akunnaya, 2012).

Gumbari (2011) emphasizes that entrepreneurship empowerment and skills acquisition, particularly through vocational subjects in Home Economics, can address various societal challenges such as hunger, poverty, crime, and unemployment. Orji (2013) defines entrepreneurship as a process that involves combining factors of production and innovative ideas to establish and sustain a business enterprise. This underscores the importance of Home Economics education in fostering entrepreneurship development, with the potential to contribute significantly to reducing unemployment. Okoro (2005) underscores the unique role of Home Economics education, stating that it is integral to the school curriculum and focuses on enhancing individual lives, family living, and community improvement. As a profession, Home Economics Education trains individuals to be self-reliant and serves as a job creator at the family, societal, and national levels. Teachers, as key players in the entrepreneurship development

process, have a crucial role in addressing massive unemployment by imparting essential skills to students.

Recognizing the need for more effective forms of dissemination of information, collaborative teaching and learning practices have been developed to promote integrative thinking in Home Economics students. Entrepreneurship education equips youths with essential knowledge, skills, attitudes, and ideas for self-reliance (Onu, 2006). However, the challenges in the educational system, particularly the lecture method of teaching, have hindered the effective impartation of entrepreneurship skills to students. To address this challenge, collaborative teaching methodologies have recently gained prominence. Researchers such as Troussas et al. (2020), Carless (2004), and Reeves (2017) have highlighted the effectiveness of collaborative teaching practices in achieving better outcomes in education. Therefore, this study is to investigate the various collaborative practices that can be used to achieve entrepreneurship skills acquisition in Home Economics for quality education in Lagos State.

Purpose of the Study

The main purpose of this study is to, investigate the various collaborative teaching and learning practices which may help in achieving entrepreneurship skills acquisition in Home Economics for quality education in Lagos State. Specifically, the study intends:

1. to highlight different collaborative learning practices which can be used to achieve entrepreneurship skills in Home Economics.
2. to identify the effect of collaborative learning on the teaching of entrepreneurship skills in Home Economics.
3. to enumerate the obstacles militating against the collaborative process in teaching entrepreneurship skill's in Home Economics.
4. to determine the 21st-century collaborative teaching and learning practices that can be used to achieve entrepreneurship skills in Home Economics.

Research Questions

In line with the purpose of the study, the following research questions were proposed.

1. What are the different collaborative learning practices which can be used to achieve entrepreneurship skills in Home Economics?
2. What is the effect of collaborative learning on the teaching of entrepreneurship skills in Home Economics?
3. What are the obstacles militating against the collaborative process in teaching entrepreneurship skill's in Home Economics?

4. What is the most effective 21st century collaborative teaching and learning practice which could be used to achieve entrepreneurship skills in Home Economics?

Methods

This research was conducted using a qualitative methodology. The researcher conducted interviews and surveys on Home Economics students from various levels in various tertiary institutions in Lagos to get their perceptions on the type of collaborative practices which could help them achieve entrepreneurship skills and the obstacles affecting these practices.

This study was conducted in all tertiary institutions offering home economics in Lagos State, Nigeria.

Population of the Study

The population of this study consisted of all levels of home economics students in tertiary institutions in Lagos State, Nigeria.

Sample and Sampling Techniques

Purposive samply techniques was used to select three tertiary institutions offering home economics course in Lagos Mainland Local Government Area, Lagos State. The participants were drawn from the University of Lagos, Federal College of Education (Technical) Akoka, and Yaba College of Technology. A total of ten (10) students from the one hundred to four hundred level home economics students from the aforementioned institutions was chosen. This gives a total of forty (40) students per institution. As a result, one hundred and twenty (120) students participated in this study.

Research Instrument

The instrument used for this study was a structured questionnaire. The questionnaire was divided into two sections. The first section focuses on the respondent's data which includes age, gender, level, and school while the second section focuses on answers to the various research questions. The questionnaire is a 4 point Likert rating scale was used to respond to the research questions with options of; SA (Strongly Agree), A (Agree), D (Disagree), and SD (Strongly Disagree).

