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Curriculum Assessment on Navigation 1 among Students, Instructors and Administrators

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ABSTRACT

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The Curriculum Assessment on Navigation 1 at the Merchant Marine Academy of Caraga Inc. is crucial for ensuring the competence and safety of future mariners. This quantitative research involves maritime students in their 2nd and 3rd years, instructors, and administrators as respondents. The study aims to evaluate the Navigation 1 curriculum, focusing on students' study habits, academic performance, teachers' profiles, instructional delivery modalities, and perceptions of the curriculum by students, administrators, and instructors. Data collection includes questionnaires and statistical analyses like frequency distribution, weighted mean, and chi-square tests. Initial findings

indicate a high level of agreement and positive perceptions across various aspects of the curriculum, with an overall weighted mean of 3.72. The study suggests that the Navigation 1 curriculum effectively meets its objectives. Future research should assess the long-term effectiveness of the curriculum by tracking graduates' performance, gathering industry feedback, and integrating new technologies to enhance student preparation for real-world navigation challenges.

INTRODUCTION

The need to develop skilled and prepared mariners is crucial in the global context of maritime education. This is evident not only at the local level but also in international endeavors like the United Nations Sustainable Development Goals (SDGs), specifically SDG 4 on Quality Education and SDG 14 on Life Below Water. In order to promote sustainable development and the preservation of marine resources, these objectives highlight the significance of raising educational standards and improving maritime safety procedures (International Maritime Organization, 2020; United Nations, 2015; United Nations, 2020a; United Nations, 2020b; World Maritime University, 2019).

The Philippines, a maritime nation with a long history of seafaring, is crucial in determining the direction that maritime education will take in the face of global imperatives. At the Merchant Marine Academy of Caraga Inc. in Butuan City, Philippines, the Curriculum Assessment on Navigation 1 is a major step toward assessing and improving the curriculum for maritime students. Studies by Rahman (2006) and Sajjad (2019), which draw on recent scientific findings, highlight the crucial role that course materials and instructional strategies play in distance learning and offer insightful information for developing curricula in the maritime industry.

Even with improvements in teaching methods, there are still unanswered questions about how well navigation curricula prepare students for problems they may encounter in the actual world at sea. By producing new information on how the Navigation 1 curriculum aligns with industry demands, student learning goals, and effective teaching practices, this study seeks to close these gaps. The assessment aims to clarify the effects of curriculum assessment on student performance, instructor effectiveness, and administrative practices by utilizing a quantitative research design and drawing on insights from Locke and Latham (2006) on goal-setting theory and Seijts et al. (2004) on goal orientation in education.

The research's expected results go beyond the classroom and have ramifications for maritime education in the Philippines and around the world. The study is to develop a cadre of maritime professionals with the necessary

knowledge and abilities to successfully negotiate the intricacies of the marine business by improving educational quality and coordinating curricula with industry requirements. The importance of this study resides in its ability to further maritime education globally while supporting sustainability, competence, and safety in the maritime industry in line with global objectives and regional educational requirements.

FRAMEWORK

The Joint CHED-MARINA Memorandum Circular No. 1, s. 2022 outlines the policies, standards, and guidelines for the Bachelor of Science in Marine Transportation and Marine Engineering programs, emphasizing the Maritime Industry Authority's role in maritime education. Assessment is highlighted as crucial for evaluating students' knowledge, skills, and abilities, providing feedback, and certifying competence. Evaluation of learning outcomes ensures students meet expected standards and progress adequately. Mikre (2010) notes that assessment is vital in education, impacting curriculum practice and quality of learning. He critiques current teaching methods that emphasize factual knowledge over transferable skills valued by employers, advocating for integrated, effective assessment methods such as performance assessments and peer reviews.

