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REPORT DEV 1.2

WP1 STATE OF THE ART ON MARITIME ENVIRONMENTAL PROTECTION AND MANAGEMENT

DEV 1.2 GAP analysis



Development of Regional Joint Master Program in Maritime Environmental Protection and Management – MEP&M
Project no. 619239-EPP-1-2020-1-ME-EPPKA2-CBHE-JP

REPORT ON OVERVIEW OF MSC PROGRAMS IN FIELD OF MEP&M AT EU HEIs

Overview of MSc programs in field of MEP&M at EU HEIs

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List of abbreviations and acronyms

MEP&M	- Maritime Environmental Protection and Management
UoM	- University of Montenegro
UAMD	- Aleksander Moisiu University of Durrës
UV	- University 'Ismael Qemali' Vlore
UL	- University of Ljubljana
UCA_F	- Université Côte d'Azur
UCA_E	- University of Cadiz
GMD	- General Maritime Directorate
EPA	- Environmental Protection Agency
ECD	- Ecological Center DOLPHIN



1. Introduction

Author(s) of Introduction: Srdjan Redzepagic

This document is providing the comparison of actual performances with the desired ones that have been delivered in DEV 1.2 through this GAP analysis. Respecting all elements, this document is based on the Needs analysis previously done in the field of MEP&M at Montenegrin and Albanian HEIs. Previously have been done the overview of MSc programs in field of MEP&M at EU HEIs is performed with teaching methodologies implemented for such programs, where it has been developed detailed instructions on developing curricula with teaching, research and practical knowledge and skills for new MSc program, based upon previously delivered GAP analysis. This has ensured that all the best practices from EU will be used to meet the needs of partner countries higher education institutions, and that prepared MSc program curricula and course catalogues will be synchronized with relevant national and international legislation and strategies in field of marine environmental protection. Thru this document we give the main results of a GAP analysis that are showing additional sub-areas that should be included for developing teaching methodology and practical skills in new joint MSc in MEP&M. This document is composed of three parts with relevant questionnaires from three partner countries universities (one from Montenegro and two from Albania) respectively: University of Montenegro, University of Vlore and University of Durres. Each of these three universities has provided questionnaires for their university and its analysis, thru the Analysis of questionnaire for academic staff, the Analysis of questionnaire for students and the Analysis of questionnaire for stakeholders. This document is fully completed with introductory and concluding remarks, showing also annexes by the end.

2. Questionnaires for the University of Montenegro and its analysis

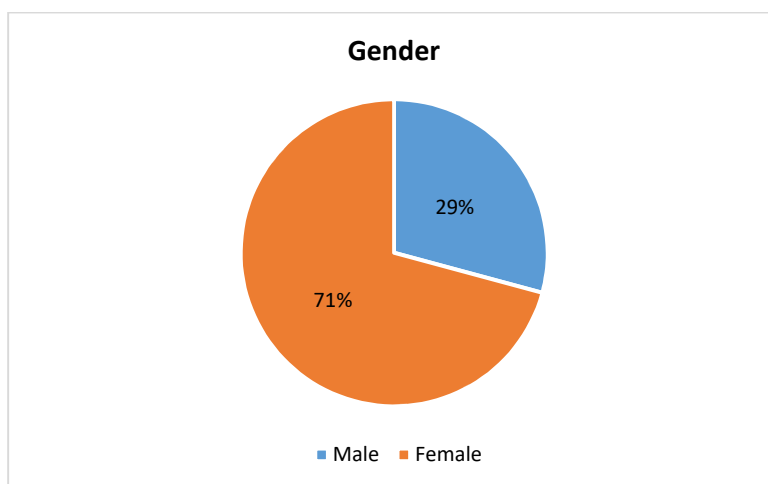
Author(s) of the Chapter #2: Kristofor Lapa, Enkeleint Aggelos Mechili, Danilo Nikolic, Maja Skuric, Radmila Gagic

2.1 Analysis of questionnaire for academic staff

Referring to the survey analysis for the University of Montenegro, 24 professors in total completed the questionnaire. 29.2% of respondents are of male gender and 70.8% of female (Graph 1). Most of them belong to age category 31-40 (37.5%) and to 41-50 (41.7%). Additionally, 12.5% of respondents belong to age category over 51.

The majority of the participants are from the Faculty of Maritime Studies Kotor (70.8%) and the rest are coming from the Institute for Marine Biology (29.2%). Most of the participants are Assistant Professor/Scientific associate (37.5%) while Teaching assistant/Research assistant reached 33.3%. 54.2% of respondents have less than ten years of work experience, 41.7% hold classes at Master level, 20.8% at bachelor level, and only two professors tutor PhD students.

41.7% of surveyed academic staff has delivered a course in the broader fields of Maritime Environmental Protection and Management (MEP&M) in the last five years. However, 14 participants (58.3%) report that have delivered a seminar/training/workshop to non-student population in broader fields of MEP&M in the last 5 years (Graph 2, Table 1). Regarding the percentage of students that participated to these seminars/workshops, there were attended by at maximum 5 participants (16.7%); between 6-10 participants reached 37.5%; from 11 to 20 participated in the percentage of 29.2%, while more than 20 persons (16.7%) attended also the mentioned events. The research areas of the academic staff are presented at Graph 3.



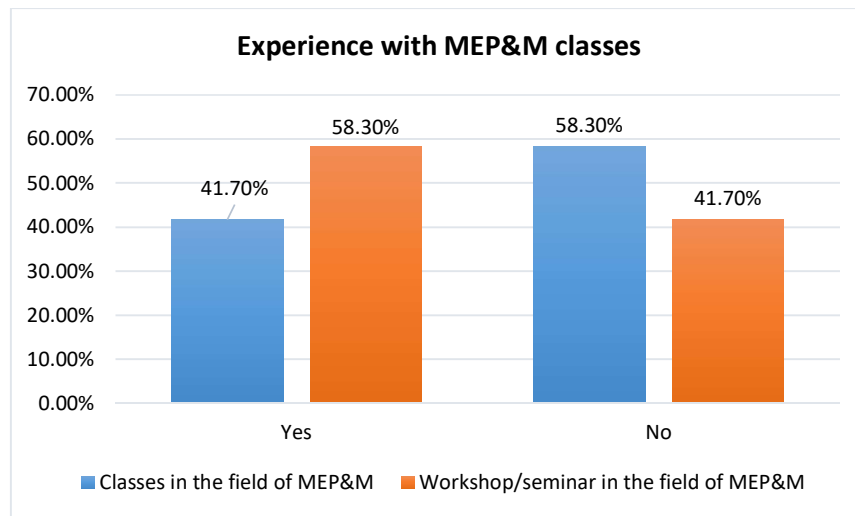
Graph 1: Gender statistics of respondents

Table 1: Basic information of the respondents

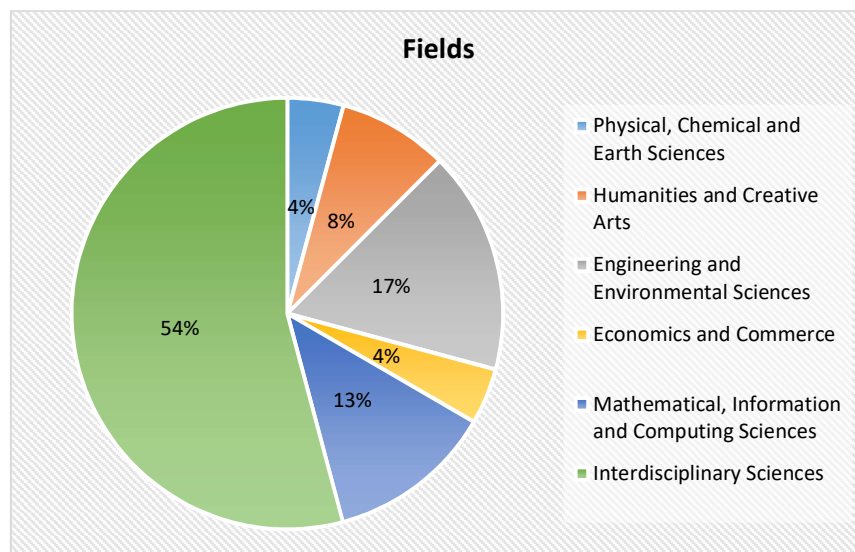
	Number of answers (N)	Percent (%)
Gender		
Male	7	29.2
Female	17	70.8
Age		
22-30	2	8.3
31-40	9	37.5
41-50	10	41.7
51-60	3	12.5
Faculty		
Institute for Marine Biology	7	29.2
Faculty of Maritime Studies Kotor	17	70.8
Academic level		
<i>Full Professor/Scientific advisor</i>	4	16.7
<i>Associate Professor/Senior scientific associate</i>	3	12.5
<i>Assistant Professor/Scientific associate</i>	9	37.5
<i>Teaching assistant/Research assistant</i>	8	33.3
Years of work experience		
0-10	13	54.2
11-20	5	20.8
21-30	6	25.0
Study programs that have classes		
BSc	5	20.8
MSc	10	41.7
PhD	2	8.3
N/A	7	29.2
Classes in the field of MEP&M		
Yes	10	41.7
No	14	58.3
Workshops/seminars in the field of MEP&M		
Yes	14	58.3
No	10	41.7

75.0% of the surveyed respondents consider that the University of Montenegro offer in-curricular or extracurricular activities focusing on the behavior, skills, knowledge and creativity development in the broader fields of MEP&M (Graph 4, Table 2). Related to the number of academic/research staff involved in the institution's activities development in the broader fields of MEP&M, the statistics of the respondents' answers is as follows: 5 professors (reached 45.8%) is teaching their lectures related to MEP&M, 4 people (20.8%) are delivering

these lectures, 3 academic staff (12.5%) is teaching MEP&M lectures, while more than 5 professors (16.7%) taught MEP&M lectures. 79.2% report that their faculty/institution implement activities related the broader fields of MEP&M (e.g. projects, research, workshops, seminars, trainings, summer school etc.). Among the participants, 29.2% mentioned that these activities have been previously concluded, 54.2% say that are currently active, and 16.7 that are planned for the future.



Graph 2: Experience with MEP&M workshops/seminars

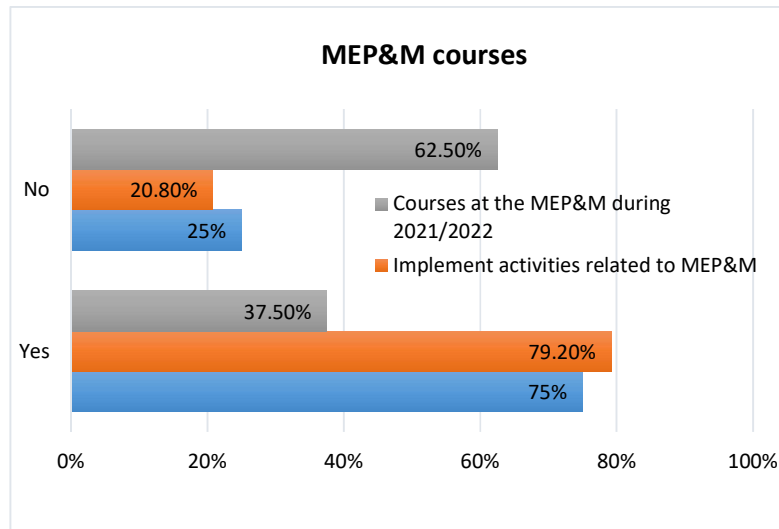


Graph 3: Research areas of the academic staff

37.5% of respondents hold courses/part of the course related to the broader fields of MEP&M in academic 2021/2022. Some of them delivered two courses (54.52%), while 4 courses were

mentioned by 20.8% of the respondents, 1 course is mentioned by 16.7% respondents and 3 courses by 8.3% surveyed professors. As about the number of ECTS included in the subject, 62.5% of people report that the courses range from 3-5 ECTS while 37.5% of them reported the number between 6 and 8 ECTS.

However, the classes/courses related to the broader fields of MEP&M are compulsory (37.5%), are elective (37.5%) while both options of the respondents' opinions referred by 25% (Graph 5, Table 2).

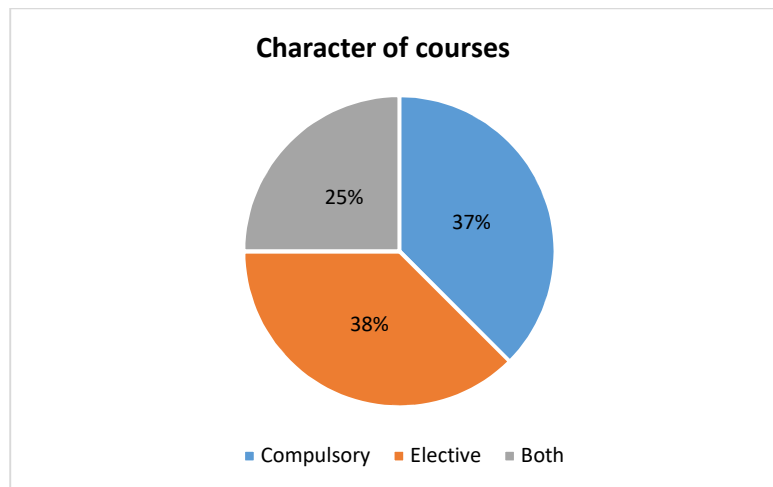


Graph 4: MEP&M courses in 2021/2022

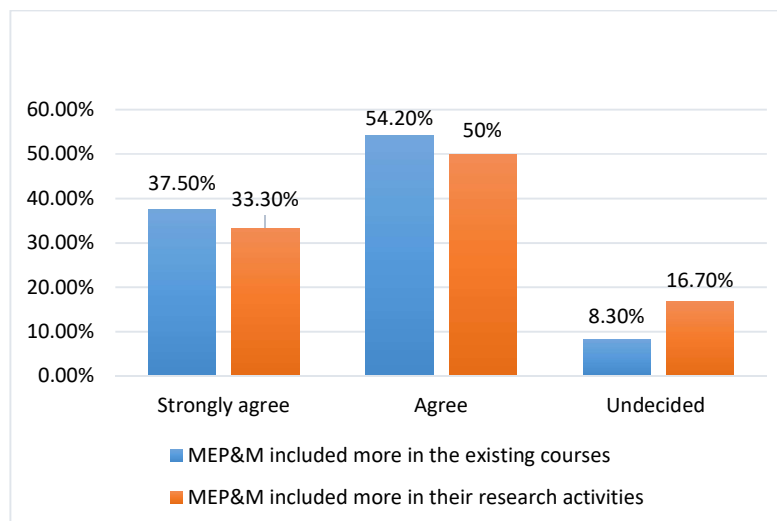
Table 2: Different kind of activities at the University of Montenegro (Part I)

	Number of answers (N)	Percent (%)
In-curricular or extracurricular activities		
Yes	18	75.0
No	6	25.0
Implement activities related to MEP&M		
Yes	19	79.2
No	5	20.8
Planning of these activities		
Previously concluded	7	29.2
They are currently active	13	54.2
Activities are planned for the upcoming period	4	16.7
N/A		
Courses at the MEP&M during 2021/2022		
Yes	9	37.5
No	15	62.5

Character of courses		
Compulsory	9	37.5
Elective	9	37.5
Both	6	25.0
Number of ECTS		
3.0	4	16.7
4.0	7	29.2
5.0	4	16.7
6.0	6	25.0
8.0	3	12.5



Graph 5: Type of courses in MEP&M at the University of Montenegro



Graph 6: The opinion of MEP&M activities in existing courses and research activities

54.2% of participants totally agree or agree that the specific fields of MEP&M should be included more in the University existing courses while 8.3% are undecided (Graph 6, Table 3). 83.3% of them totally agree or agree that the specific fields of MEP&M should be included more in their research activities while 16.7% are neutral (Table 3).

62.5% of the academic staff reports that they have included the industry or business sector professionals in the practical part of their course lectures, while 37.5% does not do this. The number of lecturers given by industry or business sector practitioners during the academic year 2020/2021 ranged from 1-5 (54.2%), 6-10 professionals reached the percentage of 37.5% and more than 10 professionals 8.4% participated in the lecturing (Table 3).