Validity Of The Instrument

Face validity of the instrument was done by three xperts in home economics , two from University of Lagos and one from Federal College of Education Akoka. Corrections and inputs of the validates were incorporated into the final instrument.

Reliability of The Instrument

The questionnaires was pre-tested by administering 20 copies to students from another school different from the study sample. The reliability coefficient obtained

through Cronbach alpha formula was 0.84 which shows that the instrument was reliable.

Method of Data Collection

In three tertiary institutions, the researcher distributed closed-ended questionnaires to students. The researcher distributed the questionnaires to the three hundred level and four hundred level home economics students of the sampled schools after getting approval from the Dean of Faculty of the schools. All of the students completed and returned the questionnaires.

Method of Data Analysis

The descriptive statistics of mean and standard deviation were used for the research questions raised. The research questions were answered using tables containing mean and standard deviation of the opinions of the students on questions relating to the research. The remarks for each opinion as well as the general remarks were made based on an average mean benchmark of 2.5 where mean values above 2.5 signifies agreement to a particular opinion while mean values below 2.5 signifies disagreement to that opinion for 4 point likert scale questions.

Results

Research Question 1: What are the different collaborative learning practices which can be used to achieve entrepreneurship skills in Home Economics?

Table 1. Collaborative Learning Practices Which Can Be Used To Achieve Entrepreneurship Skills In Home Economics

Collaborative Learning Practices	SA (%)	A (%)	D (%)	SD (%)	Mean	S.D	Remark
Reading races	17.2	58.2	19.7	4.9	2.88	.745	Agreed
Group presentations	32.8	52.5	13.1	1.6	3.16	.708	Agreed
Games based learning (games and competition)	40.2	53.3	5.7	0.8	3.33	.622	Agreed
Group task project	34.4	50.8	10.7	4.1	3.16	.772	Agreed
Gallery walk	22.1	62.3	13.9	1.6	3.05	.654	Agreed
Running diction	13.9	62.3	17.2	6.6	2.84	.743	Agreed
Milling/mingling activities	19.7	68.0	8.2	4.1	3.03	.667	Agreed
Jigsaw task	16.4	59.0	19.7	4.9	2.87	.738	Agreed
Think, pair share	25.4	63.1	10.7	0.8	3.13	.616	Agreed
Brainstorming technique	36.1	54.1	6.6	3.3	3.23	.713	Agreed
Use of diagrams/ maps and other graphic organisers (to represent concepts, record	38.5	53.3	6.6	1.6	3.29	.662	Agreed

information and display language)							
Exciting warmers/lead-ins used to reduce boredom	31.1	63.1	3.3	2.5	3.23	.627	Agreed
Group discussion/interactive session	39.3	55.7	1.6	3.3	3.31	.669	Agreed
Debate	36.1	50.0	11.5	2.5	3.20	.735	Agreed
Role Play	34.4	54.9	8.2	2.5	3.21	.695	Agreed
Peer Teaching	32.0	53.3	9.8	4.9	3.12	.778	Agreed
Simulations	29.5	59.8	8.2	2.5	3.16	.672	Agreed
Guided Design	28.7	59.8	9.8	1.6	3.16	.656	Agreed
Peer Editing	25.4	53.3	20.5	0.8	3.03	.703	Agreed
Case Studies	33.6	57.4	6.6	2.5	3.22	.674	Agreed
Grand Mean					**3.131**	**.142**	**Agreed**

Source: *Generated from analysis using SPSS, 2023; F=frequency; SA=Strongly Agree;*
A=Agree; D=Disagree; SD=Strongly Disagree; S.D=Standard Deviation