OBJECTIVES OF THE STUDY

This study aims to comprehensively assess the Navigation 1 curriculum for maritime students, ensuring it aligns with industry standards and technological advancements to effectively prepare them in terms of competence, safety, and readiness for future maritime careers while also identifying strengths and potential weaknesses to provide targeted recommendations for enhancing both theoretical knowledge and practical skills essential for safe and efficient navigation**.**

METHODOLOGY

Research Design

The quantitative research design was employed in this study. It was fact-finding with the interpretation of the conditions of the relationship between curriculum assessments on Navigation 1 of Merchant Marine Academy of Caraga Inc. (MMACI). The researcher used the descriptive correlation method to describe and interpret the relation of Problems Encountered by Bachelor of Science in Marine Transportation students in Curriculum Assessment on Navigation 1.

Research Site

The study was conducted at Merchant Marine Academy of Caraga Inc., North Montilla Boulevard Brgy. Ong Yiu Butuan City, Agusan del norte, Philippines.

Respondents of the Study

The respondents utilized in this research are 202 students in their 2nd and 3rd year of Marine Transportation, 9 instructors, and 2 administrators from the College of Maritime Education at the Merchant Marine Academy of Caraga Inc. in Butuan City, Philippines.

Instrumentation

This research instrument, based on the questionnaire adapted from "An English Course for the Students of Marine Sciences" by Jaafar (2017) and "The Influence of Study Attitude and Study Habits on the Academic Performance of the Students" by Tus (2020), aims to comprehensively evaluate the effectiveness of teaching methods, course materials, course goals, assessment methods, course teachers, and self-assessment. Participants will provide demographic information, rate the effectiveness of teaching methods on a scale from 1 to 4, evaluate course materials for clarity and relevance, reflect on their achievement of course goals, assess the fairness and alignment of assessment methods, share perceptions of the course teacher's effectiveness, and engage in self-assessment regarding attendance, lecture preparation, and exam readiness. This instrument aims to gather comprehensive insights to inform future improvements of the course.

Data Gathering Procedure

Procedure 1st step: The researchers wrote a letter, noted by the adviser, to the Dean of the College of Maritime Education (CME) requesting permission to survey the second-year and third-year maritime students as indicated in the approved schedule.

In the second step, the researchers wrote a letter, noted by the adviser, to the Office of the School Registrar asking for the master lists of all second and third-year maritime students. The researcher signed a data privacy form with the school registrar.

3rd Step, the researchers identified two hundred two (202) maritime students from 2nd year and 3rd year Bachelor of Science in Marine Transportation program.

In 4th step, the data collection was done room to room with the consent of the instructor.

In the fifth step, Questionnaires were given to the respondents, and the researcher waited until the respondents finished answering the questionnaire to retrieve it.

For the instructor and Administrator, 1st step was to drop a formal letter,

noted by the adviser, addressed to the Dean of the College of Maritime Education to allow them to conduct a survey of the instructor and administrator.

2nd step, the researcher signed data privacy form to maintain confidentiality.

3rd step, the researcher identified the appropriate individual for data collection.

4th step, the consent form was given to the identified respondents before proceeding with the data collection process.

In the fifth step, Questionnaires were given to the respondents, and the researcher waited until the respondents finished answering the questionnaire to retrieve it.

Research Ethics Protocol

The research proposed study entitled "Curriculum Assessment on Navigation 1" conducted a survey. The respondent voluntarily chose to participate. They are free to refuse to take part in this research. Their identities and sensitive information are kept confidential. They were provided and signed consent and information forms as evidence of their voluntary involvement, and there was an in-person discussion about the optional dissemination of personal information. Since none of the respondents were forced, the researcher wrote a permission letter to the dean requesting to conduct a survey. After that, the Dean approved the request letter. The respondent was noticed by the researcher about the material and included an image. The data was treated with the utmost confidentiality for the study, and the information was not used for any purpose other than what was intended, as the researchers informed the respondents of the documentation, including pictures. The research must adhere to integrity and ethical practices. Data are secured in a flash drive containing solely the responses. Lastly, there was an orientation of racial and ethnic groups.

RESULTS AND DISCUSSION

Problem 1. To what extent is the curriculum assessment Navigation-1 perceived by the students, instructor, and administrators? Course Material, Teaching Method, Course Goals, Assessment Method, Course Teacher, and Self-Assessment?