58.3% of the academic staff reports that they are extremely or very familiar with the policies/strategy/action plans regarding maritime environmental protection in Montenegro while 41.7% of them are moderately familiar. 62.5% of the participants definitely or probably are interested in giving lectures if there was a Master degree program in the field of MEP&M in the English (Graph 7, Table 3). As about their English level, 25% staff reports a B2 level and 33.3% of them report a C2 level.

In Table 4 are presented the topics that professors from the University of Montenegro are interested in giving lectures. International conventions on marine environmental protection and Sustainable development were the most reported areas (by 20.8% each), followed by the Entrepreneurship and Innovation and Environmental Law (by 9.8% each), and Marine Ecology areas (16.7%).

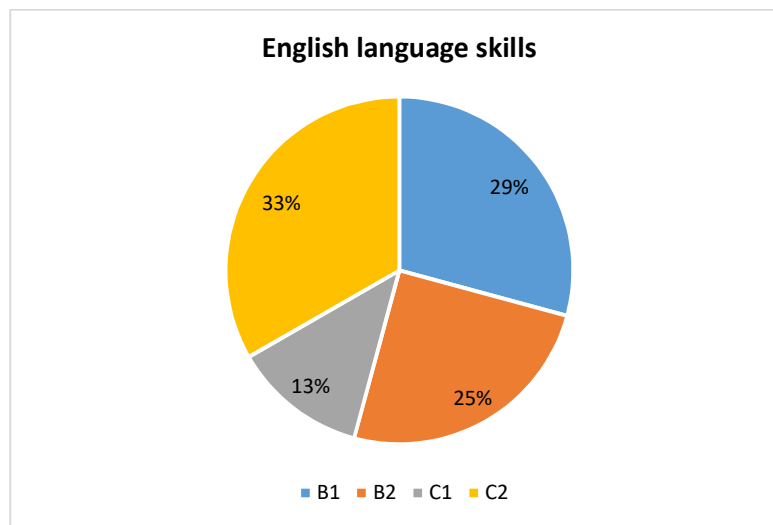
Table 3: Different kind of activities at the University of Montenegro (Part II)

	Number of answers (N)	Percent (%)
MEP&M included more in the existing courses		
Strongly agree	9	37.5
Agree	13	54.2
Undecided	2	8.3
MEP&M included more in their research activities		
Strongly agree	8	33.3
Agree	12	50.0
Undecided	4	16.7
Industry or business sector staff in courses		
Yes	15	62.5
No	9	37.5
Familiar with policies/strategy/action plans regarding MEP&M in Montenegro		
Extremely familiar	11	45.8
Very familiar	3	12.5
Moderately familiar	10	41.7
Giving lecturers in a Master program in MEP&M		
Definitely	8	33.3
Probably	7	29.2

Possibly	4	16.7
Probably Not	5	20.8
English language level		
B1	7	29.2
B2	6	25.0
C1	3	12.5
C2	8	33.3

Table 4: MEP&M topics that are interested to give lecturers

	Number of answers (N)	Percent (%)
MEP&M topics that are interested to give lecturers		
Sustainable development	5	20.8
Entrepreneurship and innovation	4	16.7
International conventions on marine environmental protection	5	20.8
Environmental Law	4	16.7
Maritime transport	2	8.3
Climate change	1	4.2
Marine pollution	1	4.2
Marine resources	1	4.2
Management of protected marine areas	1	4.2



Graph 7: English language level of academic staff

41.7% of the participants report that lectures are often or sometimes used in the MEP&M education while case studies were reported often or sometimes by 54.2% of respondents. 58.3% of the participants report that Entrepreneurs/practitioners in the classroom are often

or sometimes welcomed to have practical lectures in the MEP&M education while project teams is also a type of activity in the educational process reported often or sometimes by 16.7% and 33.3%, respectively. Project teams' teaching method were reported by 50% of the participants that are never or rarely conducted by them. Company visits is also the mode of practical lectures, and are reported often or sometimes by 12.5% and 54.2%, respectively, while the method of *students from different faculties/disciplines to mix in the classroom activities* were reported by 25% (often), 33.3% (sometimes), 29.2% (rarely) and 12.5% (never) respondents. 58.3% of the participants report that exploring complex real-world problems are often (20.8%) and sometimes (37.3%) used in the MEP&M education (Table 5).

25.0% of the respondents said that are extremely or very familiar with on-line classes while 62.5% report that are moderately familiar and 12.5% are slightly familiar. 75% of the academic staff reported that the technology quality used for virtual teaching at their faculty is excellent or good. Regarding the quality of the lecturers used for virtual teaching at their faculty, 70.8% report that was excellent or good. Students work during online classes at the faculty was evaluated as excellent by 20.8% of the participants, as good by 54.0% and as fair by 25.0% (Graph 8, Table 6).

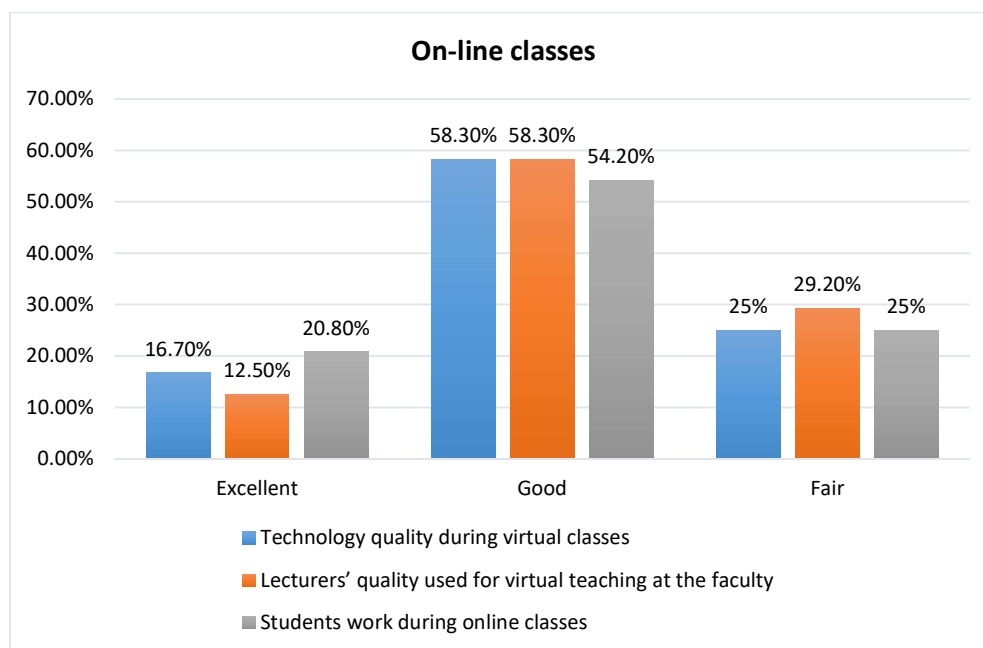
Table 5: Statistics of teaching methods

Teaching method	Often	Sometimes	Rarely	Never	I don't know
	N (%)	N (%)	N (%)	N (%)	N (%)
Lecturing	4 (16.7)	6 (25)	11 (45.8)	3 (12.5)	0
Case studies	4 (16.7)	9 (37.5)	9 (37.5)	2 (8.3)	0
Entrepreneurs/practitioners in the classroom	3 (12.5)	11 (45.8)	6 (25)	3 (12.5)	1 (4.2)
Project teams	4 (16.7)	8 (33.3)	10 (41.7)	2 (8.3)	0
Company visits	3 (12.5)	13 (54.2)	7 (29.2)	1 (4.2)	0
Students from different faculties/disciplines to mix in the classroom	6 (25)	8 (33.3)	7 (29.2)	3 (12.5)	0
Exploring complex real-world problems	5 (20.8)	9 (37.5)	8 (33.3)	2 (8.3)	0

Table 6: Knowledge and skills about online classes

	Number of answers (N)	Percent (%)
Familiar with online lectures		
Extremely familiar	5	20.8
Very familiar	1	4.2
Moderately familiar	15	62.5
Slightly familiar	3	12.5
Technology quality during virtual classes		

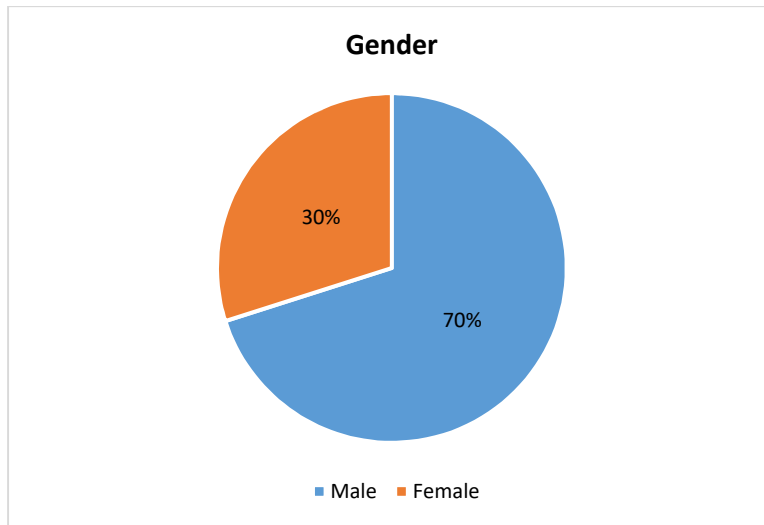
Excellent	4	16.7
Good	14	58.3
Fair	6	25.0
Lecturers' quality used for virtual teaching at the faculty		
Excellent	3	12.5
Good	14	58.3
Fair	7	29.2
Students work during online classes		
Excellent	5	20.8
Good	13	54.2
Fair	6	25.0



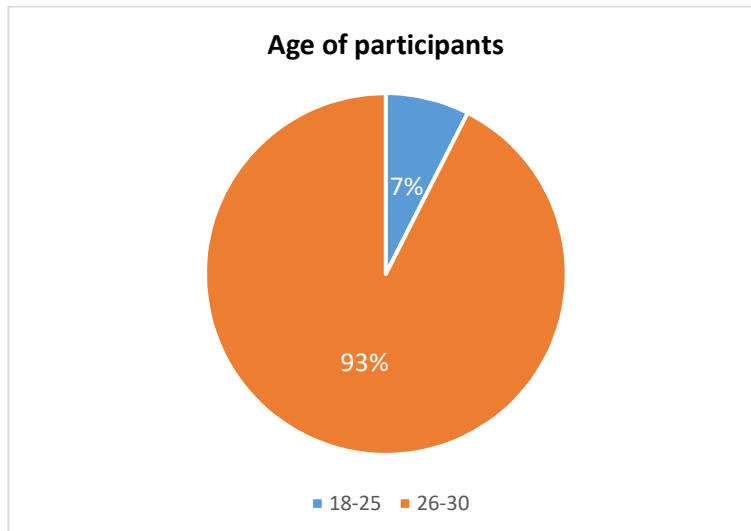
Graph 8: On-line classes answers

2.2 Analysis of questionnaire for students

The total of 67 students from the University of Montenegro filled out the survey. Most of them are of male gender (70.1%) while the rest are females (Graph 9). 92.5% of participants belong to age group of 18-25 (Graph 10), and all of them are coming from the Faculty of Maritime Studies Kotor, because there are no students at the Institute of Marine Biology (Table 7). In Graphs 11 and 12 are given the statistics of study year and study program attended by students in the survey.



Graph 9: Gender statistics

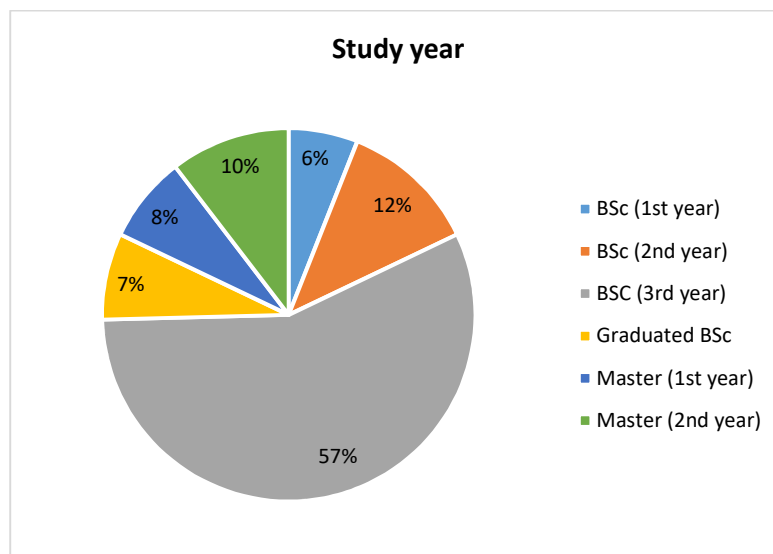


Graph 10: Age of students that fulfilled out the survey

Table 7: Basic information of students participated in the survey

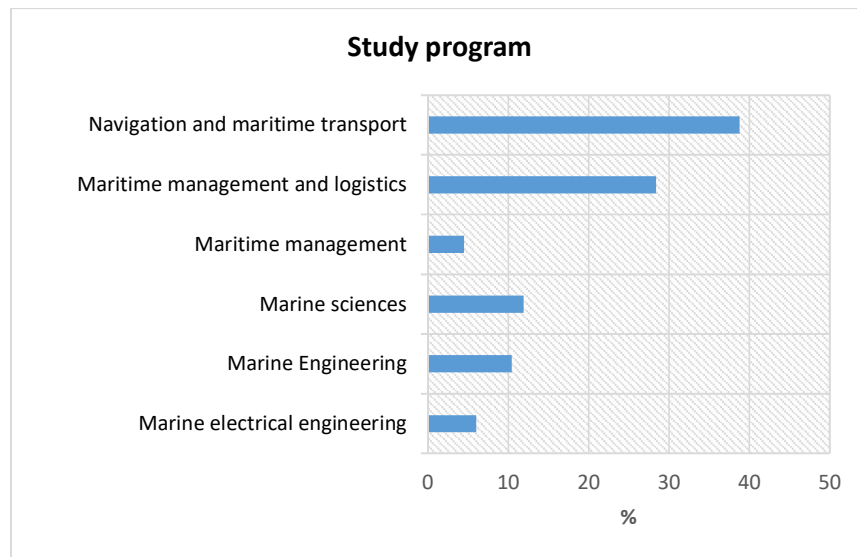
	Number of answers (N)	Percent (%)
Gender		
Male	47	70.1
Female	20	29.9
Age		
18-25	62	92.5
26-30	5	7.5
Year of studies		
BSc* (1st year)	4	6.0
BSc (2nd year)	8	11.9

BSc (3rd year)	38	56.7
Graduated Bachelor	5	7.5
Master (1st year)	5	7.5
MSc (2nd year)	7	10.4
Academic Grades		
9.50-10.00	6	9.0
8.50-9.49	18	26.9
7.50-8.49	27	40.3
6.50-7.49	12	17.9
6.00-6.49	4	6.0
Study program		
Marine electrical engineering	4	6.0
Marine Engineering	7	10.4
Marine sciences	8	11.9
Maritime management	3	4.5
Maritime management and logistics	19	28.4
Navigation and maritime transport	26	38.8

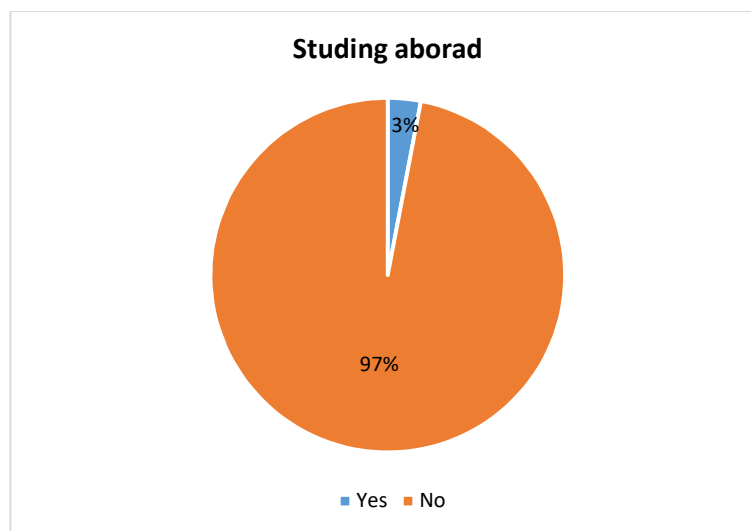


Graph 11: The information on the study year of respondents (students)

Only 3% of students have conducted a part of their studies abroad. One student has had an Erasmus experience while another has had a two-week experience abroad. Both of them characterize this experience as excellent (Graph 13). 71.6% have no work experience or practical work (internship), see Graph 14. From those having conducted practical work (internship) 52.6% of them has worked for less than 6 months while 71.6% of them characterizing this experience as excellent. 57.9% of the students characterize their experience as excellent/ very good while 21.06% denoted it as bad/very bad (Table 8).