Table 1 lists numerous collaborative learning methodologies for home economics entrepreneurship. All the 20 collaborative learning approaches had mean ratings above 2.5, indicating respondents agreement. 58.2% of the participants thought reading races were good for entrepreneurship. 52.5% of the respondents agreed that group presentations were important, emphasizing teamwork and public speaking. 53.3% of the participants liked games-based learning, which uses competition. Gamification engages pupils and fosters entrepreneurship. Group work assignments, gallery tours, milling/mingling exercises, and brainstorming tactics were also well-received. Most responders supported jigsaw projects, think-pair-share activities, diagrams/maps, and visual organizers. These methods encourage active engagement, critical thinking, and communication all of which are essential for entrepreneurship skills development. Respondents liked exciting warm-ups/lead-ins, group discussions, debates, role-plays, peer teaching, simulations, guided design, peer editing, case studies, and other collaborative learning methods, with mean scores more than 3. These exercises may enhance Home Economics entrepreneurship due to strong agreement.

The grand mean of 3.131 implies that respondents agreed that collaborative learning approaches help Home Economics entrepreneurs. These findings underscore the importance of varied collaborative learning methodologies to provide an engaging and dynamic learning environment that fosters entrepreneurship abilities.

Research Question 2: What is the effect of collaborative learning on the teaching of entrepreneurship skills in Home Economics?

Table 2. Effect Of Collaborative Learning On The Teaching Of Entrepreneurship Skills In Home Economics

Effects of Collaborative Learning	SA (%)	A (%)	D (%)	SD (%)	Mean	S.D	Remark
I learn more when I work and share experience with others	36.1	56.6	4.9	2.5	3.26	.666	Agreed
Group activities/tasks makes me more active, confident and determined to learn and speak in a safe environment.	35.2	57.4	4.9	2.5	3.25	.663	Agreed
I learn more when the teacher assigns us roles, provides variety of guidance explanation towards completing tasks.	37.7	54.1	5.7	2.5	3.27	.681	Agreed
The teacher gives me opportunity to interact and practice language in and out of class building my social interaction.	23.8	54.9	18.9	2.5	3.00	.727	Agreed
Group discussion makes me alert and attentive in class.	35.2	52.5	10.7	1.7	3.21	.694	Agreed
I learn more entrepreneurship skills in home economics class when the class is participatory and interactive.	36.1	54.9	6.6	2.5	3.25	.684	Agreed
I have higher achievement test scores in my home economics when taught with collaborative learning	30.3	59.8	8.2	1.6	3.19	.647	Agreed

Collaborative learning motivates me to be an autonomous leader	26.2	61.5	11.5	0.8	3.13	.629	Agreed
It improves my thinking skills	33.6	60.7	4.1	1.6	3.26	.614	Agreed
Collaborative learning increases my learning motivation	36.1	55.7	5.7	2.5	3.25	.675	Agreed
I do not get easily distracted while carrying out tasks in collaborative learning.	26.2	55.7	14.8	3.3	3.05	.737	Agreed
It improves my problem-solving skills like a true entrepreneur.	32.0	59.0	8.2	0.8	3.22	.623	Agreed
Collaborative learning help me and my classmates progress as a group.	34.4	59.8	5.7	0.0	3.29	.567	Agreed
Collaborative learning promotes changes in the classroom beyond academics by fostering critical social consciousness among students as individuals.	27.9	62.3	9.0	0.8	3.17	.612	Agreed
It strengthens my independence as a student especially when I become accountable to my team mates.	31.1	58.2	8.2	2.5	3.18	.681	Agreed
Grand Mean					**3.199**	**.083**	**Agreed**

Source: *Generated from analysis using SPSS, 2023; F=frequency; SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree; S.D=Standard Deviation.*

Table 2 examines how collaborative learning affects Home Economics entrepreneurship instruction. Collaborative learning improved understanding and knowledge for most respondents (3.26 mean). Group activities also made leaners/students more active, confident, and motivated to learn and talk in a safe setting (3.25 mean). When teachers assign roles and provide direction, students learn more (3.27 mean). This shows how important teacher support is for collaborative learning.