Table 1

Extent of Curriculum Assessment in Navigation 1 as Perceive by the Respondent as to Coarse Material

	Students Weighted Mean	Instructors Weighted Mean	Administrator Weighted Mean	Total Weighted Mean	Rank	Verbal Description
1. The goals of the course were clear from its beginning	3.56	3.75	4	3.77	1	Strongly Agree
2. I learnt through the course a lot of new information and vocabulary about marine sciences	3.4	3.75	4	3.72	4	Strongly Agree
3. I think the course is designed in a way that meets the targeted goals	3.5	3.75	4	3.75	2	Strongly Agree
4. The material of the course was suitable for its period	3.33	3.75	4	3.69	5	Strongly Agree
5. The design of the course is attractive and motivates me to read it	3.44	3.75	4	3.73	3	Strongly Agree
6. The paper size of the curriculum is good	3.32	3.75	4	3.69	6	Strongly Agree
TOTAL	3.43	3.75	4	3.73		Strongly Agree

The survey findings indicate that participants overwhelmingly praised the course. They strongly agreed that it had clear goals from the start (weighted mean of 3.77), effectively communicated objectives, and provided substantial learning in marine sciences (weighted mean of 3.72). Respondents also felt the course met its goals well (weighted mean of 3.75) and found its content relevant and up-to-date (weighted mean of 3.69). The attractive design (weighted mean of 3.73) and user-friendly materials (weighted mean of 3.69) further enhanced their satisfaction. Overall, the positive reception suggests the course was well-received for its content delivery, learning outcomes, design, and usability, providing insights for future improvements.

According to Rhaman (2022), developing course materials for Open and distance learning is a continuous process. A variety of staff with a wide range

of expertise are involved in producing a distance education course. That means a team of academics involved in distance education will be responsible for developing each program.

Table 2

Extent of Curriculum Assessment in Navigation 1 as Perceive by the Respondent as to Teaching Method

	Students Weighted Mean	Instructor Weighted Mean	Administrator Weighted Mean	Total Weighted Mean	Rank	Verbal Description
1. The teaching method encouraged me to interact with the classroom activities	3.42	3.75	4	3.72	1	Strongly Agree
2. The visual aids helped in more understanding of the course	3.36	3.75	4	3.70	3	Strongly Agree
3. The practices in the course helped me to understand how to apply the grammar	3.41	3.75	4	3.72	2	Strongly Agree
4. The linguistic games helped in motivating me to learn more	3.33	3.75	4	3.69	4	Strongly Agree
TOTAL	3.38	3.75	4	3.71		Strongly Agree

The survey findings indicate that participants highly approve of the teaching methods used in Navigation 1. They strongly agreed that interactive classroom activities, visual aids, grammar practices, and linguistic games significantly enhanced their learning experience, with weighted means ranging from 3.69 to 3.72. These methods were praised for promoting active engagement, improving comprehension, reinforcing learning, and motivating students. Overall, the results suggest that employing these strategies in language education can lead to more effective learning outcomes and a more enjoyable classroom environment.

According to Sajjad (2019), the teaching method is the mechanism used by the teacher to organize and implement a number of educational means and activities to achieve certain goals. Teaching techniques are the means that reflect the success of the learning process and affirm the competencies of the teacher.

Table 3

Extent of Curriculum Assessment in Navigation 1 as Perceive by the Respondent as to Course Goals

	Students Weighted Mean	Instructor Weighted Mean	Administrator Weighted Mean	Total Weighted Mean	Rank	Verbal Description
1. I've learned through the course a lot of new vocabulary, especially words from science	3.36	3.75	4	3.70	2.5	Strongly Agree
2. I've learned how to write a paragraph correctly	3.36	3.75	4	3.70	2.5	Strongly Agree
3. I've learned how to give a presentation	3.39	3.75	4	3.71`	1	Strongly Agree
TOTAL	3.37	3.75	4	3.71		Strongly Agree

The course evaluation findings indicate a strong endorsement from participants regarding the course goals in Navigation 1. They strongly agreed (weighted mean 3.70 to 3.71) that they have developed a solid understanding of new scientific vocabulary, proficiency in writing paragraphs correctly, and skills for delivering effective presentations. These results suggest high proficiency, confidence, and adaptability in communicating scientific concepts, both in written and oral formats. The positive feedback implies potential for professional growth in fields requiring strong communication skills.

