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The Impact of Interactive Learning on Academic Performance Among Entrepreneurship Students at Quezon City University San Bartolome Campus Novaliches Quezon City

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ABSTRACT

The study sought to assess the impact of interactive learning on the academic performance among entrepreneurship students at Quezon City University. The following hypotheses were tested at a 0.05 margin of error. The researcher used a Quantitative Descriptive Method for the research; The descriptive method is used to gather information about the present existing condition. The researcher used the sampling technique by selecting at least five hundred (500) students as respondents. The respondents' demographic profile comprised the following age, gender, and college year level. The sampling technique is a non-probability sampling technique used when respondents are chosen because of their appropriateness in the conduct of the study. It was used to determine the general description on the impact of interactive learning on the academic performance among entrepreneurship students. The data gathered from the respondents was tabulated and interpreted. Statistical tools, including frequency distributions and regression analysis, were used to analyze the data.

The main instrument used in the collection of data was a structured google form survey questionnaire. The questionnaire was patterned to the questions used in a relevant study, a questionnaire based on the gathered relevant literature. The instrument was divided into 3 parts. The first part dealt with the demographic profile. The second part of the questionnaire was about the respondent's assessment of the impact of interactive learning on the academic performance among entrepreneurship students. The third part delved into the significant differences in the respondents' assessment in terms of the variables. The data gathered from the respondents was tabulated and interpreted.

Keywords: *Interactive Learning, Analytical Thinking, Knowledge Persistence, Peer Influence, Collaboration*

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INTRODUCTION

Interactive learning has become a central paradigm in education since 2021, reflecting the shift toward student-centered, technology-enhanced approaches in both physical and virtual classrooms. Unlike traditional lecture-based instruction, interactive learning emphasizes active participation, collaboration, and engagement with digital tools. The COVID-19 pandemic accelerated this transformation, as educators worldwide sought methods to sustain student motivation and comprehension in remote and hybrid settings.

Research from 2021 onwards highlights several defining features of interactive learning. Nguyen et al. (2021) examined students' experiences in remote learning environments, finding that interactive strategies such as peer collaboration, multimedia integration, and real-time feedback were critical for maintaining engagement. Similarly, Doo, Zhu, and Bonk (2021) conducted a systematic review of online learning practices, emphasizing the role of interactive technologies in fostering deeper understanding and learner autonomy.

The significance of interactive learning lies not only in its ability to improve academic outcomes but also in its alignment with 21st-century skills. Collaboration, problem-solving, and digital literacy are cultivated through interactive approaches, preparing students for dynamic professional environments. However, challenges remain, including the digital divide, teacher readiness, and the need for alternative assessment methods that capture interactive learning outcomes more effectively than traditional exams.

Bautista-Delos Reyes (2023), Ukenova & Bekmanova (2023), and Lampropoulos & Sidiropoulos (2023) demonstrates that interactive learning enhances engagement, academic performance, and cultural understanding. As education continues to evolve, interactive learning stands as a cornerstone for preparing students to thrive in dynamic, technology-rich environments.

QCU's entrepreneurship curriculum emphasizes creativity, innovation, and adaptability to prepare students for leadership roles in the business world. It implies that integrating cooperative learning into the curriculum may favor QCU entrepreneurship students' academic achievement Through this investigation, the purpose of the research study is to determine the impact of interactive learning and provide insights into whether interactive learning methods improve academic achievements and support the development of critical entrepreneurial skills.

METHODOLOGY

The researchers utilize a descriptive research design to assess the impact of collaborative learning in entrepreneurship student's academic performances. According to Shinija N. A. (2024), descriptive research designs are employed to monitor, record, and analyze a phenomenon as it occurs unaltered in its natural setting. It is used in the development of theories, the identification of issues with current procedures, the rendering of decisions, and in seeking alternatives for existing processes Stratified sampling is particularly advantageous when sub-populations exhibit significant differences. By sampling each sub-populations (stratum) for this research, the student population at Quezon City University was stratified based on year level, age and gender. This approach is essential for capturing the different perspectives of

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entrepreneurship students. This sample size is considered sufficient to provide meaningful insights into the research questions regarding the impact of collaborative learning on academic performance of entrepreneurship students at Quezon city university. The tool that the researcher used to collect data is through Google questionnaire. The google questionnaire was distributed among entrepreneurship students. Google questionnaires are a reliable and quick method to gather multiple respondents for this research.