Collaborative learning boosts language and social skills in and out of the classroom (3.00 mean). Group talks increased students' class alertness (3.21 mean), demonstrating that collaborative learning methods engage students more. Home Economics students believed that participatory and dynamic classes helped them understand entrepreneurship (3.25 mean). Collaborative learning also improved academic performance (3.19 mean achievement test scores). Collaborative learning motivated students to become autonomous leaders (3.13 mean) and increase their thinking and problem-solving skills (3.26 and 3.22 mean). It increased students' learning motivation (3.25 mean) and reduced task distractions (3.05 mean). Collaborative learning improved critical social consciousness (3.17 mean) and group progress (3.29 mean). Students' teamwork and independence improved (3.18 mean).

The grand mean of 3.199 indicates that respondents agree that collaborative learning improves Home Economics entrepreneurship education. Collaborative learning improves students' motivation, problem-solving, independence, and social consciousness.

Research Question 3: What are the obstacles militating against the collaborative process in teaching entrepreneurship skill's in Home Economics?

Table 3. Obstacles Militating Against The Collaborative Process In Teaching Entrepreneurship Skill's In Home Economics

Obstacles	SA (%)	A (%)	D (%)	SD (%)	Mean	S.D	Remark
Students do not pay attention to each other's opinion and interrupt each other.	12.3	50.0	27.9	9.8	2.65	.822	Agreed
Students interaction are below is below a level that allows for shared knowledge construction.	9.9	45.5	36.4	8.3	2.57	.783	Agreed
Lecturers find it difficult to organize appropriate collaborative groups.	17.2	45.9	31.1	5.7	2.75	.809	Agreed
Students lack collaborative skills	14.8	37.7	36.1	11.5	2.72	.855	Agreed
Students do not bond well during collaborative projects	10.7	43.4	33.6	12.3	2.56	.882	Agreed
Lecturers are unable to manage class time when	18.0	51.6	23.0	7.4	2.52	.845	Agreed

using collaborative strategies							
Students refusing to participate in collaborative tasks	31.1	56.6	21.3	9.0	2.80	.820	Agreed
Help seekers in a collaborative group are unable to formulate effective requests for help.	11.5	54.9	28.7	4.9	2.74	.801	Agreed
The relevant materials for collaborative learning are not provided by the teacher.	18.0	54.1	23.8	4.1	2.73	.728	Agreed
Team work behaviors and beliefs are not usually established	12.3	49.2	28.7	9.8	2.86	.753	Agreed
Students are usually confused about their specific roles in the group.	11.5	50.8	28.7	9.0	2.64	.824	Agreed
Lecturers are unable to pay sufficient attention to each groups work.	18.0	53.3	22.1	6.6	2.65	.802	Agreed
The different competence status of each students will affect the productivity of collaborative learning	18.9	55.7	21.3	4.1	2.83	.800	Agreed
Lecturers show uncertainty and ambiguity in assessing students performance through collaborative learning	18.0	54.9	22.1	4.9	2.89	.748	Agreed
Lecturers sometimes do not give the correct group task to right group.	20.5	49.2	24.6	5.7	2.86	.764	Agreed
The lack of assessment tools to measure	19.7	50.8	23.0	6.6	2.84	.813	

collaborative performance of every group member may cause student disappointment about the transparency and evenness of the assessment							
Lecturers are unable to enhance and monitor effective collaboration	17.4	45.5	28.9	8.3	2.84	.817	
Grand Mean					**2.732**	**.117**	**Agreed**

Source: *Generated from analysis using SPSS, 2023; F=frequency; SA=Strongly Agree; A=Agree; D=Disagree; SD=Strongly Disagree; S.D=Standard Deviation*