Goal-setting theory indicates that there is a positive relationship between setting explicitly high goals and academic performance. When one is committed and invested in setting a goal, no matter the difficulty of the goal, performance is increased and attainment is probable (Locke & Latham, 2006; Seijts et al., 2004).

Table 4

Extent of Curriculum Assessment in Navigation 1 as Perceive by the Respondent as to Assessment Method

	Students Weighted Mean	Instructor Weighted Mean	Administrator Weighted Mean	Weighted Mean	Rank	Verbal Description
1. The score division was suitable to the goals of the course	3.42	3.75	4	3.72	1	Strongly Agree
2. The teacher's feedback on my performance was useful in highlighting my mistakes and correcting them	3.40	3.75	4	3.72	2	Strongly Agree
3. The teacher's feedback on my performance was useful in highlighting my mistakes and correcting them	3.36	3.75	4	3.70	3	Strongly Agree
TOTAL	3.39	3.75	4	3.71		Strongly Agree

The survey findings reveal that participants in Navigation 1 highly appreciate the assessment methods used in the course. They strongly agreed (weighted mean 3.72) that the scoring system accurately reflected their performance, indicating its effectiveness. Additionally, consistent feedback from teachers (weighted means of 3.72 and 3.70) was seen as beneficial for identifying mistakes and guiding improvement. Overall, the assessment methods received a weighted mean of 3.71 with a "Strongly agree" description, reflecting students' positive perception and agreement with how their performance was evaluated. This underscores the success and effectiveness of the assessment strategies employed in the course.

According to Lock et al. (2018), innovative assessment and pedagogical practices in higher education can add challenges and tensions to existing programs and institutional structures. This publication presents four innovative approaches to teaching and learning, examining each through Shulman's Signature Pedagogies and Tatar's Design Tensions frameworks to identify tensions and challenges that arise.

Table 5

Extent of Curriculum Assessment in Navigation 1 as Perceive by the Respondent as to Coarse Teacher

	Students Weighted Mean	Instructor Weighted Mean	Administrator Weighted Mean	Weighted Mean	Rank	Verbal Description
1. The teacher usually answers my questions with enough explanation	3.47	3.75	4	3.71	1	Strongly Agree
2. The teacher was proficient in the course	3.35	3.75	4	3.7	4	Strongly Agree
3. The teacher's way of introducing the course usually motivated me to take part in the class activities	3.43	3.75	4	3.72	2	Strongly Agree
4. The teacher was able to create an interactive classroom which helped in improving my linguistic abilities	3.36	3.75	4	3.70	3	Strongly Agree
TOTAL	3.40	3.75	4	3.72		Strongly Agree

The survey results indicate that students in Navigation 1 hold a highly positive view of their course teacher. They strongly agree (weighted means ranging from 3.70 to 3.72) that the teacher effectively answers questions with clear explanations, demonstrates proficiency in the course material, introduces the course in a motivational manner, and creates an interactive classroom environment. These aspects contribute to a positive learning atmosphere that enhances both learning outcomes and student engagement. With an average weighted mean of 3.72 and the description "Strongly agree," students show significant agreement and positive sentiment towards the teacher's effectiveness and teaching methods. This suggests potential for improved student performance, recognition for effective teaching, and opportunities for the teacher's ongoing professional development.

According to Tran and O'Connor (2024), the course teacher concept of teacher curriculum competence is an amalgamation of theoretical or formal and personal practical teacher knowledge and orientations in relation to curriculum. It is situated within institutional, political, and philosophical contexts and shapes

how teachers interact with curriculum and deliver content to their students.

