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Improvements to the Interactive Learning Management System for Business Administration Students in Strategic Management Courses

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ABSTRACT

This study examined the effectiveness of the case study method in improving the interactive learning management system of Business Administration students enrolled in Strategic Management (STRAMA) courses at Pamantasan ng Lungsod ng Pasig. Recognizing the increasing importance of analytical thinking, problem-solving, and decision-making competencies in knowledge-driven workplaces, the research aimed to enhance students' ability to identify, analyze, and resolve problems through practical learning interventions. The study focused on three essential dimensions: problem determination, problem analysis, and problem resolution. Using an intervention-based research approach, the case study method was implemented during the first semester of Academic Year 2022–2023 to assess its influence on students' perceived competencies before and after the intervention. The instructional activities encouraged students to examine realistic business situations, evaluate possible solutions, and develop appropriate strategies for addressing organizational challenges. Findings revealed significant improvements in students' perceived interactive learning management competencies following the implementation of the case study method. Participants demonstrated enhanced confidence in recognizing problems, analyzing relevant information, evaluating alternatives, and formulating appropriate resolutions. These findings emphasized the importance of experiential and interactive learning approaches in developing essential managerial competencies among future business professionals. The study concluded that integrating case-based learning into Strategic Management instruction can strengthen students' analytical abilities, critical thinking, and decision-making processes. It recommends incorporating structured case study activities into business education curricula to promote active participation, practical application of theoretical concepts, and continuous improvement in students' problem-solving competencies. Furthermore, the research provides a foundation for future investigations into innovative instructional strategies within Philippine higher education institutions.

Keywords: *interactive learning management system, analytical skills, case study method, competencies, decision-making, problem solving*

INTRODUCTION

The case study teaching method is a highly adaptable style of teaching that involves problem-based learning and promotes the development of interactive learning management system (Psotka, 2012). By presenting content in the format of a narrative accompanied by questions and activities that promote group discussion and solving of complex problems, case studies facilitate development of the higher levels of

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Dynamic Interactive Learning System; moving beyond recall of knowledge to interactive learning, evaluation, and application (Jeffrey Barker, 2009). Similarly, case studies facilitate interdisciplinary learning and can be used to draw attention to links between certain academic subjects and practical societal problems and uses. This has been reported to increase student motivation to participate in class activities, which promotes learning and increases performance on assessments (Christopher, 2020). These factors have made case-based learning popular in medical and business education for a long time.

Graduates who have higher level of thinking skill are more preferred by employees (Sulaiman, Rahman, &Dzulkifli, 2008). In addition to technical capabilities, analytical thinking enables an individual to make well-founded judgments based on pertinent and verified evidence. Jones & Pimdee (2017) also gave emphasis on the emergence of knowledge-based economies which is the goal of any developing or developed nations across the globe. With the introduction and development of new technologies, technical skills are becoming increasingly unnecessary; nonetheless, they cannot take the place of human critical thinking abilities. especially in cases where decisions have to be made. This is also consistent with the research results obtained by Bassham, Irwin, Nardone, and Wallace (2013) which indicated that higher educational institutions are responsible for developing the critical-thinking skill of the future work force thus, the commencement of this research.

The proponent intends to study students under the Business Administration Program enrolled in Principles of Strategic Management during the first semester AY 2022-2023 to test their current interactive learning management system regarding the identification, analysis, and solutions of problems and integrate the case study method to determine the significance or impact of this methodology to their interactive learning performance. Moreover, it is the intent of this research to establish the strong points and weak points of students as manifested on how they perceive their skills before and after case study was introduced in class.