Graph 12: Study program attended by students



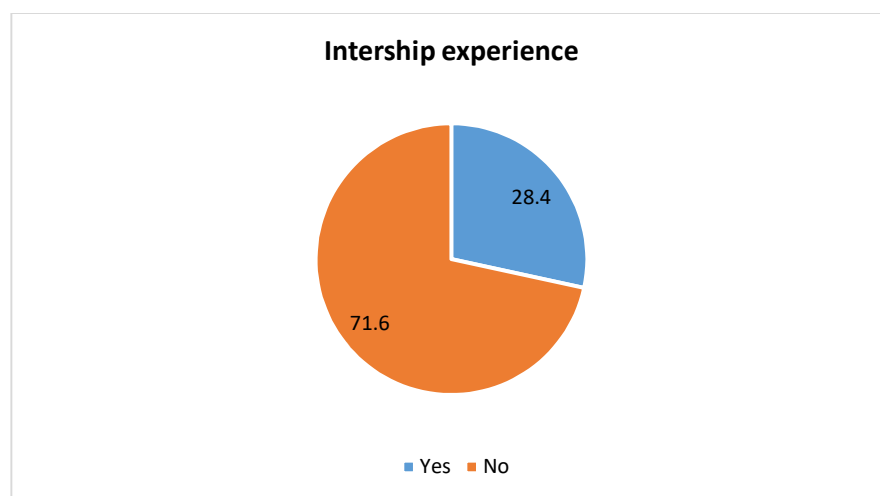
Graph 13: Studying abroad

Table 8: Work/practical experience of students

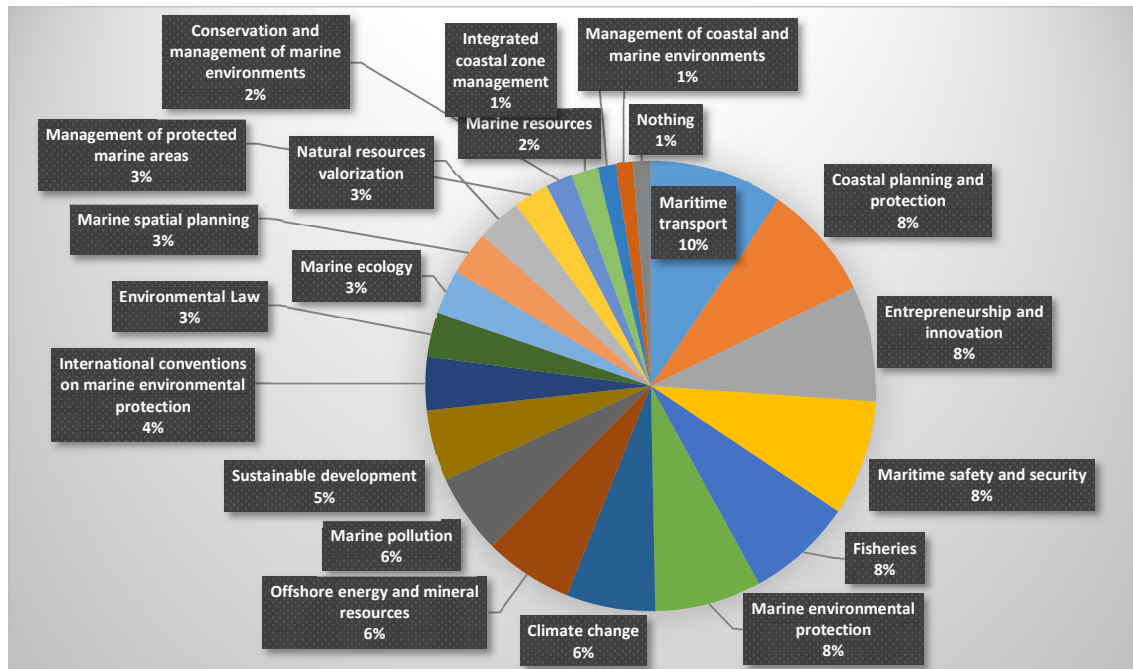
	Number of answers (N)	Percent (%)
Conducting part of the studies abroad		
Yes	2	3.0
No	65	97.0
Work/practical/internship experience		
Yes	19	28.4
No	48	71.6
Period of experience		



0-6 months	10	52.6
6-12 months	3	16
More than 12 months	6	31.4
Satisfaction with this experience		
Excellent	11	57.9
Good	1	5.4
Fair	3	15.7
Poor	4	21.0
Very Poor	0	0
Filed of Maritime Environmental Protection and Management		
Sustainable development	9	6.4
Entrepreneurship and innovation	16	11.4
Environmental Law	5	3.6
Maritime transport	13	9.3
Management and conservation of marine species	13	9.3
Offshore energy and mineral resources	7	5.0
Natural resources valorization	1	.7
Integrated coastal zone management	5	3.6
Coastal planning and protection	5	3.6
Maritime safety and security	15	10.7
Other	51	36.4



Graph 14: Working experience of students



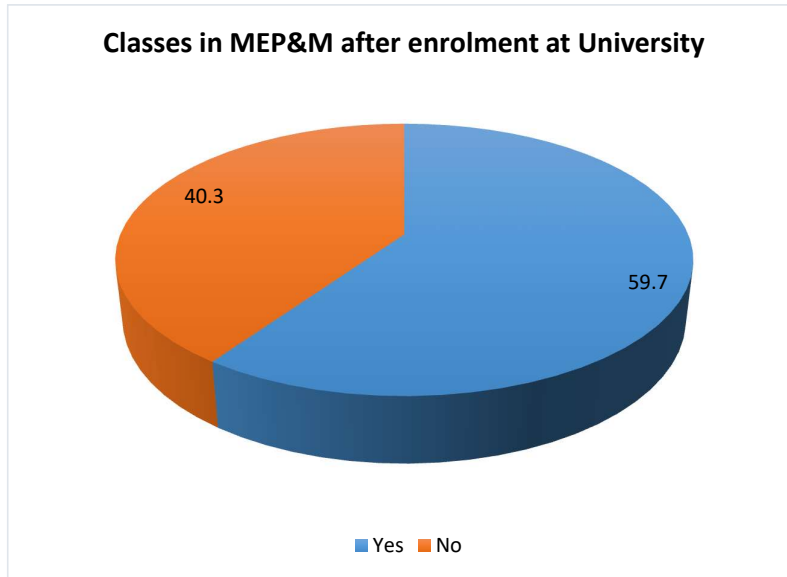
Graph 15: Interest of students for future employment in different fields MEP&M

Regarding the question of which field of MEP&M are students interested in, the statistics is shown in Graph 15. The predominant answers were: maritime transport (9.55%), coastal planning and protection, entrepreneurship and innovation, and maritime safety and security ranking second position with 8.28% per each category, fisheries and marine environmental protection with 7.64% per each, and climate change as well as offshore energy and mineral resources with 6.37% per each topic.

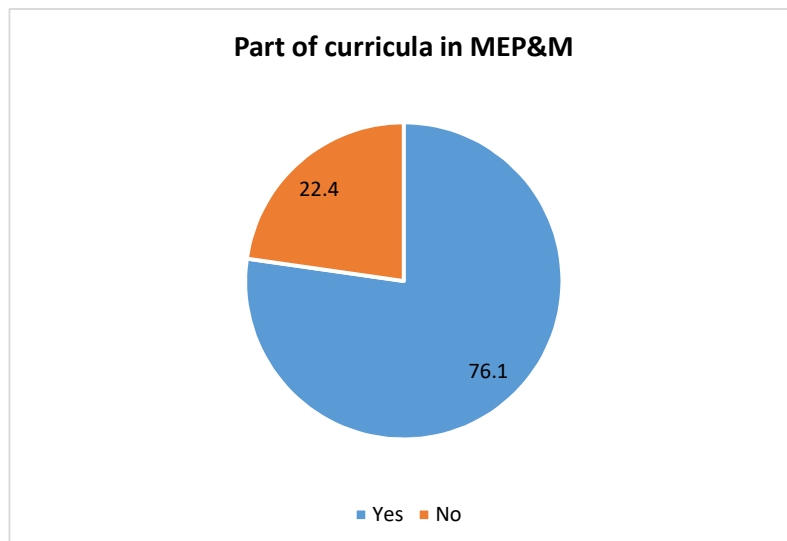
Table 9: MEP&M courses and curricula

	Number of answers (N)	Percent (%)
Classes in MEP&M after enrolment at University		
Yes	40	59.7
No	27	40.3
Satisfaction with classes content		
Excellent	1	1.5
Good	19	28.4
Fair	4	6.0
Poor	15	22.4
Very Poor	1	1.5
Part of curricula in MEP&M		
Yes	51	76.1
No	15	22.4

Satisfaction with curricula content		
Excellent	3	4.5
Good	19	28.4
Fair	9	13.4
Poor	21	31.3
Very Poor	3	4.5



Graph 16: Classes in MEP&M after enrolment at the University



Graph 17: Part of curricula in MEP&M

59.7% of students had courses in broader fields of MEP&M from their enrolment at the University of Montenegro. Almost 30% of them report that these classes content were excellent/good and 23.9% of students reported them as not good (Table 9). 76.1% reported that have had part of curricula dedicated to fields of Maritime Environmental Protection and Management with 32.9% of participants (49.25) reporting that are satisfied with the content and 35.8% were not satisfied (Graphs 16, 17).

53.7% of the participants totally agree and/or agree that the fields of Maritime Environmental Protection and Management education is relevant for their future career with Seminars/workshops being the most common extracurricular activity (Table 10). 80.6% of the students totally agree and/or agree that their Faculty should integrate more activities related to broader fields of MEP&M. 49.3% of the students would be interested to be enrolled in a Master degree program in the field of MEP&M in the English language if available.

Table 10: MEP&M education statistics

	Number of answers (N)	Percent (%)
Fields of Maritime Environmental Protection and Management education is relevant for your future career		
Strongly Agree	34	50.7
Agree	2	3.0
Undecided	4	6.0
Disagree	10	14.9
Strongly Disagree	15	22.4
Extracurricular activities focusing on MEP&M		
Seminars/workshops	33	49.3
Business plan/venture capital competitions	3	4.5
Company visits	9	13.3
Matchmaking events between students and stakeholders	7	10.5
Summer schools	5	7.5
No experience/other	10	14.9
Faculty should integrate more activities related to broader fields of MEP&M		
Strongly Agree	28	41.8
Agree	26	38.8
Undecided	12	17.9
Disagree	0	0
Strongly Disagree	1	1.5
Attending a Master degree program in field of MEP&M		
Definitely	16	23.9
Probably	17	25.4
Possibly	22	32.8
Probably Not	12	17.9

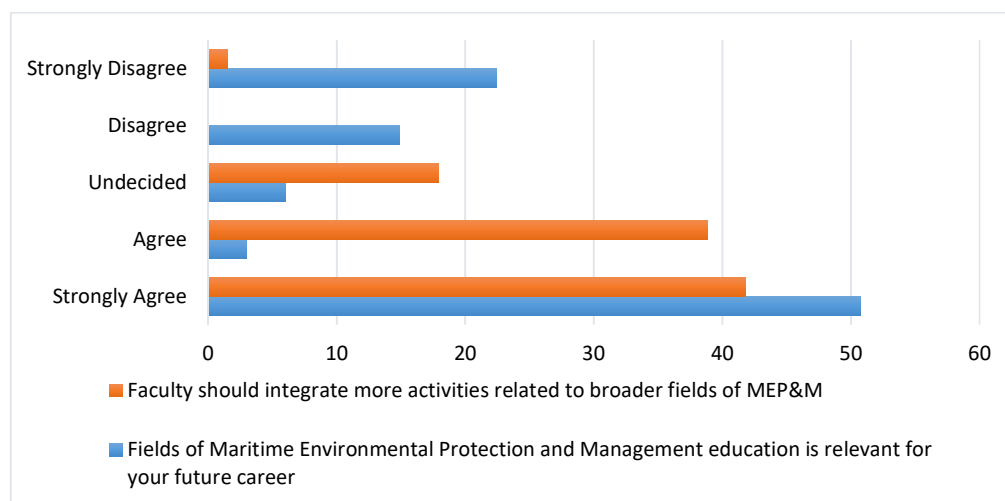


Definitely Not	6	9.0
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Lecturing was mentioned as one of the most often teaching method that students have (86.5%) while case studies were conducted sometimes (32.8%). Company visits wasn't something that happened often as well as the mix in the classroom with students from different faculties/disciplines. Exploring complex real-world problems was something that happened often (17.9%) and sometimes (23.9%) (Graphs 18, 19, 20, Table 11).

Table 11: Frequency use of teaching methods

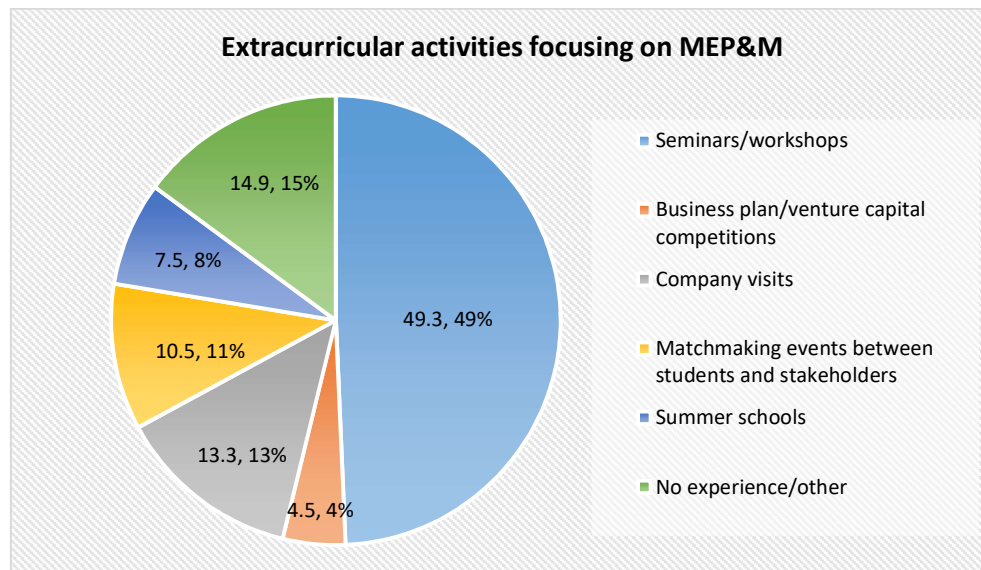
Teaching method	Often	Sometimes	Rarely	Never	I don't know
	N (%)	N (%)	N (%)	N (%)	N (%)
Lecturing	58 (86.5)	6 (9)	1 (1.5)	1 (1.5)	1 (1.5)
Case studies	6 (9)	22 (32.8)	17 (25.4)	6 (9)	16 (23.9)
Project teams	11 (16.4)	19 (28.4)	19 (28.4)	8 (11.9)	10 (14.9)
Company visits	4 (6)	6 (8.9)	22 (32.8)	20 (29.9)	15 (22.4)
Students from different faculties/disciplines to mix in the classroom	10 (14.9)	11 (16.4)	20 (29.9)	14 (20.9)	12 (17.9)
Exploring complex real-world problems	12 (17.9)	16 (23.9)	15 (22.4)	11 (16.4)	13 (19.4)



Graph 18: Maritime Environmental Protection and Management education in classes

Both 38.8% and 38.8% of the participants rated as very important and/or important the MEP&M trends, while 44.8% and 13.4% rated the culture at their faculty and environmentalist behavior among student population, respectively. Regarding the level of the English language knowledge, students rate it as C1 (34.3%), B2 (31.4%) and as B1 (14.9%). 53.7% of the

participants have plans to be employed after graduation in one of the mentioned areas of MEP&M (Graphs 21, 22, Table 12).