Table 3 outlines challenges faced in teaching Home Economics entrepreneurship skills collaboratively. Students encounter difficulties in collaboration, including interruptions and a lack of active listening during debates (mean = 2.65, SD = 0.822). Interaction levels for shared knowledge construction fall short, indicating insufficient student engagement (mean = 2.57, SD = 0.783). Lecturers struggle to form effective collaborative groups, facing challenges in grouping students for activities (mean = 2.75, SD = 0.809). Students also grapple with communication and teamwork issues, hindering collaboration (mean = 2.72, SD = 0.855). Forming cohesive groups proves challenging for students (mean = 2.56, SD = 0.882). Lecturers may find it hard to control class time when employing collaborative tactics, impacting collaborative learning (mean = 2.52, SD = 0.845). Student resistance to collaboration is a significant issue, with some students opposing or refusing to collaborate (mean = 2.80, SD = 0.820). Additional obstacles include ineffective requests for help, inadequate provision of relevant materials by teachers, a lack of established teamwork behaviours and beliefs, confusion about specific roles within groups, insufficient attention from lecturers to each group's work, the influence of varying competence levels on collaborative productivity, and uncertainty in assessing student performance through collaboration (Sawyer, 2017). The grand mean of 2.732 shows that all of the difficulties stated hinder the collaborative approach of teaching entrepreneurship skills in Home Economics. These findings highlight the necessity of tackling these difficulties to improve student collaboration and learning in this discipline.

Research Question 4: What is the most effective 21st-century collaborative teaching and learning practice which can be used to achieve entrepreneurship skills in Home Economics?

Table 4. The Most Effective 21st-Century Collaborative Teaching And Learning Practice Which Can Be Used To Achieve Entrepreneurship Skills In Home Economics

Best Collaborative and Learning practice	Frequency	Percent
Problem-Based Learning (PBL) e.g. in Foods and Nutrition.	27	22.1
Think-Pair-Share e.g. in Home Management.	20	16.4
Guided Design e.g. in Textiles and Clothing.	12	9.8
Case Studies e.g. in Consumer Education.	11	9.0
Simulations e.g. in Housing and Interior Decoration.	11	9.0
Peer Teaching e.g. in Development and Care of Children.	8	6.6
Peer Editing e.g. in Family Living.	3	2.5
Jigsaw Strategy e.g. in Foods and Nutrition.	4	3.3
Small Group Discussion e.g. in Consumer Education.	10	8.2
Group presentations e.g. in Textiles and Clothing.	16	13.1
Total	122	100.0