METHODS

The study is classified as action research employing evaluative, investigative, and analytical research methodologies aimed to evaluate issues and deficiencies whether organizational, academic, or instructional and assist educators build practical ways to solve them quickly and efficiently. The surveys were further separated into three focus variables such as problem determination, problem analysis and resolutions and to identify weak points among students that can be subjected for advance improvement through provision of additional class activities primarily the case study method. At the start of the 1st Semester AY 2022-2023 a pre- testing through questionnaire was conducted to establish the current level of interactive learning management system through self-evaluation. The case study technique was used as an intervention after the data were totaled. The class was given instances of corporate decision-making to discuss at random. After the activity, the same questionnaire was provided to re-evaluate the level of students' interactive learning management system considering the experience that they had in decision-making utilizing the case study. Additionally, the study made use of descriptive research, which comprised studies that corroborated current information about the nature and status of anything. Consent from the respondents was also requested for ethical reasons, and the students were informed of the study's purpose. The investigator employed the purposive sample technique and pre-identified its subjects by allocating one hundred (100) Bachelor of Science in Business Administration 4th year students under the College of Business Administration and Accountancy, selected as the study's subjects because of their similar characteristics, which guarantee the validity of the information that can be extracted from the questionnaires' responses. Additionally, pre- and post-test data were compared and analyzed, and the T-Test statistical tool was used to determine the significant difference in the assessment of students of their interactive learning management system and how it was improved with the use of case studies. Since the investigation was carried out in a safe and controlled environment—the Pamantasan—no hazards were anticipated by the

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researcher. Under the proponent's supervision, the study was carried out quickly with the chosen participants.

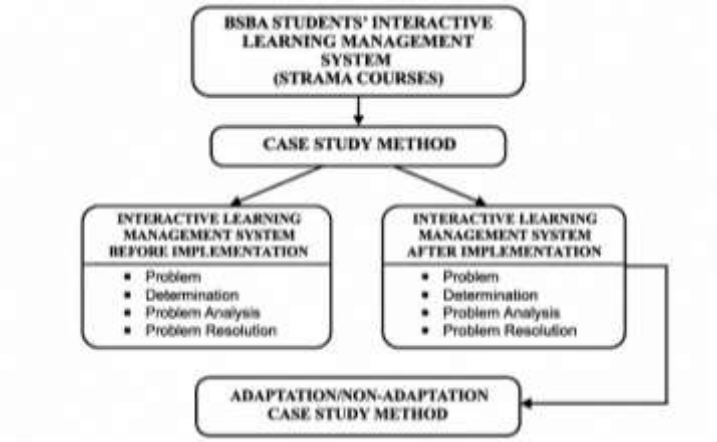

Figure 1. *Conceptual Framework*

The research was anchored on the assessment of the interactive learning management system of BS Business Administration students enrolled in Strategic Management courses during the 1st Semester AY 2022-2023 and these data were analyzed and interpreted using statistical methods including the weighted mean and T-test. Based on the findings, the research would be able to draw generalizations that would strengthen or supplement the program's present approaches to help students develop their analytical abilities.

RESULT AND DISCUSSION

A pre-test questionnaire was given to BS Business Administration students at the beginning of the first semester of SY 2022–2023 in order to ascertain their present interactive learning management system. A case study activity was then conducted in class, and a post-test questionnaire was administered to ascertain if the intervention had an effect on the students' interactive learning management system. The statistics shown here, together with the student profiles, demonstrate the outcomes of the translation and analysis.

Table 1. ***Demographic Profile-Sex***

Sex	**Frequency**	**Percentage (%)**
Male	29	29.00%
Female	71	71.00%
Total Respondents	**100**	**100.00%**

As to the demographic profile of students based on sex, twenty-nine (29) or 29% of the students were male and on the other hand, seventy-one (71) or 71% of the respondents were female.

Table 2. *Demographic Profile-Age*

Age	**Frequency**	**Percentage (%)**
16–20 years old	78	78.00%
21–25 years old	17	17.00%
26–30 years old	3	3.00%

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31 years and above	2	2.00%
Total Respondents	**100**	**100.00%**

As to the demographic profile of students based on age, seventy-eight (78) or 78% were aged from sixteen to twenty, seventeen (17) or 17% were aged twenty-one to twenty-five, three (3) or 3% were aged twenty-six to thirty and finally two (2) or 2% were aged thirty-one and above.