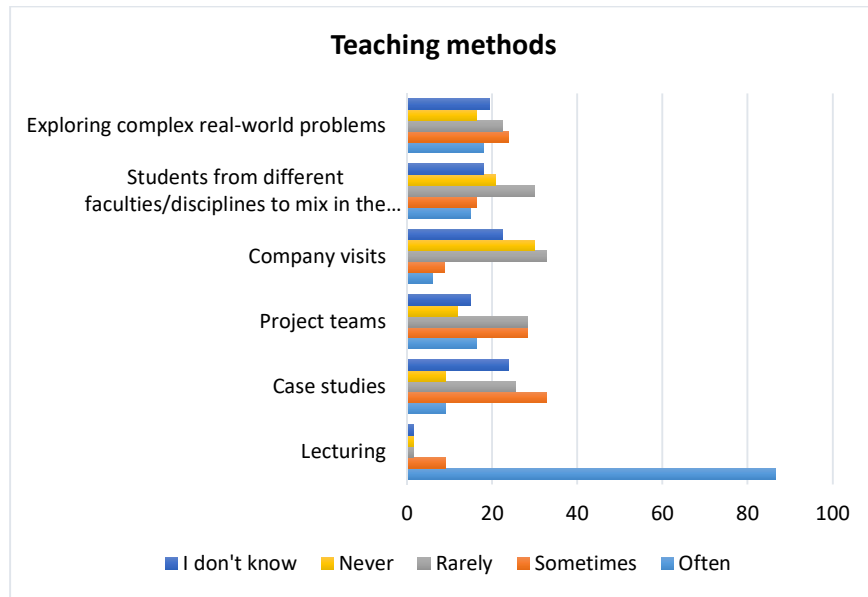


Graph 19: Extracurricular activities focusing on MEP&M

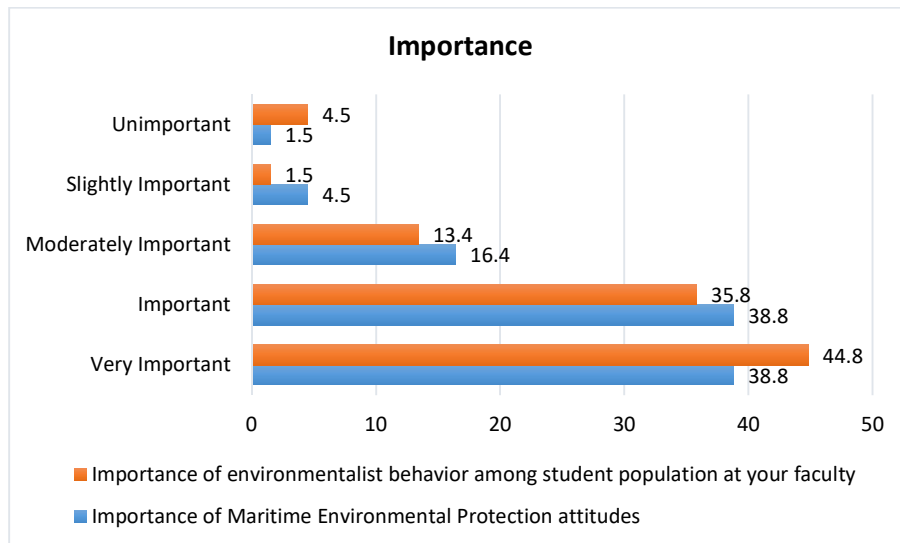
Table 12: Future experience with MEP&M

	Number of answers (N)	Percent (%)
Importance of Maritime Environmental Protection attitudes		
Very Important	26	38.8
Important	26	38.8
Moderately Important	11	16.4
Slightly Important	3	4.5
Unimportant	1	1.5
Importance of environmentalist behavior among student population at your faculty		
Very Important	30	44.8
Important	24	35.8
Moderately Important	9	13.4
Slightly Important	1	1.5
Unimportant	3	4.5
English language level		
A1	1	1.5
A2	1	1.5
B1	10	14.9
B2	21	31.4
C1	23	34.3
C2	11	16.4
Plans to be employed after graduation in one of the mentioned areas of MEP&M		

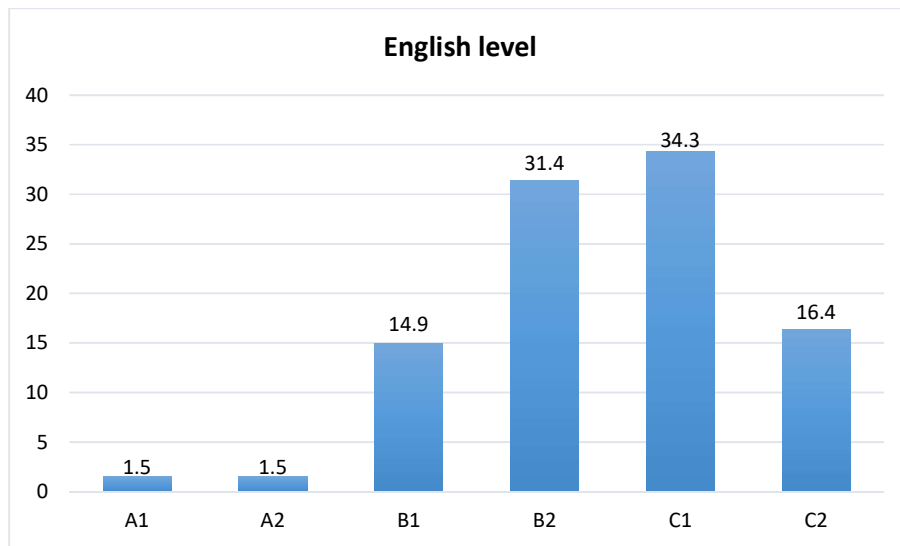
Definitely	3	4.5
Most probably	7	10.4
Possible	26	38.8
Most probably no	22	32.8
Definitely no	9	13.4



Graph 20: Teaching methods

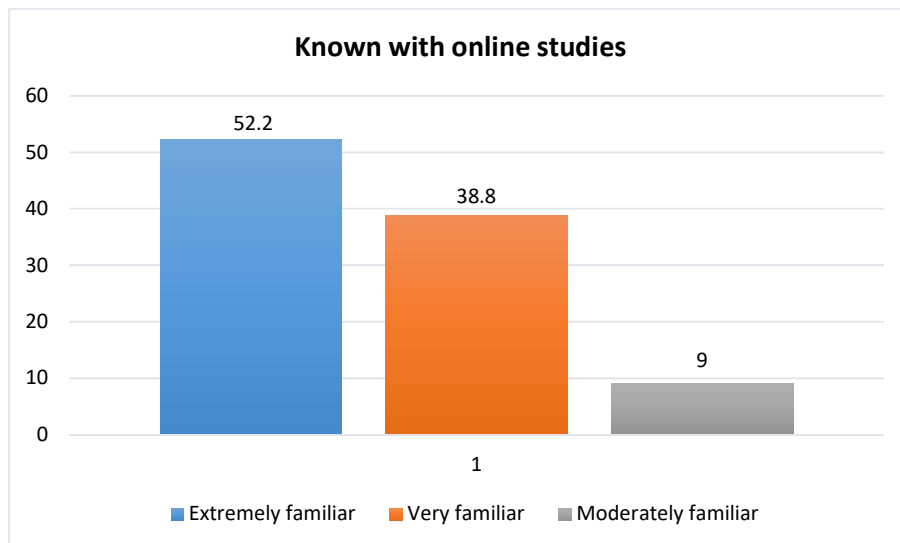


Graph 21: Importance between student populations



Graph 22: English level knowledge of students

Among the participants, 52.2% reported of being very much known with online studies while 38.8% and 9% reported mostly and medium known with this process. 34.3% assumed that the online classes were excellent, 26.9% rated them as good and 15% of students as bad and/or very bad (Graph 23, Table 13).



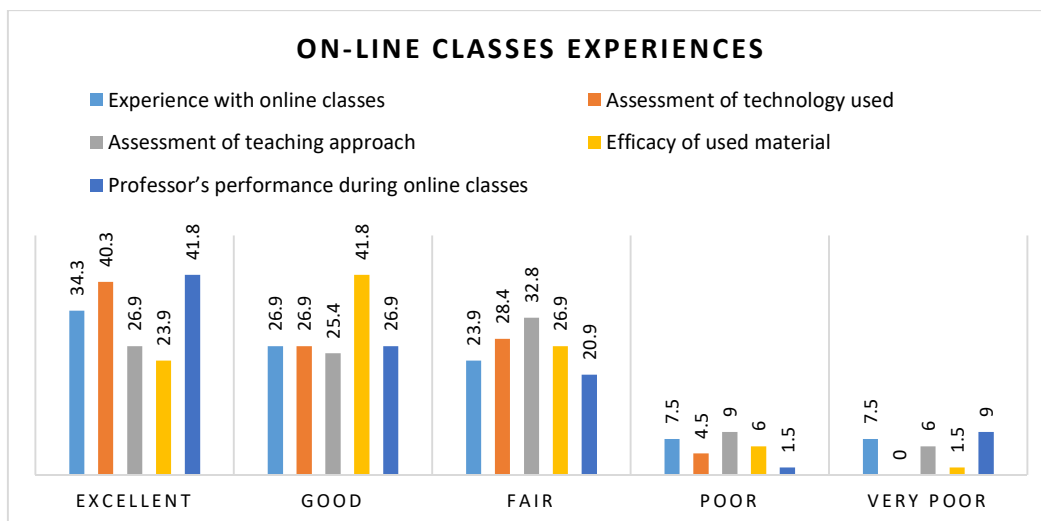
Graph 23: Known with online classes

Referring the assessment of the technology used, it was rated as excellent by 40.3%, as good by 26.9% and as fair by 28.6% respondents. Students assessed the teaching approach as excellent (26.9% of students answered that), as good approached reached 25.4% of students answers, as fair reached 32.8% and as bad and/or very bad assumed 15.0% of students. The efficiency of the material used during the online classes was assessed as excellent (answered

by 23.9% of respondents), as very good declared by 41.8% of students, as good noticed by 26.9% students and as bad/very bad listed by 7.5% of participants. Finally, the professor's performance during the online classes was evaluated as excellent (41.8%), very good (26.9%), good (20.9%) and as bad/very bad by 10.5% of the students (Graph 24, Table 13).

Table 13: Online classes experiences

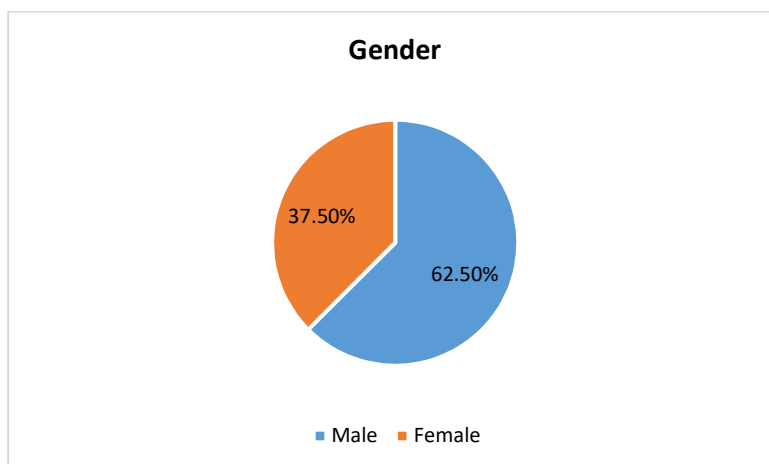
	Number of answers (N)	Percent (%)
Known with online studies		
Extremely familiar	35	52.2
Very familiar	26	38.8
Moderately familiar	6	9.0
Experience with online classes		
Excellent	23	34.3
Good	18	26.9
Fair	16	23.9
Poor	5	7.5
Very Poor	5	7.5
Assessment of technology used		
Excellent	27	40.3
Good	18	26.9
Fair	19	28.4
Poor	3	4.5
Very Poor	0	0
Assessment of teaching approach		
Excellent	18	26.9
Good	17	25.4
Fair	22	32.8
Poor	6	9.0
Very Poor	4	6.0
Efficacy of used material		
Excellent	16	23.9
Good	28	41.8
Fair	18	26.9
Poor	4	6.0
Very Poor	1	1.5
Professor's performance during online classes		
Excellent	28	41.8
Good	18	26.9
Fair	14	20.9
Poor	1	1.5
Very Poor	6	9.0



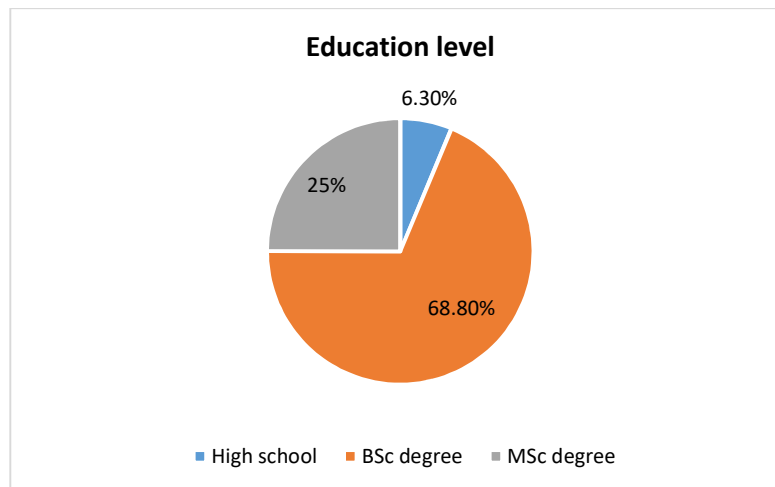
Graph 24: On-line classes experiences

2.3 Analysis of questionnaire for stakeholders

In total, 16 stakeholders responded the questionnaire at the Montenegrin level. 62.5% are of male gender and 37.5% of female. The most of them (43.8%) belong to age category of 31-40 years, and 25% of them have a Master degree (Graphs 25, 26). Engineering and Environmental Sciences and Education and Human Society were the field of the expertise of most of the participants (by 18.8% per each field). Other fields were Biological and Biotechnological Sciences (12.5%), Humanities and Creative Arts (6.3%) and Mathematical, Information and Computing Sciences (6.3%). 37.5% of the participants work less than ten years in the company while another 37.5% of them work more than ten but less than 20 years (Table 14). Most of the participants (50%) work in public institutions or companies while 25% of them work in private SME (Graphs 27, 28).



Graph 25: Gender distribution of stakeholders surveyed



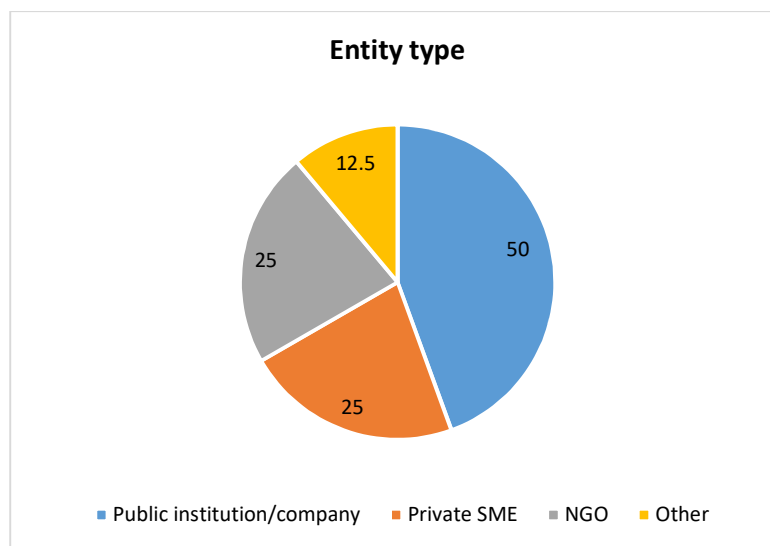
Graph 26: Education level of stakeholders

Table 14: Basic information of stakeholders

	Number of answers (N)	Percent (%)
Gender		
Male	10	62.5
Female	6	37.5
Age		
20-30	4	25.0
31-40	7	43.8
41-50	3	18.8
51-60	1	6.3
>60	1	6.3
Education level		
High school	1	6.3
BSc degree	11	68.8
MSc degree	4	25.0
Education field		
Humanities and Creative Arts	1	6.3
Engineering and Environmental Sciences	3	18.8
Education and Human Society	3	18.8
Mathematical, Information and Computing Sciences	1	6.3
Biological and Biotechnological Sciences	2	12.5
Interdisciplinary sciences	1	6.3
Other	5	31.3
Working in the organization/company		
2-10	6	37.5

11-20	6	37.5
21-30	2	12.5
Over 30	2	12.5
Entity type		
Public institution/company	8	50.0
Private SME	4	25.0
NGO	4	25.0
Other	2	12.5

Relating the classification of their organization/company activities 25% of them categorize in “Transportation and Storage”, 12.5% of interviewed stakeholders categorize in “Agriculture, forestry and fishing”, 6.3% of them in “Water supply, sewerage, waste management and remediation activities” and 6.3% of stakeholders declared to the “Accommodation and food service activities” and “Information and communication”, respectively. Regarding the size of the companies, almost half of them (43.8%) have between 50-249 employees, and 25% less than ten and from 11-49 employees, respectively (Graph 28, Table 15).