Source: *Generated from analysis using SPSS, 2023*

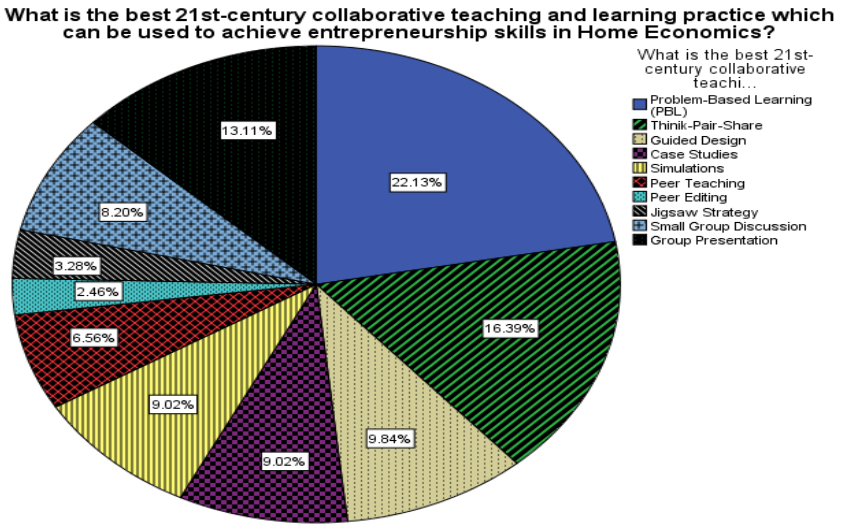

Figure 1

Source: *Generated from analysis using SPSS, 2023*

Table 4 and figure 1 examined the most effective 21st-century collaborative teaching and learning strategies for developing Home Economics entrepreneurship abilities. Problem-Based Learning (PBL) in Foods and Nutrition was the most often reported collaborative teaching and learning technique for entrepreneurship skills in Home Economics, with 27 respondents (22.1%). This suggests that many participants think food and nutrition problem-solving can help students become entrepreneurs. 20 responders (16.4%) stated Home Management Think-Pair-Share. This collaborative approach enables students to think alone, talk with a partner, and then share with the group. It promotes home management entrepreneurship. 12 responders (9.8%) identified Guided Design in Textiles & Clothing. This method helps students build business abilities by guiding them through textile and garment design and production. Case Studies, used in Consumer Education, and Simulations, used in Housing and Interior Decoration, each garnered 11 mentions, accounting for 9.0%. Case studies examine consumer education scenarios, while simulations immerse students in housing and interior design. These strategies build entrepreneurial skills. Peer Teaching in Child Development and Care garnered 8 mentions, 6.6% of the total. Students take turns teaching their friends in this method. It promotes child development and care entrepreneurship. Peer Editing, Jigsaw Strategy, Small Group Discussion, and Group Presentations were all mentioned. These strategies were recognized by fewer respondents, demonstrating their perceived relevance in building entrepreneurship abilities in specialized Home Economics domains.

Problem-Based Learning (PBL) in Foods and Nutrition was the most commonly mentioned and most effective collaborative teaching and learning technique for promoting entrepreneurship abilities in Home Economics. This technique allows students to use their knowledge and problem-solving skills in real-world food and nutrition contexts, improving their entrepreneurial skills.

Discussion of Findings

Collaborative Learning Practices

Table 1. illuminates home economics entrepreneurship collaborative learning methods and responder agreement. All the 20 collaborative learning approaches in the table obtained mean scores of over 2.5, suggesting participant agreement. Respondents liked several methods. 58.2% supported competitive reading races. This strategy can engage kids and improve their reading abilities in entrepreneurship. 52.5% said group presentations were important. Entrepreneurship requires teamwork and public speaking. 53.3% of participants liked games-based learning, which uses competitive games to encourage entrepreneurial thinking. This supports the premise that gamification might promote entrepreneurship by delivering engaging learning experiences.

Respondents also liked group work, gallery trips, milling/mingling, and brainstorming. These methods promote active participation, critical thinking, and communication—essential entrepreneurship skills. Jigsaw projects, think-pair-share, diagrams/maps, and visual organizers were also supported. These methods encourage active learning, cooperative problem-solving, and knowledge synthesis—essential skills for entrepreneurs.

This study confirms that collaborative learning improves home economics entrepreneurship education. The high mean ratings for collaborative learning approaches (above 3) show that respondents feel they build entrepreneurship abilities. The current findings/results support the literature on collaborative learning in entrepreneurship education by Fayolle and Gailly (2008) and Peterman and Kennedy (2003) stress experiential and collaborative learning in entrepreneurial education. These methods improve students' problem-solving, creativity, and communication skills, essential for entrepreneurial success.

Table 2. shows how collaborative learning affects Home Economics entrepreneurship education. Collaboration improves students' learning experiences and outcomes, according to statistics. Collaborative learning improves understanding and knowledge with a mean of 3.26. According to Johnson et al. (2020), collaborative learning improves students' academic achievement and cognitive growth. The mean of 3.25 shows that collaborative learning group activities make students more active, confident, and driven to learn and talk. The study emphasizes teacher support in collaborative learning. Teachers' duties and guidance improve student learning, according to the mean of 3.27. Slavin (2015) found that teachers should structure and facilitate collaborative learning activities to optimize their efficacy. The mean of 3.00 indicates that Home Economics collaborative learning improves linguistic and social abilities. Kagan (1994) noted that cooperative learning improves students' communication, teamwork, and social skills. Collaborative learning boosts students' class alertness (mean 3.21), comprehension of entrepreneurship (mean 3.25), academic performance (3.19), motivation (3.25), and problem-solving skills (3.26). Wang et al. (2021) and Johnson et al. (2022) have shown that collaborative learning improves academic and socio-emotional outcomes. Collaborative learning improves students' critical social consciousness (mean 3.17), group progress (3.29), teamwork (3.18), independence (3.18), and autonomy (3.13). Dillenbourg et al. (2009) found that collaborative learning helps students acquire social and interpersonal skills, which are crucial for entrepreneurship and other careers.