Table 3. *Demographic Profile-Year Level*

Year Level	**Frequency**	**Percentage (%)**
3rd Year	34	34.00%
4th Year	66	66.00%
Total Respondents	**100**	**100.00%**

As to the demographic profile of students based on year level, thirty-four (34) or 34% were third year college students and sixty-six (66) or 66% were fourth year students.

Table 4. *Demographic Profile-Course Major*

Course Major	**Frequency**	**Percentage (%)**
Entrepreneur	10	10.00%
Marketing	78	78.00%
Accountancy	12	12.00%
Total Respondents	**100**	**100.00%**

As to the demographic profile of students based on their course major, ten (10) or 10% belong to the entrepreneur program, seventy-eight (78) or 78% belong to the marketing program and twelve (12) or 12% belong to the accountancy program.

Table 5. *Pre-Test and Post-Test on Problem Determination*

Problem Determination	**Pre-test M**	**Pre-test VI**	**Post-test M**	**Post-test VI**
Identify arising or looming problems.	3.71	SA	3.92	SA
Utilize tools such as root cause analysis and fish bone analysis.	3.16	A	3.56	SA
Objective approach in determining problems.	2.91	A	3.87	SA
Dissect statements and factual data.	2.73	A	3.56	SA
Identify problems and not just symptoms.	3.04	A	3.76	SA
Verify data from reputable sources.	3.32	A	3.89	SA
Not clouded with emotions and subjectivity.	3.34	A	3.64	SA
Assess and organize information accurately.	3.21	A	3.81	SA
Open to collaboration with others.	3.80	SA	3.64	SA
Prioritize problems based on the need to immediately address it.	3.06	A	3.51	SA
AVERAGE WEIGHTED MEAN	**3.23**	**A**	**3.72**	**SA**

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Data above shows the level of interactive learning management system as perceived by the students through the pre- test and post-test results using the case study method intervention. Initially, during the pre-test, the students assessed their problem determination skill to be average with an average weighted mean of 3.23 interpreted as Agree (A). Students frequently rely their problem assessments on their feelings rather than true and verifiable evidence, which is a sign that they only have a limited understanding of how to resolve problems using objective ways. On the other hand, after the case study method was introduced through a class activity, the assessment increased and this was evidenced by a higher average weighted mean of 3.72 interpreted as Strongly Agree (SA). This is a clear indicator that the case method sufficiently provided students with the basic skill set of properly identifying problem as a focus of their interactive learning.

Table 6. *Pre-Test and Post-Test on Problem Analysis*

Problem Analysis	**Pre-test M**	**Pre-test VI**	**Post-test M**	**Post-test VI**
Utilize experience and objective approach in interpretation.	2.89	A	3.49	A
Collaborate with other teammates to come up with credible analyses.	2.99	A	3.55	SA
Consider internal factors that may influence decision making.	3.12	A	3.87	SA
Consider external factors.	3.26	A	3.61	SA
Utilize tools such as SWOT in determining implications.	2.79	A	3.78	SA
Provide analyses based on available concepts, paradigms and theories.	2.16	D	3.29	A
Provide practical analyses to encountered problems.	2.68	A	3.91	SA
Ensure that analyses are anchored on first hand information.	3.06	A	3.51	SA
Apply learned concepts from previous subjects.	3.47	A	3.66	SA
Organize information and analyze its interrelationship.	3.29	A	3.84	SA
AVERAGE WEIGHTED MEAN	**2.97**	**A**	**3.65**	**SA**

Data above shows the level of interactive learning management system as perceived by the students through the pre- test and post-test results using the case study method intervention. At the onset of the semester during the pre- test, the students assessed their problem analysis skill to be moderately acceptable with an average weighted mean of 2.97 interpreted as Agree (A). It can be inferred that during this point, students had difficulty in determining the pros and cons of decision and the factors that can influence decision-making. After the case study method was employed, it reflected a significant improvement among the students with an average weighted mean of 3.65 interpreted as Strongly Agree (SA). It can be inferred that students developed a deeper understanding on how to properly weigh benefits and drawbacks of specific business decisions. They are able to employ basis for decision-making tools to provide grounded decisions and to select the best options suited for the problem.