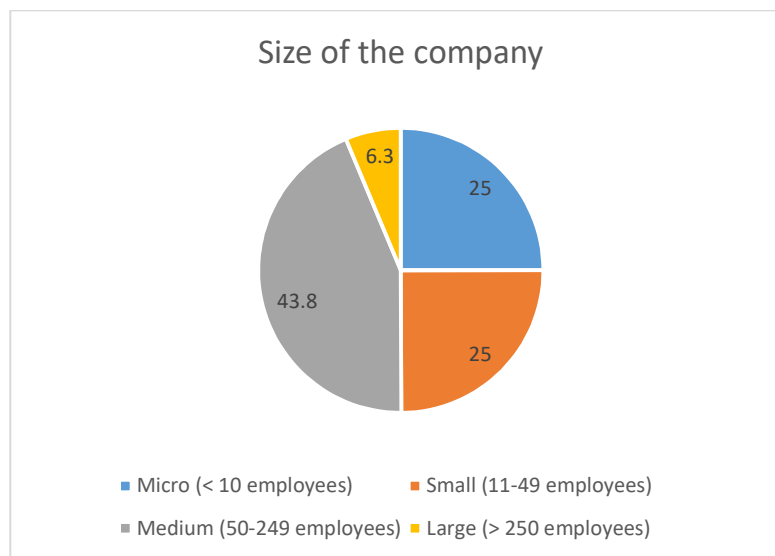


Graph 27: Entity type of stakeholders

Table 15: Type of organization activity

	Number of answers (N)	Percent (%)
Type of organization		
Section A Agriculture, forestry and fishing	2	12.5

Section E Water supply, sewerage, waste management and remediation activities Section	1	6.3
Section H Transportation and storage	4	25.0
Section I Accommodation and food service activities	1	6.3
Section J Information and communication	1	6.3
Section O Public administration and defense; compulsory social security	1	6.3
Section S Other service activities	6	37.5
Size of the company		
Micro (< 10 employees)	4	25.0
Small (11-49 employees)	4	25.0
Medium (50-249 employees)	7	43.8
Large (> 250 employees)	1	6.3

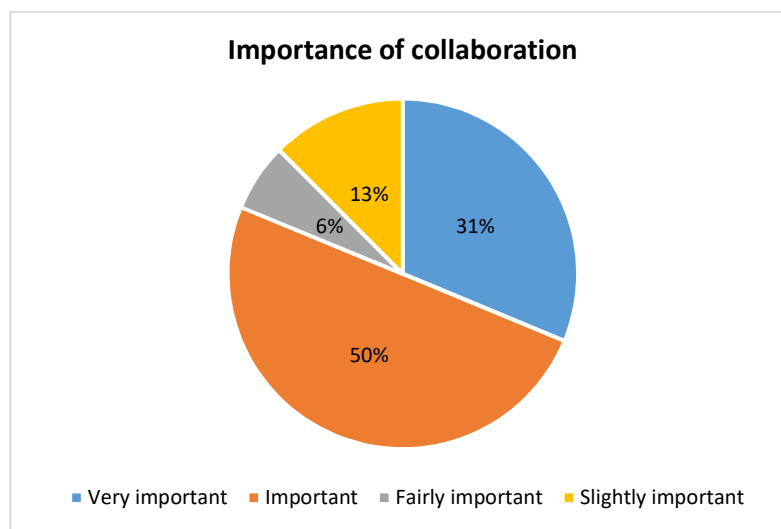


Graph 28: Size of the company of the surveyed stakeholders

81.3% of the participants responded that their companies have cooperated with the University of Montenegro in the past. Among those reporting not having a collaboration till now, all of them is willing to start cooperation with the University while among those saying yes, 62.5% of them have an agreement with the University. 62.5% of respondents rate the quality of the cooperation with the University of Montenegro as very good or good while 37.5% of them ranked as poor (Graph 29, Table 16).

50% of stakeholders rate as important the current or future cooperation with the University of Montenegro for their business, while for 31.3% and 6.3% of them reported as very important and fairly important, respectively. 25% of respondents indicate that the way of cooperation with the University is through education activities, and 6.3% of them through innovation, but another 6.3% of stakeholders report the collaboration through research (Graph 30).

31.3% of the participants report that the collaboration includes all the above mentioned fields while another 31.3% of them report other activities. 93.8% of the stakeholders that participated in the survey declared as very important that students should have experience within the broader fields of MEP&M topics, while 6.3% of them rate as important (Table 16).

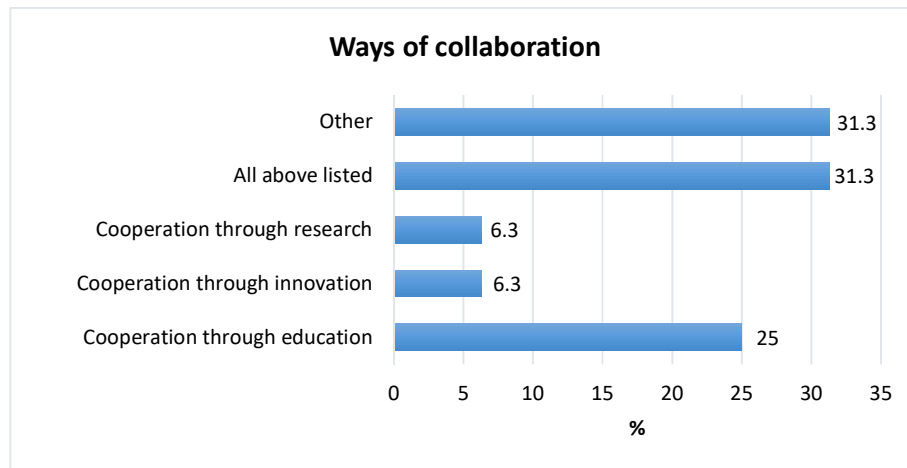


Graph 29: Importance of collaboration

Table 16: University - businesses collaboration

	Number of answers (N)	Percent (%)
Cooperation with the University		
Yes	13	81.3
No	3	18.8
Importance of collaborating with the University		
Very important	5	31.3
Important	8	50.0
Fairly important	1	6.3
Slightly important	2	12.5
Way of cooperation		
Cooperation through education	4	25.0
Cooperation through innovation	1	6.3
Cooperation through research	1	6.3
All above listed	5	31.3

Other	5	31.3
Importance MEP&M		
Very important	15	93.8
Important	1	6.3



Graph 30: Ways of collaboration

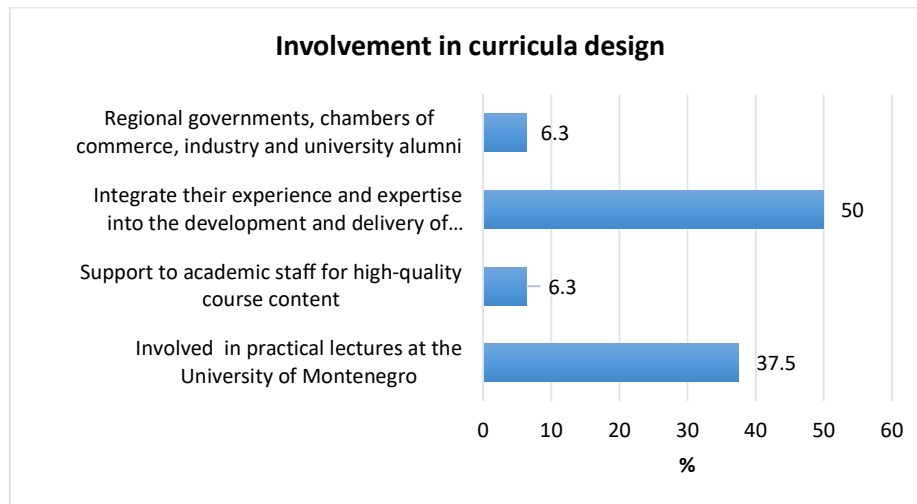
93.8% of stakeholders strongly agree or agree that environmentalists are good role models for young people and 93.8% of the participants strongly agree or agree that to act and think environmentally is an important feature of modern life. All participants strongly agree or agree that students should learn to think and act environmentally during their time at university.

68.8% strongly agree that education in broader fields of MEP&M should be an integral part of the curriculum at all levels of education while 31.3% of them agree with this statement. However, 75% of the participants strongly agree that academic staff should be able to motivate students to think and act environmentally while 25% agree with this statement (Table 17). 37.5% of the stakeholders' report that are regularly involved in practical lectures at the University of Montenegro, 50% report that their experience and expertise is integrated into the development and delivery of university courses (Graph 31).

Table 17: Beliefs about environmental issues

	Strongly Agree	Agree	Neutral
	N (%)	N (%)	N (%)
Environmentalists are good role models for young people (students)?	12 (75)	3 (18.8)	1 (6.3)
To act and think environmentally is an important feature of modern life	12 (75)	3 (18.8)	1 (6.3)

Students should learn to think and act environmentally during their time at university	12 (75)	4 (25)	-
MEP&M part of the curriculum	11 (68.8)	5 (31.3)	-
Academic staff to motivate students	12 (75)	4 (25)	-



Graph 31: Involvement in curricula design

93.8% of the stakeholders strongly agree or agree that the University of Montenegro should be committed more to collaboration and knowledge exchange with all actors in the economic market, and 93.8% of them strongly agree or agree that the University should involve more industry/business sector (wider community) activities to exploit new knowledge. 37.5% of the stakeholders strongly agree that their organization/company should demonstrate active involvement in partnerships and relationships with the University of Montenegro while 62.5% of them only agree with this statement. However, 43.8% of stakeholders strongly agree that their organization/company demonstrates active involvement in partnerships and relationships with a wide range of stakeholders while 56.3% of them only agree with this statement. In addition, 68.8% of respondents strongly agree or agree that their organization/company provides opportunities for students to take part in different activities with business/the external environment while 6.3% disagrees (Table 18).

93.8% of the participants report that often or sometimes their organization/company address some of the activities in the fields of MEP&M. The specific areas of these activities are presented in Table 19 and Graph 32.

Table 18: Industry/business role and attitude toward collaboration

	Number of answers (N)	Percent (%)
Collaboration and knowledge exchange with all actors		

Strongly Agree	12	75.0
Agree	3	18.8
Neutral	1	6.3
Involve more industry/business		
Strongly Agree	10	62.5
Agree	5	31.3
Neutral	1	6.3
Demonstrate active involvement in partnerships		
Strongly Agree	6	37.5
Agree	10	62.5
Relationships with a wide range of stakeholders		
Strongly Agree	7	43.8
Agree	9	56.3
Provides opportunities for students		
Strongly Agree	4	25.0
Agree	7	43.8
Neutral	4	25.0
Disagree	1	6.3
Opportunities for students to take part in different activities with business/the external environment		
Strongly Agree	4	25.0
Agree	7	43.8
Neutral	4	25.0
Disagree	1	6.3

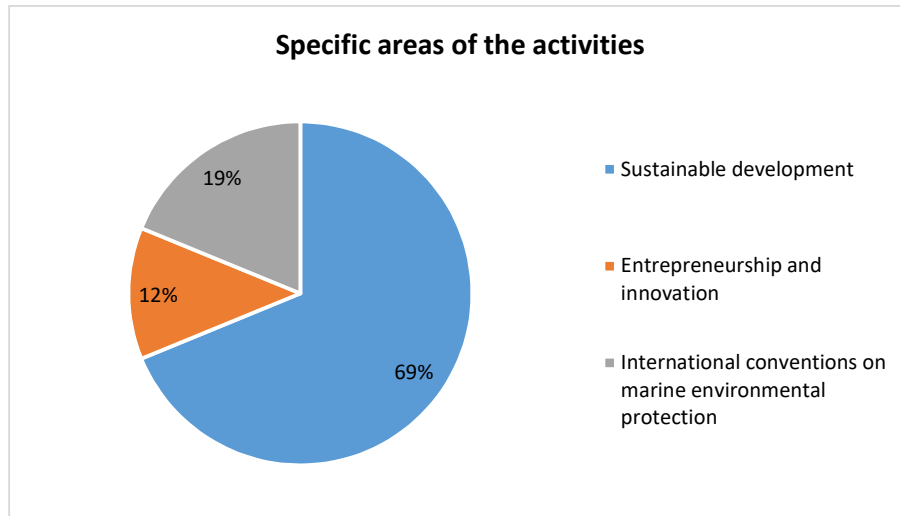
Table 19: Specific areas of the activities

	Number of answers (N)	Percent (%)
Specific areas of the activities		
Sustainable development	11	68.8
Entrepreneurship and innovation	2	12.4
International conventions on marine environmental protection	3	18.8

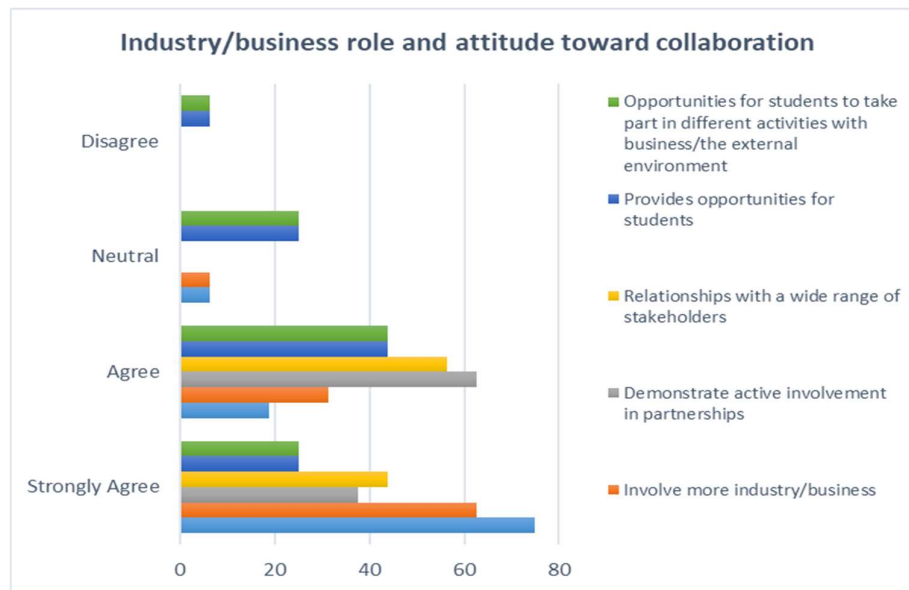
Sustainable development, International conventions on marine environmental protection and Entrepreneurship and innovation were the key fields reported by 68.8%, 18.8% and 12.4% of respondents, respectively.

68.8% of the participants report that definitely or probably their organization/company plan to include more activities in its business in the field of MEP&M. 87.5% of the participants report that definitely or probably if a 2-year Master degree program in interdisciplinary field of MEP&M in the English and adapted for professionals in companies, would have interest in suggesting to their colleagues to enroll in order to get deeper knowledge in this field. Additionally, 56.3% report that if was a 2-year Master degree program in interdisciplinary field

of the same program, definitely or probably their company would have interest in providing internship for students (Graphs 33, 34, Table 20).