The Most Effective 21st Century Collaborative Learning Practice

Table 3. and Figure 1 show the most effective collaborative teaching and learning methodologies for 21st-century Home Economics business. Problem-Based Learning (PBL) in Foods and Nutrition was the most effective technique, stated by

27 respondents (22.1%). Participants feel food and nutrition problem-solving can boost students' entrepreneurial skills. PBL allows students apply their knowledge and problem-solving skills to real-world circumstances, which is essential for entrepreneurial development. 20 respondents (16.4%) stated Home Management Think-Pair-Share. This collaborative approach enables students to think independently, talk to a partner, and share their ideas with the group. It supports home management entrepreneurship and critical thinking. 12 (9.8%) chose Guided Design in Textiles & Clothing. This technique gives students hands-on business experience in textile and garment design and manufacture. It teaches textile and garment entrepreneurship. 11 respondents (9.0%) said Case Studies and Simulations were beneficial for building entrepreneurship abilities in Consumer Education and Housing and Interior Decoration, respectively. Case studies and simulations give students hands-on experience in housing and interior design. Both methods develop entrepreneurial skills. Peer Teaching in Child Development and Care garnered 8 mentions (6.6%), demonstrating its importance in boosting entrepreneurship in this field. Peer teaching helps students learn about child development and care, which are crucial to entrepreneurship in this industry. Fewer respondents indicated Peer Editing, Jigsaw Strategy, Small Group Discussion, and Group Presentations, suggesting their perceived usefulness in strengthening entrepreneurship skills in specialized Home Economics sectors. Overall, collaborative teaching and learning methodologies for Home Economics entrepreneurial development are important. PBL in Foods and Nutrition was the most popular and possibly most effective technique. Entrepreneurship requires problem-solving and real-world application. Other strategies create specialized entrepreneurial abilities in Home Economics domains. Yuen, Law, and Wong (2020) and Oladejo and Adewumi (2020) have examined how collaborative teaching and learning methodologies stimulate entrepreneurship in several sectors, including Home Economics. The findings in Table 4 support problem-based learning, case studies, and simulations.

Conclusion

In conclusion, the research findings offer insights into collaborative teaching and learning strategies for fostering entrepreneurship skills acquisition in Home Economics. All approaches obtained mean scores above 2.5, suggesting participant agreement, emphasizing collaborative learning methods. Entrepreneurship was promoted by competitive reading races, group presentations, games-based learning, and other group activities.

Collaboration improves Home Economics entrepreneurial instruction, according to studies. Collaborative learning improves comprehension, knowledge, active engagement, confidence, motivation, problem-solving, and social awareness. Collaboration requires teacher support. The study also found barriers to

collaborative learning, including communication concerns, limited interaction, group formation issues, lack of collaborative abilities, and time management issues. Problem-Based Learning (PBL) in Foods and Nutrition, Home Management Think-Pair-Share, and Guided Design in Textiles & Clothing were the most effective collaborative learning methods. Case studies, simulations, peer teaching in Child Development and Care, and other methods were also found to build entrepreneurship skills in specialized Home Economics fields. The study shows that collaborative teaching and learning promotes entrepreneurship in Home Economics courses. It emphasizes the usefulness of various strategies and the necessity to address impediments and provide sufficient support for successful collaborative learning experiences.

Recommendations

1. Home Economics teachers/lecturers should teach collaboration skills. Students lack communication, teamwork, and cooperation abilities, which hinder classroom collaboration. Students can master collaborative learning by explicitly acquiring these skills.
2. Activities that improve communication and teamwork can accomplish this. Second, a supportive, inclusive collaborative learning atmosphere is essential. The research shows that students don't listen to each other and don't collaborate.
3. Teachers should develop effective communication, active engagement, and a culture of collaboration and cooperation to overcome these problems.
4. Creating a supportive environment requires clear norms and expectations for courteous and attentive listening, successful cooperation, and meaningful student interactions. These tips can help educators overcome hurdles and foster collaboration, improving learning and Home Economics students' entrepreneurial skills.

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