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Table 7. *Pre-Test and Post-Test on Problem Resolution*

Problem Resolution	Pre-test M	Pre-test VI	Post-test M	Post-test VI
Weigh the pros and cons of recommended resolutions.	2.89	A	3.51	SA
Provide long term resolutions to problems.	2.06	D	3.47	A
Recommend simple and realistic resolutions.	3.15	A	3.67	SA
Provide time-bound resolutions.	3.23	A	3.71	SA
Provide two or more options as a resolution.	3.36	A	3.64	SA
Monitor and evaluate once problem has been solved.	2.15	D	3.04	A
Contingency plans must be considered.	2.36	D	3.38	A
Adapt consensus in resolving problems.	3.26	A	3.66	SA
Consider everyone's take on how to handle or resolve certain issues.	3.03	A	3.57	SA
Base resolutions on manuals or tangible materials.	3.31	A	3.65	SA
AVERAGE WEIGHTED MEAN	**2.88**	**A**	**3.53**	**SA**

Data above shows the level of interactive learning management system as perceived by the students through the pre- test and post-test results using the case study method intervention. At the beginning of the semester during the pre- test, the students assessed their problem resolution skill to be average with an average weighted mean of 2.88 interpreted as Agree (A). This is a manifestation of the students' lack of knowledge on the post implementation strategies needed in decision-making to monitor the effectiveness of the options chosen to resolve a problem. It is also noticeable that students often times dwell on providing immediate or short term resolutions to long-term problems. However, after the case study method was implemented, a significant increase was evidenced by a high average weighted mean of 3.53 interpreted as Strongly Agree (SA). It can be inferred that with the aid of interventions such as case study activities within the class, students are able to come up not just with founded solutions but also to strategies for business continuity and sustainability through post-evaluation of resolutions to address corporate challenges.

Table 8. *Hypothesis Testing*

t-Test: Paired Two Sample for Means	Pre-test	Post-test
Mean	3.026333333	3.632333333
Variance	0.177568851	0.03814954
Observations	30	30
Pearson Correlation	0.610827488	
Hypothesized Mean Difference	0	
df	29	
t Stat	9.780571184	
P(T<=t) one-tail	5.44579E-11	
t Critical one-tail	1.699127027	
P(T<=t) two-tail	1.08916E-10	
t Critical two-tail	2.045229642	

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Utilizing the T- Test hypothesis testing with a level of significance of 0.05, the T computed value is9.780571184 which is greater than the critical value of 2.045229642 suggesting that there is a significant increase in the level of interactive learning management system of students based on the following variables: problem determination, problem analysis and problem resolution after the case study method was implemented in class. Therefore, the null hypothesis is rejected.

CONCLUSION

These findings are the result of the study's analysis that were based for conclusion:

1. The students subjected to the intervention initially manifest a low level of assessment on their problem determination skill, however after the implementation of the case study method, a significant increase was observed.
2. The respondents who were the subjected to the intervention present a low level of assessment on their problem interactive learning, on the contrary, after the implementation of the case study method, their assessment increased.
3. The students had a low level of assessment on their problem resolution skill before the case study method was implemented but an increase was noticed after the intervention was employed.
4. There is a significant difference on how the students perceive their interactive learning management system before and after the implementation of the case study method.

Recommendation

1. Enjoin professors in introducing students with marketing tools in their classes specifically strategic management subjects in order to systematically improve kids' problem-solving skills.
2. Increase the library's campaign by having teachers make full use of both online and offline resources, including scientific publications, to provide students a foundation and a starting point for their problem-solving abilities.
3. Strategic management In order to provide students a thorough situational understanding of how to address business difficulties, topics must place a strong focus on decision-making tools like SWOT.
4. Adopt and incorporate the case study approach into the business administration program's present curricula, particularly in the modules on strategic management.
5. Provide students with on-campus training, workshops, or seminars to improve their interactive learning management system and suggest off-campus activities to help them develop this ability.
6. Conduct more study to find other techniques or activities that might enhance or improve students' interactive learning management system.

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