Graph 32: Specific areas of the activities favorable by stakeholders



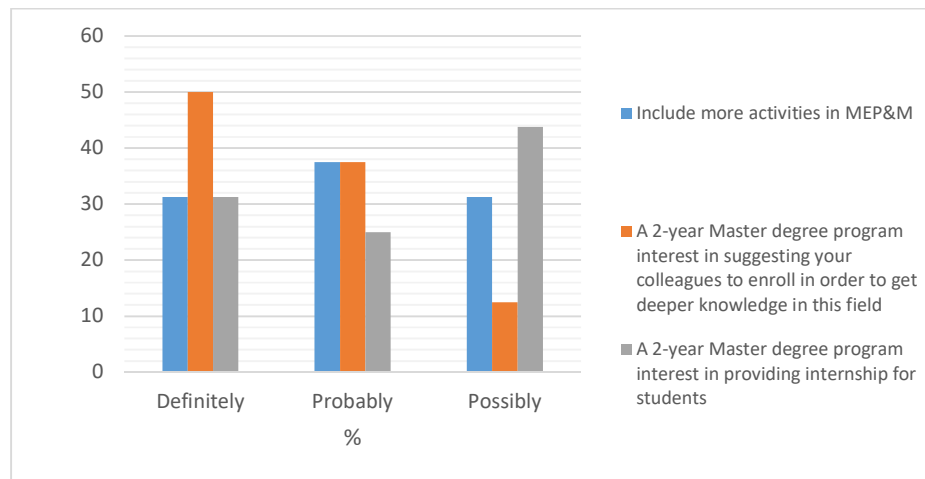
Graph 33: Industry/business role and attitude toward collaboration

Table 20: Possible future activities of companies if a Master program in MEP&M exists

	Number of answers (N)	Percent (%)
Include more activities in MEP&M		
Definitely	5	31.3
Probably	6	37.5



Possibly	5	31.3
A 2-year Master degree program interest in suggesting your colleagues to enroll in order to get deeper knowledge in this field		
Definitely	8	50.0
Probably	6	37.5
Possibly	2	12.5
A 2-year Master degree program interest in providing internship for students		
Definitely	5	31.3
Probably	4	25.0
Possibly	7	43.8



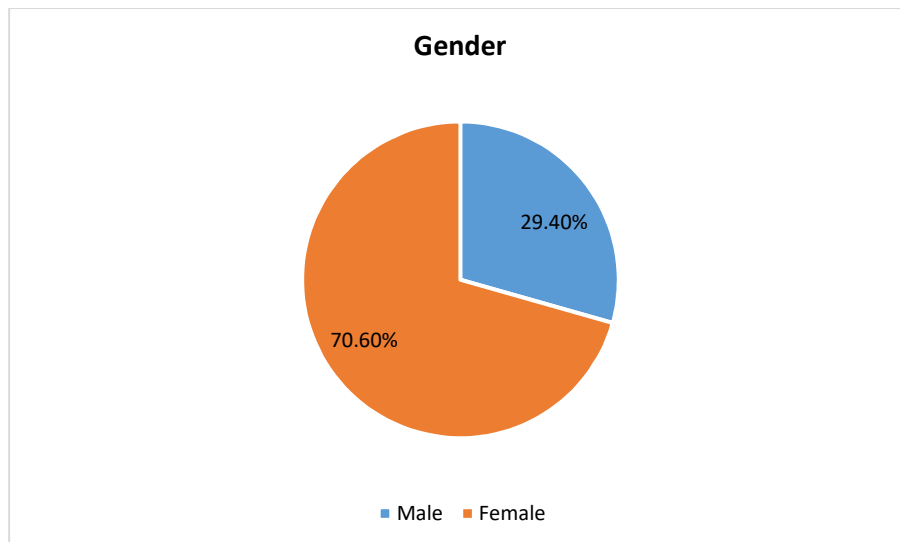
Graph 34: Possible future activities of companies if a Master program in MEP&M exists

3. Questionnaires for University of Vlora and its analysis

Author(s) of the Chapter #3: Kristofor Lapa, Enkeleint Aggelos Mechili

3.1 Analysis of questionnaire for academic staff

From University of Vlora 51 professors in total completed the questionnaire. The 29.4% are of male gender (n=15) and 70.6% of female. Most of them belong to age category 31-40 (39.2%) and to 41-50 (37.3%). Additionally, 15.7% belong to age category over 51 years old. All of them are from Faculty of Technical and Natural Sciences and 47.1% belong to category of Associate Professor. The 41.2% are Doctor of Sciences and the rest full professors. THE 47.1% HAVE LESS THAN ten years of work experience 54.9% have classes at Bachelor level, 43.1 at master level and only one professor has PhD students. Only 7.8% (n=4) have delivered a course in the broader fields of Maritime Environmental Protection and Management (MEP&M) in the last 5 years. However, only 6 participants (11.8%) report that have delivered a seminar/training/workshop to non-student population in broader fields of Maritime Environmental Protection and Management in the last 5 years (**Table 1**). These seminars/workshops were frequented by more than 20 persons.



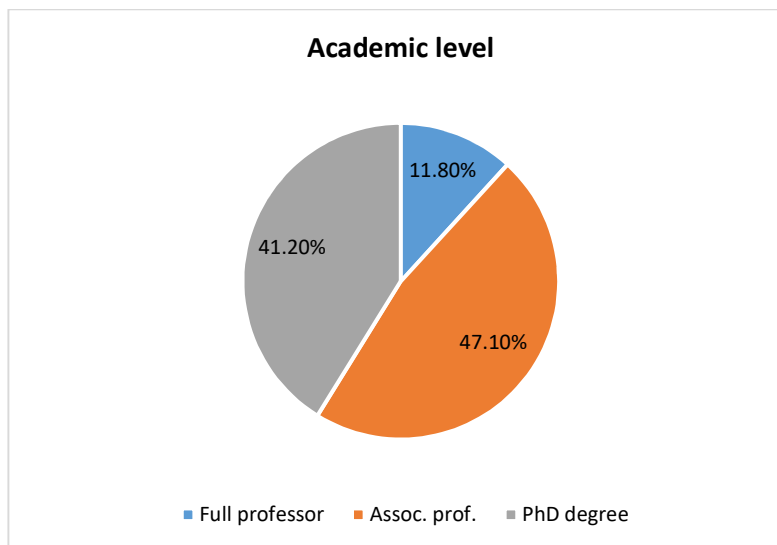
Graph 1: Gender

Table 1: Demographic characteristics

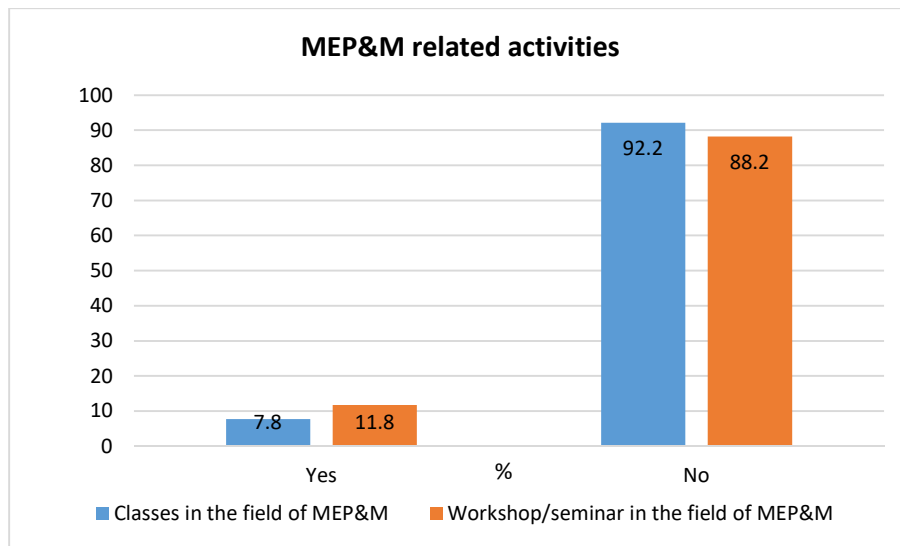
	Frequency (N)	Percent (%)
Gender		
Male	15	29.4
Female	36	70.6
Age		



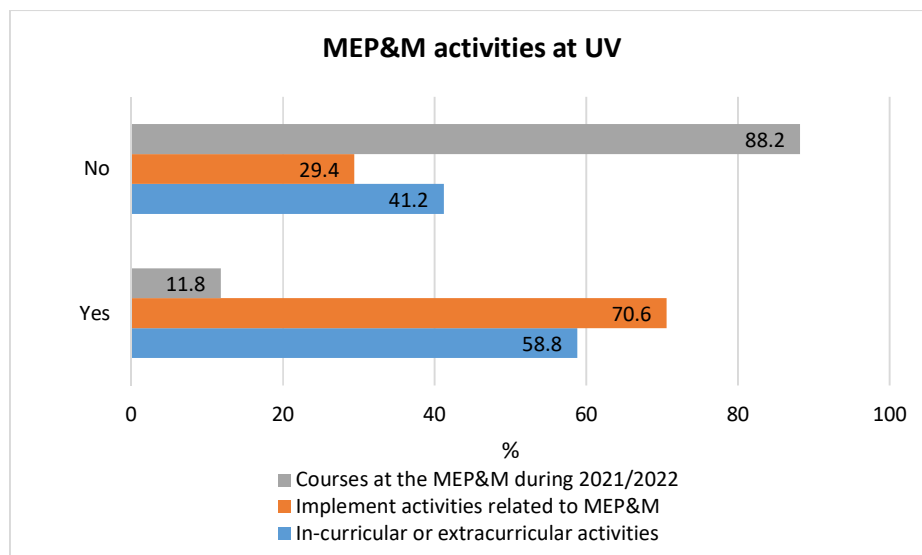
22-30	4	7.8
31-40	20	39.2
41-50	19	37.3
51-60	8	15.7
Academic level		
Full professor	6	11.8
Assoc. prof.	24	47.1
PhD degree	21	41.2
Years of work experience		
0-10	24	47.1
11-20	10	19.6
N/A	17	33.3
Study programs that have classes		
BSc	28	54.9
MSc	22	43.1
PhD	1	2.0
Classes in the field of MEP&M		
Yes	4	7.8
No	47	92.2
Workshop/seminar in the field of MEP&M		
Yes	6	11.8
No	45	88.2



Graph 2: Academic level



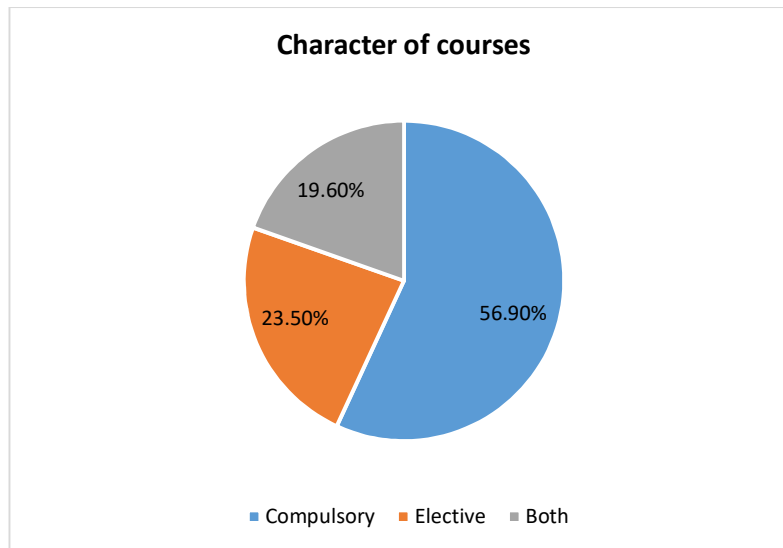
Graph 3: MEP&M related activities



Graph 4: MEP&M activities at UV

The 58.8% report that the University of Vlora offer in-curricular or extracurricular activities focusing on the behavior, skills, knowledge and creativity development in the broader fields of Maritime Environmental Protection and Management. As about the number of academic/research staff involved in the institution’s activities development in the broader fields of Maritime Environmental Protection and Management most of the participants report that are more than 2 (33.3%), 2 are reported by 2% and 1 is reported by 13.7%. 70.6% report that their faculty/institution implement activities related the broader fields of Maritime

Environmental Protection and Management (e.g. projects, research, workshops, seminars, trainings, summer school etc.). among the participants, 45.1% mentioned that these activities have been previously concluded, 21.6% say that are currently active and 21.6 that are planned for the future. 11.8% hold courses/part of the course related to the broader fields of Maritime Environmental Protection and management in academic 2021/2022. Most of the participants that report having classes in the broader fields of MEP&M had 1 module/class (74.5%). The majority of them (68.6%) have these classes/modules at bachelor level and 9.8% at master level. As about the number of ECTS-s, 60.8% report that range from 1-5 ECTS-s while 5.9% report 6-8 ECTS-s. However, the classes/courses related to the broader fields of Maritime Environmental Protection and Management are compulsory said the 56.9%, are elective said 23.5% and both were reported by 19.6% (**Table 2**).

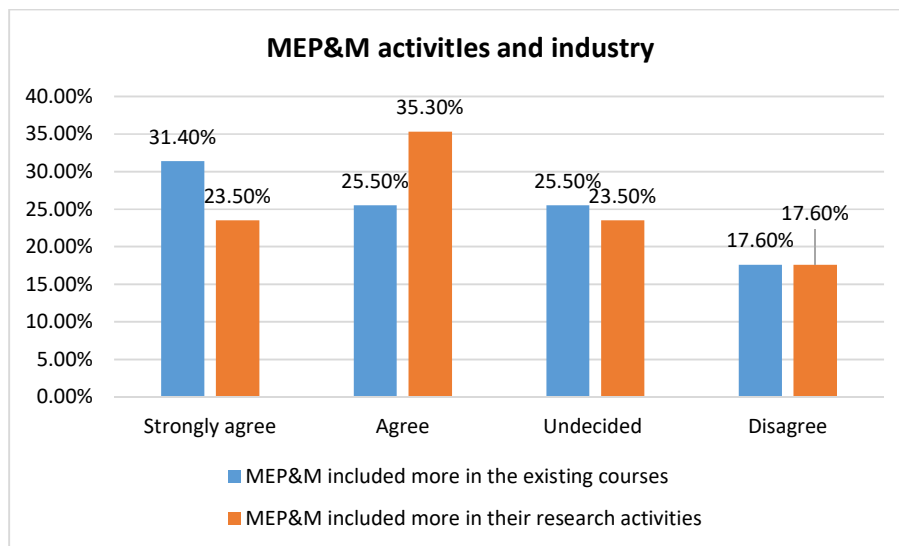


Graph 5: Character of courses

Table 2: MEP&M activities at University of Vlora

	Frequency (N)	Percent (%)
In-curricular or extracurricular activities		
Yes	30	58.8
No	21	41.2
Implement activities related to MEP&M		
Yes	36	70.6
No	15	29.4
Planification of these activities		
Previously concluded	23	45.1
They are currently active	11	21.6
Activities are planned for the upcoming period	11	21.6

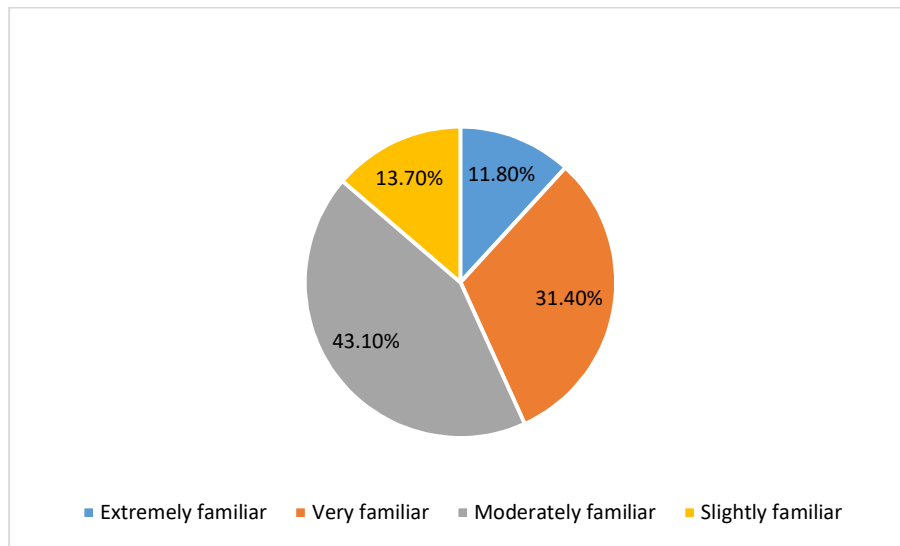
N/A	6	11.8
Courses at the MEP&M during 2021/2022		
Yes	6	11.8
No	45	88.2
Level of courses		
BSc	35	68.6
MSc	5	9.8
Character of courses		
Compulsory	29	56.9
Elective	12	23.5
Both	10	19.6



Graph 6: MEP&M activities and industry

The 56.9% totally agree or agree that the specific fields of Maritime Environmental Protection and Management should be included more in the University existing courses while 17.6% disagree and 25.5% are undecided. The 58.8% totally agree or agree that the specific fields of Maritime Environmental Protection and Management should be included more in their research activities while 17.6% disagree with this and 23.5% are neutral. The 23.5% report that have included the industry or business sector staff in the practical part of their course lectures while 76.5% doesn't have done this. The number of the staff coming from the industry or business sector range from 1-5 persons and was reported by 56.9%. 31.4% report that are extremely or very familiar with the policies/strategy/action plans regarding maritime environmental protection in Albania while 13.7% report non-familiar. All participants definitely or probably are interested in giving lectures if there is a Master degree program in field of Maritime environmental protection and management on English (**Table 3**). As about

their English level, 39.2% report a B2 level and 37.3% report a C1 level. In table 4 are presented the topics that professors of Vlora University are interested in giving lectures. International conventions on marine environmental protection was the most reported area (13.9%), followed by Marine pollution and Sustainable development (9.8% each) and Marine Ecology (7.8%).