Table 6

Extent of Curriculum Assessment in Navigation 1 as Perceive by the Respondent as to Self-Assessment

	Students Weighted Mean	Instructor Weighted Mean	Administrator Weighted Mean	Weighted Mean	Rank	Verbal Description
1. I was interested to attend all the lectures to get the most benefit	3.43	3.75	4	3.73	1.5	Strongly Agree
2. I went to the lectures not because I found them interesting, but simply to avoid the consequences of being absent.	3.37	3.75	4	3.71	4	Strongly Agree
3. I worked hard in preparing for the daily lectures in order to learn	3.43	3.75	4	3.73	1.5	Strongly Agree
4. I did my best before the exams to get the best results	3.42	3.75	4	3.73	3	Strongly Agree
Total	3.41	3.75	4	3.72		Strongly Agree

The survey findings indicate that participants in Navigation 1 have a highly positive view of their self-assessment in academic pursuits. They strongly agree (weighted mean 3.73) with attending lectures, working diligently in preparation, and doing their best before exams, demonstrating a strong commitment to their education. This approach not only enhances academic success but also develops essential skills such as time management, critical thinking, and problem-solving (weighted mean 3.73, Strongly Agree). The positive outcomes, including increased motivation and confidence (weighted mean 3.73, Strongly Agree), suggest a proactive approach to learning that empowers students to pursue their educational goals enthusiastically. Overall, with an average weighted mean of 3.72 and the description "Strongly agree," the findings highlight a significant

agreement and positive inclination towards conscientious academic efforts and their beneficial outcomes.

According to Martin et al. (2017), Self-Assessment Serves to guide the class discussion, course readings frame issues, illustrate processes, identify critical questions, and a more nuanced array of factors should be considered when identifying reading materials. With the aim of guiding instructors in the selection process of textbooks or other reading materials.

Table 7

Summary of Curriculum Assessment on navigation 1

	Weighted mean	Verbal description	Rank
Course material	3.73	Strongly Agree	1
Teaching method	3.71	Strongly Agree	5
Course goals	3.71	Strongly Agree	5
Assessment method	3.71	Strongly Agree	5
Course Teacher	3.72	Strongly Agree	2.5
Self-Assessment	3.72	Strongly Agree	2.5
Total	3.72	Strongly Agree	

Table 7 shows an overview of a curriculum assessment on Navigation 1. A faculty member surveyed students and administrators, who were prompted to assess the course, utilizing a scale ranging from "strongly disagree" to "strongly agree."

The curriculum assessment on Navigation 1 showed commendable satisfaction levels among students, faculty, and administrators. The overall average score of 3.72 indicated strong agreement, with the course material, course teacher, and self-assessment components receiving the highest ratings. The teaching method, course goals, and assessment method also received high scores, albeit slightly lower. Overall, the assessment reflects a successful and well-received navigation course curriculum, with respondents strongly endorsing and satisfied with the various aspects evaluated.

According to Mikre (2010), assessment is an indispensable component of curriculum practice as it plays a crucial role in measuring student performance and ensuring that the curriculum is aligned with the needs of the workforce. Administrators, teachers, and students must focus on the learning outcomes and the abilities that students can demonstrate through their education. However, assessment should not be viewed as a mere tool for measuring student performance, but rather as a means to improve the quality of instruction and learning**.**

Problem 6. Is there a significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the student's instructor and administration?

Table 8

Significant difference on the extent of the curriculum assessment on navigation 1 as perceived by the Students, Instructors and Administrators in terms of Course Material.

	4	3	2	1	Total	Computed level x^2-value	Critical x^2-value	Decision
Student	82	113	5	2	202			Fail to reject Null Hypothesis
Instructor	8	1	0	0	9			
Administrator	2	0	0	0	2			
Total	92	114	5	2	213	9.32	12.592	

The table shows the results of a chi-square test, which is a statistical test used to determine if there is a significant difference between two or more groups. In this case, the test is being used to see if there is a significant difference between the perceptions of students, instructors, and administrators on the extent of the curriculum assessment on navigation 1.