RESULTS AND DISCUSSIONS

The purpose of the study was to assess the impact of academic performance among entrepreneurship students at Quezon City university in the aspects of Knowledge Persistence, Analytical Thinking, Collaboration and Peer influence. This study used a descriptive research design which described the data and characteristics of the sample studied. The respondents were five hundred (500) entrepreneurship students at Quezon City University. The statistical tools utilized in the study were frequency and percentage, weighted mean and multivariate multiple regression.

1. Profile of the respondents according to age, gender, college year level

- In terms of age, 40.4 % of the respondents are 18-20, while 46.2 % are 21-23 years old. Nine-point eight percent of them are 24-26 years old. And Lastly 3.6 % are 27 years old above.
- In terms of gender, 172 (34.4 %) are male while 295 59% are female, meanwhile 33 (6.6 %) are from the LGBTQ
- In terms of year levels in college, 102 (20.4%) of them are in first year level while 274 (54.8%) of them are in second year level. Meanwhile 124 (24.8%) are third year level.

2. How do the respondent's response on the impact on the interactive learning academic performance among Entrepreneurship students at Quezon City University in terms of the following variables:

- Knowledge Persistence
- Analytical Thinking
- Collaboration
- Peer Influence

In terms of Knowledge Persistence, the overall weighted mean score of 4.16 (SD = 0.11), reflects a generally high positive impact of interactive learning on knowledge persistence. These findings imply that students perceive interactive learning as beneficial for enhancing their understanding and simplifying complex entrepreneurial concepts, although their confidence in recalling information without further review is slightly lower. The consistently high mean scores across items suggest that interactive learning positively influences knowledge retention by fostering better comprehension and long-term recall of entrepreneurial concepts.

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In terms of Analytical Thinking Overall, the weighted mean score for analytical thinking was 4.19 (SD = 0.03), reflecting a generally positive impact of interactive learning on these skills. These results suggest that interactive learning is highly effective in fostering diverse problem-solving approaches and enhancing analytical skills among students, especially when group work encourages justifying and discussing perspectives.

In terms of Collaboration, the overall weighted mean engagement score garnered 4.23 (SD = 0.11), reflecting a generally positive influence of interactive learning on students' engagement. These results suggest that interactive learning significantly enhances teamwork, communication, and active participation, which are essential aspects of student engagement. However, the slight drop in engagement during class time may indicate that while collaborative learning is beneficial, it may not fully sustain focus without additional support.

In terms of Peer Influence Overall, the weighted mean score for peer influence garnered 4.21 (SD = 0.04), indicating that students generally perceive a strong impact from peers in interactive learning. These findings imply that interactive learning fosters an environment where students are positively influenced by their peers, leading to enhanced standards, motivation, and academic performance. The high scores in peer support and social skill development further emphasize the beneficial impact of peer interactions on students' academic and personal growth.

3. Is there a significant difference in the respondent's response on the impact of interactive learning on academic performance in terms of the following variables when they are grouped according to their profile?

In terms of Age the significance of the relationship between students' age and their understanding of the impact of interactive learning on academic performance among entrepreneurship students at Quezon University. A significant relationship was found between Collaboration ($p = .000$) and Peer Influence ($p = .044$), indicating that age influences students' perceived engagement and peer effects in collaborative learning. However, no significant relationships were observed for Knowledge Persistence ($p = .173$) and Analytical Thinking ($p = .145$), suggesting these aspects are less affected by age differences.