Graph 7: Familiar with policies/strategy/action plans regarding MEP&M in Albania

Table 3: MEP&M activities and industry/business sector

	Frequency (N)	Percent (%)
MEP&M included more in the existing courses		
Strongly agree	16	31.4
Agree	13	25.5
Undecided	13	25.5
Disagree	9	17.6
MEP&M included more in their research activities		
Strongly agree	12	23.5
Agree	18	35.3
Undecided	12	23.5
Disagree	9	17.6
Industry or business sector staff in courses		
Yes	12	23.5
No	39	76.5
Familiar with policies/strategy/action plans regarding MEP&M in Albania		
Extremely familiar	6	11.8
Very familiar	16	31.4
Moderately familiar	22	43.1
Slightly familiar	7	13.7
Giving lecturers in a Master program in MEP&M		

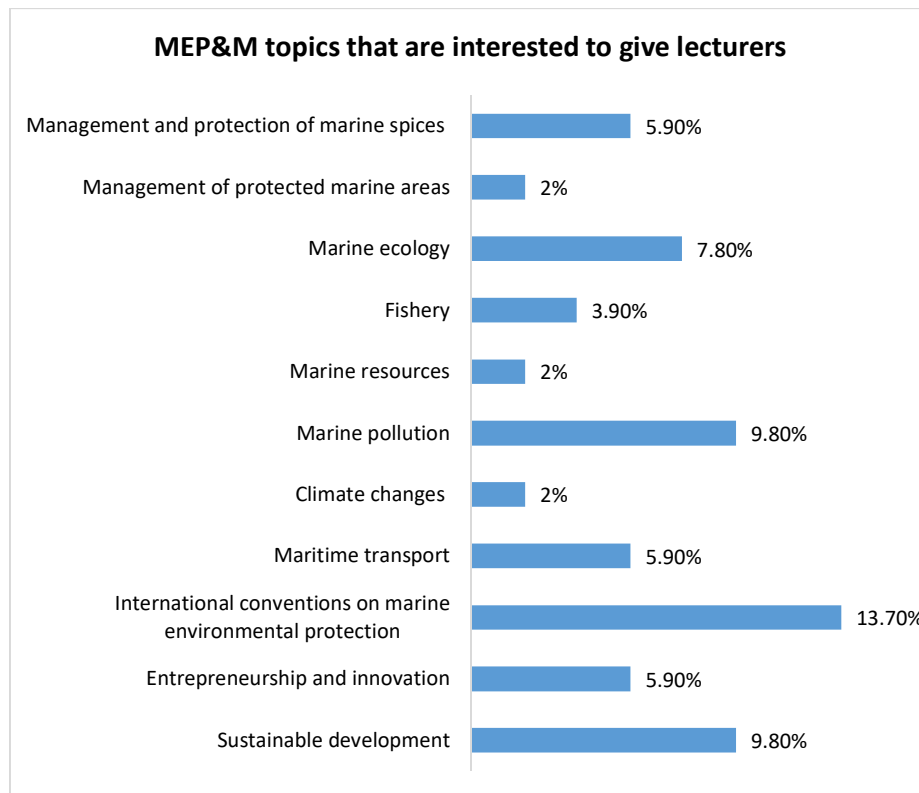


Definitely	13	25.5
Probably	38	74.5
Possibly	0	0
Probably Not	0	0
English language level		
A1	2	3.9
A2	1	2.0
B1	6	11.8
B2	20	39.2
C1	19	37.3
C2	3	5.9

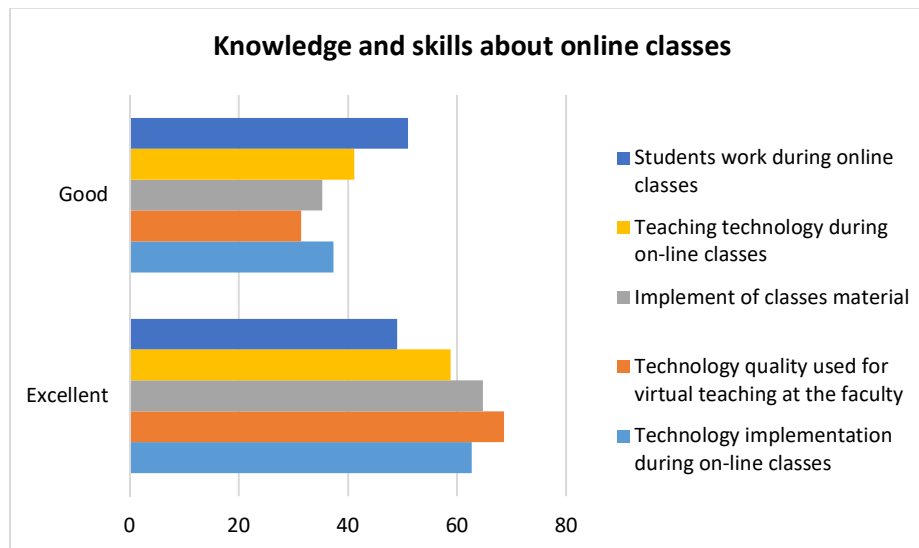
Table 4: MEP&M topics that are interested to give lecturers

	Frequency (N)	Percent (%)
MEP&M topics that are interested to give lecturers		
Sustainable development	5	9.8
Entrepreneurship and innovation	3	5.9
International conventions on marine environmental protection	7	13.7
Maritime transport	3	5.9
Climate changes	1	2.0
Marine pollution	5	9.8
Marine resources	1	2.0
Fishery	2	3.9
Marine ecology	4	7.8
Management of protected marine areas	1	2.0
Management and protection of marine species	3	5.9

The 98.0% of the participants report that are extremely or very familiar with on-line classes. All participants reported that could implement in an excellent or good way having classes on-line. As about the technology quality used for virtual teaching at their faculty all of them report that could implement in an excellent or good way. The 64.7% report that could implement in an excellent way the classes material during the on-line lecturers. The 58.8% of the participants report that can implement in an excellent way the teaching technology during the on-line classes. Students work during online classes at the faculty was evaluated as excellent by 49% of the participants and as good by 51% (**Table 5**).



Graph 8: MEP&M topics that are interested to give lecturers



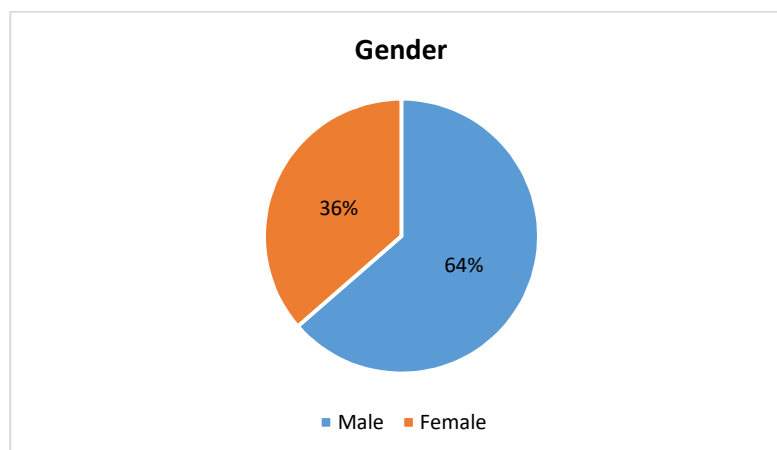
Graph 9: Knowledge and skills about online classes

Table 5: Knowledge and skills about online classes

	Frequency (N)	Percent (%)
Technology implementation during on-line classes		
Excellent	32	62.7
Good	19	37.3
Fair	0	0
Technology quality used for virtual teaching at the faculty		
Excellent	35	68.6
Good	16	31.4
Fair	0	0
Implement of classes material		
Excellent	33	64.7
Good	18	35.3
Fair	0	0
Teaching technology during on-line classes		
Excellent	30	58.8
Good	21	41.2
Fair	0	0
Students work during online classes		
Excellent	25	49.0
Good	26	51.0
Fair	0	0

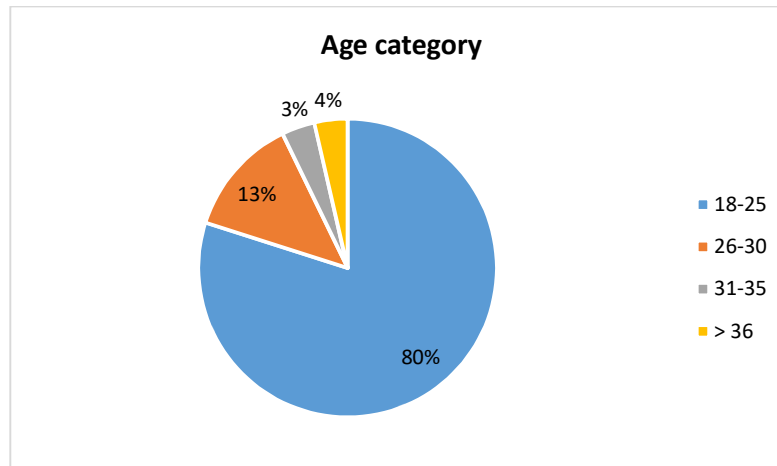
3.2 Analysis of questionnaire for students

From University of Vlora participated in total 140 students. Most of them are of male gender (63.6%) while the rest are of female (Graph 1). The 80% of participants belong to age group 18-25 years old (Graph 2) and 26.7% are at second year of their bachelor studies (**Table 1**).



Graph 1: Gender

Only 2.9% have conducted part of their studies abroad while the 58.6% have no work experience or practical work (**internship**) with most of them having less than 6 months experience. 39.3% of the students characterize their experience as not good while the 28.6% as very good (**Table 2**).



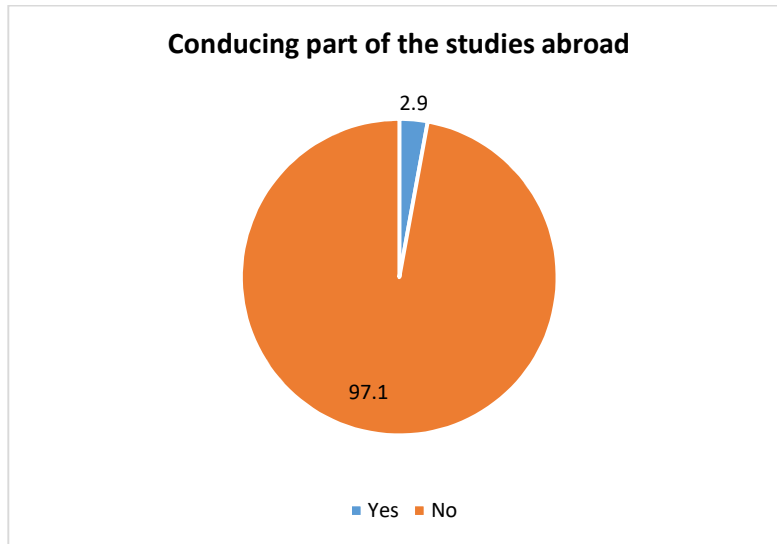
Graph 2: Age category

Table 1: Demographic characteristics of participants

	Frequency (N)	Percent (%)
Gender		
Male	89	63.6
Female	51	36.4
Age		
18-25	112	80.0
26-30	18	12.9
31-35	5	3.6
> 36	5	3.6
Year of studies		
BSc* (1 st year)	36	25.7
BSc (2 nd year)	37	26.4
BSc (3 rd year)	10	7.1
Graduated Bachelor	6	4.3
MP* (1 st year)	22	15.7
Graduated MP	2	1.4
MSc*** (1 st year)	8	5.7
MSc (2 nd year)	16	11.4
Graduated MSc	3	2.1
Academic Grades		
9.50-10.00	9	6.4
8.50-9.49	20	14.3

7.50-8.49	30	21.4
6.50-7.49	56	40.0
5.50-6.49	18	12.9
5.00-5.49	7	5.0

*BSc=Bachelor **MP=Professional Master ***MSc= Master of Science



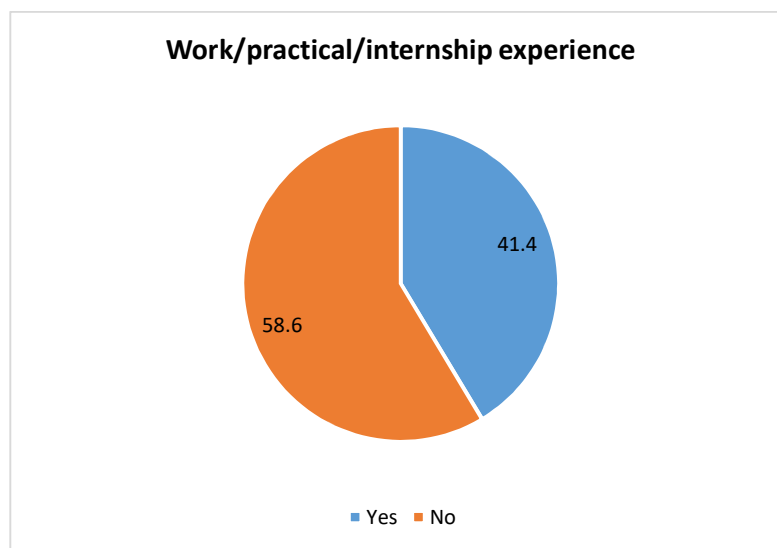
Graph 3: Conducting part of the studies abroad

Table 2: Work/practical experience

	Frequency (N)	Percent (%)
Conducting part of the studies abroad		
Yes	4	2.9
No	136	97.1
Work/practical/internship experience		
Yes	58	41.4
No	82	58.6
Period of experience		
0-6 months	42	30.9
More than 6 months	26	19.1
N/A	63	46.3
Satisfaction with this experience		
Very Good	40	28.6
Good	34	24.3
Moderate	7	5.0
Bad	55	39.3
Very bad	4	2.9
Filed of Maritime Environmental Protection and Management		
Sustainable development	9	6.4
Entrepreneurship and innovation	16	11.4
Environmental Law	5	3.6



Maritime transport	13	9.3
Management and conservation of marine species	13	9.3
Offshore energy and mineral resources	7	5.0
Natural resources valorization	1	.7
Integrated coastal zone management	5	3.6
Coastal planning and protection	5	3.6
Maritime safety and security	15	10.7
Other	51	36.4