Based on the table, the total computed value of the chi-square is 9.32, while the critical x^2-value is 12.592. Since the chi-square is less than the critical x^2-value, this means accepting the null hypothesis. Therefore, there is no significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the Students, Instructors, and Administrators.

Table 9

Significant difference on the extent of the curriculum assessment on navigation 1 as perceived by the Students, Instructors and Administrators in terms of Teaching Method.

	4	3	2	1	Total	Computed level x^2-value	Critical x^2-value	Decision
Students	79	135	9	3	202			Fail to reject the Null Hypothesis
Instructors	8	1	0	0	9			
Administrators	2	0	0	0	2			
Total	89	136	9	3	213	10.77	12.592	

Table 9 shows the result of the chi-square test of the teaching method. In this case, the test is being used to see if there is a significant difference between the

perceptions of students, Instructors, and Administrators regarding the extension of the curriculum assessment on navigation 1.

Based on the table, the total computed value of the chi-square is 10.77, while the critical x^2-value is 12.592; since the chi-square is lower than the critical x^2-value, that means accepting the null hypothesis. Therefore, there is no significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the Students, Instructors, and Administrators.

Table 10

Significant difference on the extent of the curriculum assessment on navigation 1 as perceived by the Students, Instructors and Administrators in terms of Coarse Goal.

	4	3	2	1	Total	Computed level x^2-value	Critical x^2-value	Decision
Students	90	105	5	2	202			
Instructors	8	1	0	0	9			Fail to reject the Null Hypothesis
Administrators	2	0	0	0	2			
Total	100	106	5	2	213	8.67	12.592	

Table 10 shows the result of the chi-square test of course goals. In this case, the test is being used to see if there is a significant difference between students', Instructors', and Administrators' perceptions regarding the extension of the curriculum assessment on navigation 1.

Based on the table, the total computed value of the chi-square is 8.67, while the critical x^2-value is 12.592 since the chi-square is less than the critical x^2-value, which means accepting the null hypothesis.

Therefore there is no significant difference on the extent of the curriculum assessment on navigation 1 as perceived by the Students, Instructors and Administrators.

Table 11

Significant difference on the extent of the curriculum assessment on navigation 11 as perceived by the Students, Instructors and Administrators in terms of Assessment method

	4	3	2	1	Total	Computed level x^2-value	Critical x^2-value	Decision
Students	114	89	6	2	202			
Instructors	8	1	0	0	9			Fail to reject the Null Hypothesis
Administrators	2	0	0	0	2			
Total	124	90	6	2	213	6.36	12.92	

This table shows the result of the chi-square test of course goals. In this case, the test is being used to see if there is a significant difference between the perception of Students, Instructors, and Administrators on the extent of the curriculum assessment on navigation 1.

Based on the table, the total computed value of the chi-square is 6.36, while the critical x^2-value is 12.592; since the chi-square is less than the critical x^2-value, the means accept the null hypothesis. Therefore, there is no significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the Students, Instructors, and Administrators.

Table 12

Significant difference on the extent of the curriculum assessment on navigation 1 as perceived by the Students, Instructors and Administrators in terms of Coarse Teacher.

	4	3	2	1	Total	Computed level x^2-value	Critical x^2-value	Decision
Students	85	111	4	2	202			
Instructors	8	1	0	0	9			Fail to reject the Null Hypothesis
Administrators	2	0	0	0	2			
Total	95	112	4	2	213	9.72	12.592	

Table 12 shows the result of the chi-square test of course goals. In this case, the test is being used to see if there is a significant difference between the perception of Students, Instructors, and Administrators on the extent of the curriculum assessment on navigation 1. Based on the table, the total computed value of the chi-square is 9.72, while the critical x^2-value is 12.592; since the chi-square is less

than the critical x^2-value, that means accepting the null hypothesis. Therefore, there is no significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the Students, Instructors, and Administrators.

Table 13

Significant difference on the extent of the curriculum assessment on navigation 1 1 as perceived by the Students, Instructors and Administrators in terms of Self-Asessment.