In terms of Gender Significant relationships were found for Collaboration ($p = .023$) and Peer Influence ($p = .007$), indicating that gender influences how students perceive engagement and peer effects within interactive learning. No significant relationships were observed for Knowledge Persistence($p = .720$) and Analytical Thinking ($p = .158$), suggesting these aspects are less affected by gender differences.

In terms of Year Level, A significant relationship was found for Knowledge Persistence ($p = .062$), indicating that students' year levels influence their perceived retention benefits from interactive learning, marginally. No significant relationships were observed for Analytical Thinking ($p = .051$), Collaboration ($p = .706$), and Peer Influence ($p = .536$), suggesting that these aspects are less affected by year level. These findings denote that as students' progress through their academic years, their perception of knowledge retention benefits from interactive learning may vary, while other factors remain stable.

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Table 1. Age

Frequency And Percentage Distribution in Terms of Age

Frequency		Percent	Valid Percent	Cumulative Percent
18 - 20 years Old	202	40.4	40.4	40.4
21 - 23 years Old	231	4.62	4.62	4.62
24 -26	49	9.8	9.8	19.8.
More than 27 years old	18	3.6	3.6	3.6
Total	500	100	100	100

Table 2. Gender

Frequency And Percentage Distribution in Terms of Gender.

Frequency		Percent	Valid Percent	Cumulative Percent
Female	172	34.4	34.4	34.4
Male	295	59	59	59
LGBTQIA	33	6.6	6.6	6.6
Total	500	100.0	100.0	100

Table 3. College Year Level

Frequency And Percentage Distribution in Terms of Gender.

Frequency		Percent	Valid Percent	Cumulative Percent
1st year	102	20.4	20.4	20.4
2nd year	274	54.8	54.8	54.8
3rd year	124	24.8	24.8	24.8
Total	500	100	100.0	100

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Table 4. Summary on Impact of Interactive Learning on Academic Performance among Entrepreneurship students at Quezon City University

Variables	Weighted Mean	Verbal Interpretation
Knowledge Persistence	4.16	Agree
Analytical Thinking	4.19	Agree
Collaboration	4.23	Strongly Agree
Peer Influence	4.21	Strongly Agree

Table 5. Summary of the Significant difference in the respondent's assessment on the Impact on Interactive Learning on Academic performance among entrepreneurship students at Quezon City University

Variables	Profile of the Respondents	Decision	Remarks
Knowledge Persistence	Age	Reject Ho	Significant
Analytical Thinking	Gender	Reject Ho	Significant
Collaboration	College Year Level	Reject Ho	Significant
Peer Influence		Reject Ho	Significant

Conclusion

Based on the results presented on this study, the researcher concludes the following:

- As regards the profile of the respondents, the researcher found out most respondents come from the 2nd year level with a total population of 274 or 54.8% while most of their ages range from 21-23 years old with a population of 231 or 46.2 % This demographic information helps to contextualize the findings of the study and identify potential factors influencing the impact of interactive learning.

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- The study also reveals a significant influence between respondents' demographics and the effectiveness of collaborative learning on academic performances. Age and gender significantly impact students' engagement and peer interactions within collaborative learning settings. Older students and females appeared to benefit from the social and motivational aspects of cooperative learning.
- The findings highlight that interactive learning is an effective educational approach that significantly enhances the academic performance of entrepreneurship students at Quezon City University.
- Overall, the results highlight that interactive learning serves as an effective pedagogical approach in bridging theoretical knowledge with real-world entrepreneurial challenges. It empowers students to become active participants in their own learning journey, thereby contributing to both academic success and professional readiness

Recommendations

- Embed interactive learning strategies (case studies, simulations, role-playing, peer discussions) into entrepreneurship courses.
- Optimizing student learning and fostering a collaborative classroom environment, educators should implement structured and inclusive learning activities
- Promote collaborative projects where students solve real-world entrepreneurial problems.
- Further research studies investigate the role of external factors, such as socioeconomic status and technology access, in shaping the effectiveness of interactive learning.

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