	4	3	2	1	Total	Computed level $\mathbf{x^2}$-value	Critical $\mathbf{x^2}$-value	Decision
Students	97	98	5	2	202			Fail to reject the Null Hypothesis
Instructors	8	1	0	0	9			
Administrators	2	0	0	0	2			
Total	107	99	5	2	213	7.87	12.592	

Table 13 shows the result of the chi-square test of course goals. In this case, the test is being used to see if there is a significant difference between the perception of Students, Instructors, and Administrators on the extent of the curriculum assessment on navigation 1. Based on the table, the total computed value of the chi-square is 7.87, while the critical x^2-value is 12.592; since the chi-square is less than the critical x^2-value, that means accepting the null hypothesis. Therefore, there is no significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the Students, Instructors, and Administrators.

Table 14

Summary of Curriculum Assessment on navigation 1

	Computed $\mathbf{x^2}$-value	Critical value	Decision
Course material	9.55	12.592	Fail to reject the Null Hypothesis
Teaching method	10.77	12.592	Fail to reject the Null Hypothesis
Course goals	8.67	12.592	Fail to reject the Null Hypothesis
Assessment method	6.36	12.592	Fail to reject the Null Hypothesis
Course Teacher	9.72	12.592	Fail to reject the Null Hypothesis
Self-Assessment	7.97	12.592	Fail to reject the Null Hypothesis
Total	8.84	12.592	Fail to reject the Null Hypothesis

The table shows the chi-square test results for six different aspects of the curriculum: course material, teaching method, course goals, assessment method, course teacher, and self-assessment. For each aspect, the table shows the calculated chi-square value, the critical value, and the decision. The critical value is the chi-

square value at a specific level of significance (a= 0.05). If the calculated chi-square value is greater than the critical value, we reject the null hypothesis. The null hypothesis there is no relationship between the two variables.

The table shows that the null hypothesis is accepted for Course material, Course goals, Teaching method, Assessment method, Course teacher, and Self-assessment.

Therefore, there is no significant difference in the extent of the curriculum assessment on Navigation 1 as perceived by the students, instructor, and administrator.

According to Hattie's (2008) research, effective teaching methods for successful navigation emphasize the importance of clear guidance and visible tools in education. Just as skilled navigators use maps and GPS to lead travelers, teachers use explicit instructions and feedback to enhance student learning. A holistic approach to curriculum assessment, considering the entire educational journey, ensures alignment and support for student success. While other curriculum aspects may not directly impact learning outcomes, they still play a supportive role. Recognizing the significance of visible teaching practices and comprehensive assessment helps educators navigate the complexities of teaching, leading students to successful learning outcomes.

CONCLUSIONS

The study has generated new knowledge contribution to the field of maritime education which the Merchant Marine Academy of Caraga Inc.'s comprehensive curriculum assessment of Navigation 1 reveals a strong consensus among students, teachers, and administrators, with praise for the course material's relevance and clarity, successful teaching strategies, and accurate assessment methods. To meet the demands of students and guarantee competency in the marine industry, the study underscores how the curriculum is in line with educational standards and stresses the significance of ongoing enhancements to teaching methodologies. The results highlight how important feedback mechanisms are for improving academic performance and the learning process. The study's findings show that stakeholders have a positive opinion of the curriculum and highlight the need to use a variety of evaluation techniques to enhance learning outcomes. These observations provide insightful advice for improving students' study habits.

TRANSLATIONAL RESEARCH

By implementing improved teaching strategies specifically designed for maritime students, creating customized student support programs like tutoring and mentoring, integrating industry feedback to align curriculum with industry

standards, offering faculty continuous professional development in interactive teaching methods, and creating a feedback loop for regular evaluation and adaptation of educational initiatives, the Curriculum Assessment on Navigation 1 study at the Merchant Marine Academy of Caraga Inc. can drive practical translational research initiatives. Through these activities, the curriculum will be aligned with industry needs, student learning outcomes will be optimized, faculty effectiveness will be increased, and a dynamic educational framework that prepares students for successful employment in the marine industry will be fostered.

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