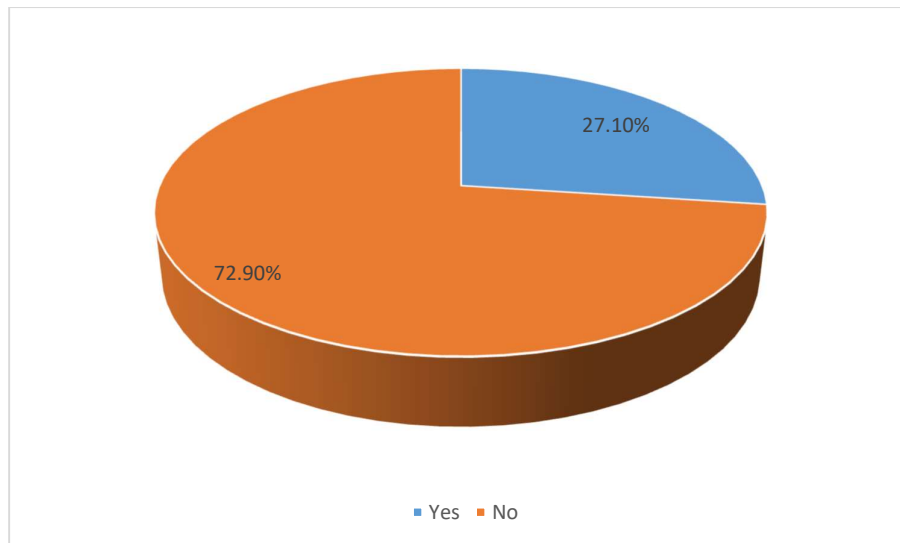


Graph 4: Work/practical/internship experience

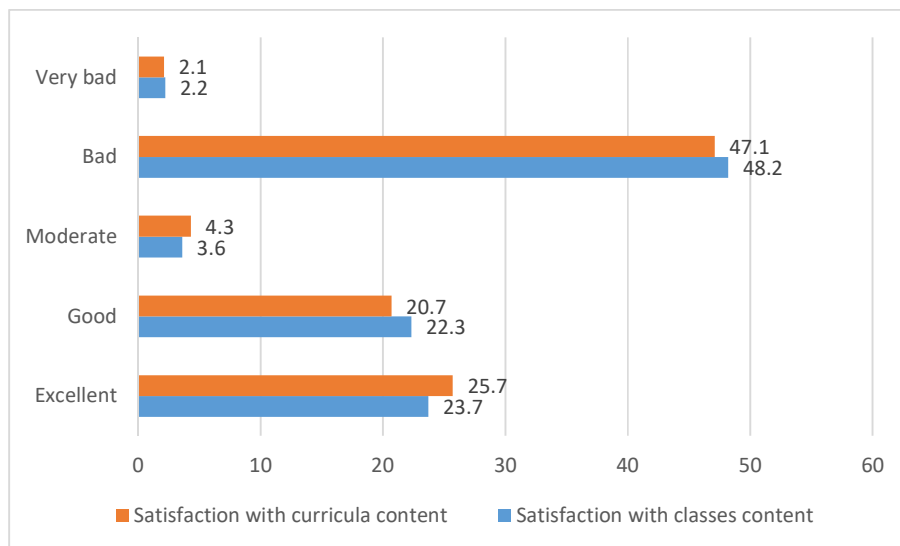


Graph 5: Satisfaction with internship experience

The 27.1% of the students had courses in broader fields of Maritime Environmental Protection and Management since their enrolment at the University of Vlora. Almost half of them report that are less satisfied with these classes content (48.2%) and 46% reported them excellent and/or very good (**Table 3**). The 28.6% reported that have had part of curricula dedicated to fields of Maritime Environmental Protection and Management with the majority of participants (49.25) reporting that are not satisfied with the content.



Graph 6: Classes in MEP&M after enrolment at University

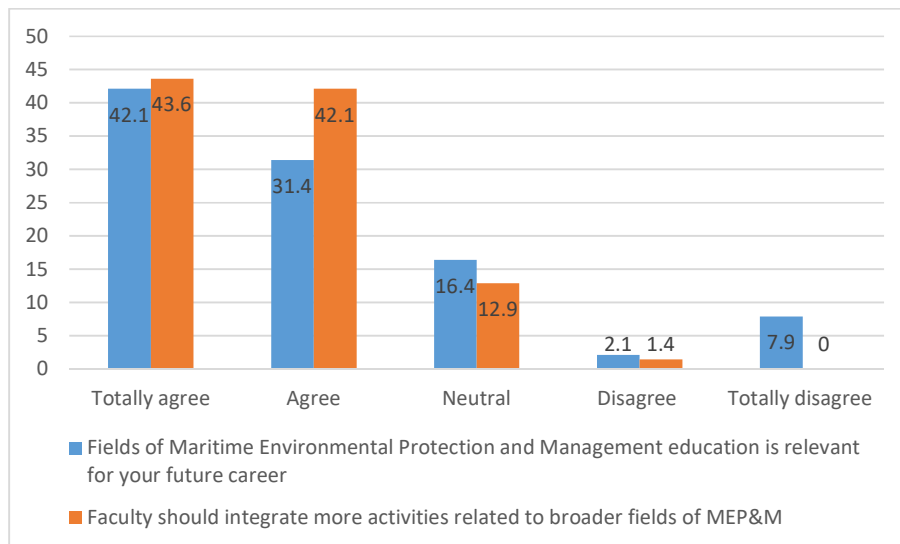


Graph 7: Satisfaction with classes and curricula content



	Frequency (N)	Percent (%)
Classes in MEP&M after enrolment at University		
Yes	38	27.1
No	102	72.9
Satisfaction with classes content		
Excellent	33	23.7
Good	31	22.3
Moderate	5	3.6
Bad	67	48.2
Very bad	3	2.2
Part of curricula in MEP&M		
Yes	40	28.6
No	100	71.4
Satisfaction with curricula content		
Excellent	36	25.7
Good	29	20.7
Moderate	6	4.3
Bad	66	47.1
Very bad	3	2.1

Table 3: Maritime Environmental Protection and Management



Graph 8: Education in the MEP&M field

The 73.6% of the participants totally agree and/or agree that the fields of Maritime Environmental Protection and Management education is relevant for their future career with

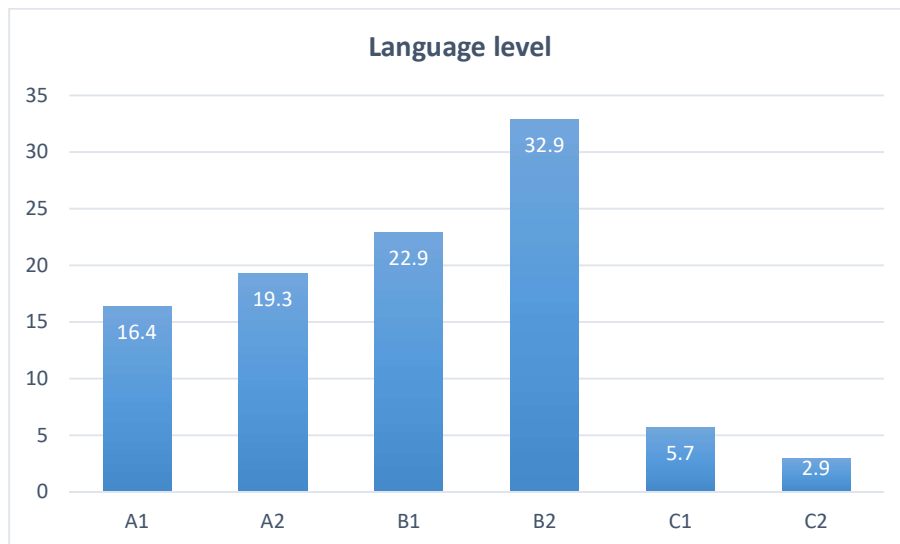
Business plan/venture capital competitions being the most common extracurricular activity. The 85.7% of the students totally agree and/or agree that their Faculty should integrate more activities related to broader fields of Maritime Environmental Protection and Management (Table 4).

Table 4: Maritime Environmental Protection and Management education

	Frequency (N)	Percent (%)
Fields of Maritime Environmental Protection and Management education is relevant for your future career		
Totally agree	59	42.1
Agree	44	31.4
Neutral	23	16.4
Disagree	3	2.1
Totally disagree	11	7.9
Extracurricular activities focusing on MEP&M		
<i>Seminars/workshops</i>	28	20.0
<i>Business plan/venture capital competitions</i>	82	58.6
<i>Company visits</i>	12	8.6
<i>Matchmaking events between students and stakeholders</i>	13	9.3
<i>Summer schools</i>	5	3.6
Faculty should integrate more activities related to broader fields of MEP&M		
Totally agree	61	43.6
Agree	59	42.1
Neutral	18	12.9
Disagree	2	1.4
Totally disagree	0	0
Attending a Master degree program in field of MEP&M		
Definitely yes	53	37.9
Most probably	32	22.9
Possible	31	22.1
Most probably no	15	10.7
Definitely no	9	6.4

The 82.9% and 92.1% of the participants rated as very important and/or important the Maritime Environmental Protection attitudes and culture at their faculty and environmentalist behavior among student population at the faculty respectively. The 82.9% most likely will attend a Master degree program in field of Maritime Environmental Protection and Management on English if was available. As about the level of English language, students rate it as B2 (32.9%) and as B1 (22.9%). The 80% of the participants have plans to be employed after graduation in one of the mentioned areas of Maritime Environmental Protection and

Management. The 63.6 have plans to be employed in on of the specific fields of MEP&M (such as sustainable development, maritime transport, innovation etc.) (**Table 5**).



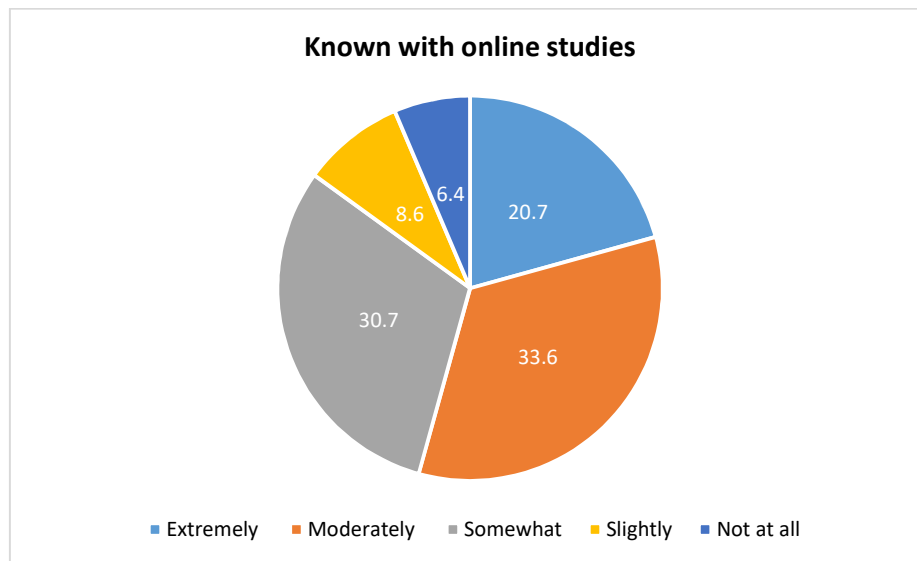
Graph 9: Language level

Table 5: Future experience with MEP&M

	Frequency (N)	Percent (%)
English language level		
A1	23	16.4
A2	27	19.3
B1	32	22.9
B2	46	32.9
C1	8	5.7
C2	4	2.9
Plans to be employed after graduation in one of the mentioned areas of MEP&M		
Definitely yes	42	30.0
Most probably	33	23.6
Possible	37	26.4
Most probably no	19	13.6
Definitely no	9	6.4
Future field of employment		
Sustainable development	11	7.9
Entrepreneurship and innovation	16	11.4
Environmental Law	2	1.4
Maritime transport	13	9.3
Management and conservation of marine species	9	6.4
Offshore energy and mineral resources	10	7.1

Natural resources valorization	12	8.6
Integrated coastal zone management	1	.7
Coastal planning and protection	3	2.1
Maritime safety and security	5	3.6
Other	7	5.0

Among the participants, 54.3% reported being extremely and/or moderately familiar with online studies while only 15% reported slightly or not at all familiar. The 24.3% reported that the online classes were excellent, 50.7% rated them at the average and the rest (25%) as very poor. As about the assessment of the technology used it was rated as average by the 58.6%, as excellent by 27.9% and as very poor by 13.6%. Students assessed the teaching approach as excellent at 25.7% level, as average at 58.6% level and very poor at 15.7% level. The efficacy of the material used during the online classes was assessed as excellent by 27.1%, as average by 56.4% and as very poor by 16.4% of participants. Finally, the presence of the lecturers during the online classes was evaluated as excellent (31.45), average (60%) and as very poor by 8.6% of the students (**Table 6**).



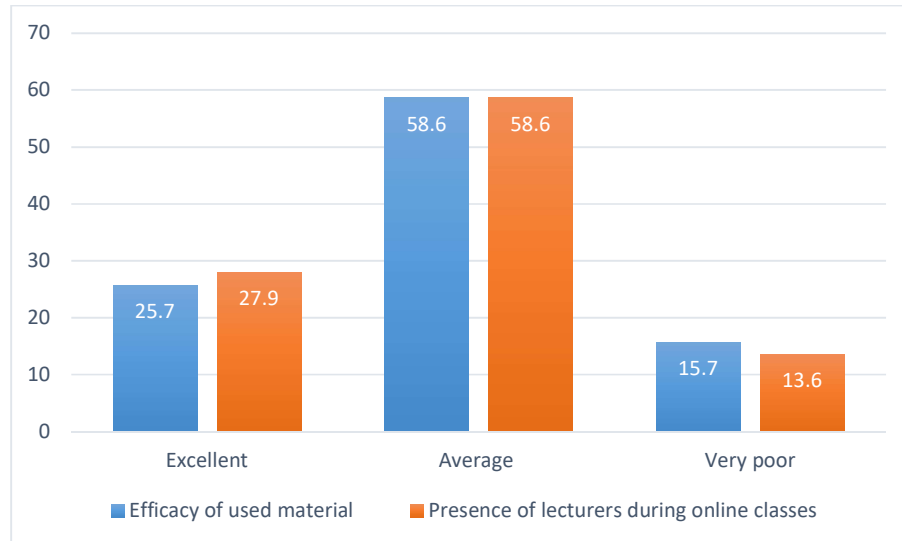
Graph 10: Known with online studies

Table 6: Online classes experiences

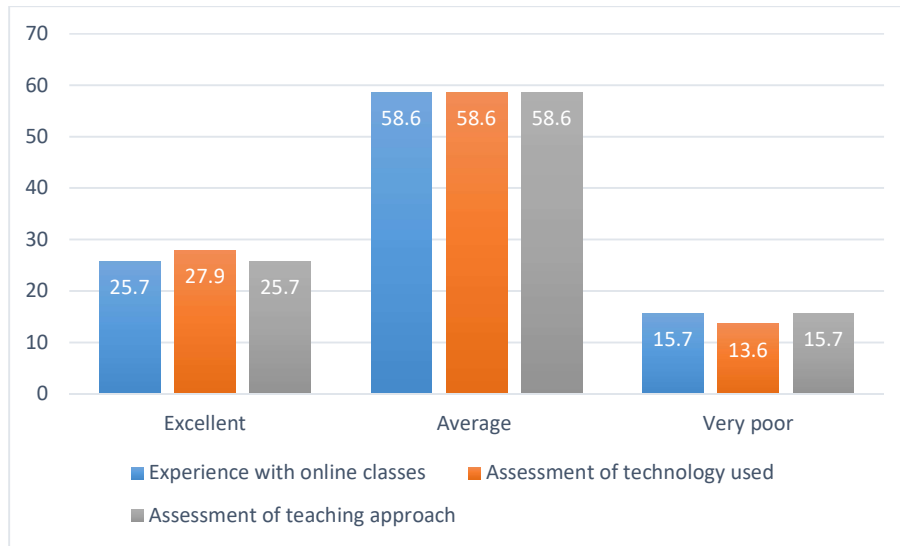
	Frequency (N)	Percent (%)
Known with online studies		
Extremely	29	20.7
Moderately	47	33.6
Somewhat	43	30.7
Slightly	12	8.6



Not at all	9	6.4
Experience with online classes		
Excellent	34	24.3
Average	71	50.7
Very poor	35	25.0
Assessment of technology used		
Excellent	39	27.9
Average	82	58.6
Very poor	19	13.6
Assessment of teaching approach		
Excellent	36	25.7
Average	82	58.6
Very poor	22	15.7
Efficacy of used material		
Excellent	38	27.1
Average	79	56.4
Very poor	23	16.4
Presence of lecturers during online classes		
Excellent	44	31.4
Average	84	60.0
Very poor	12	8.6



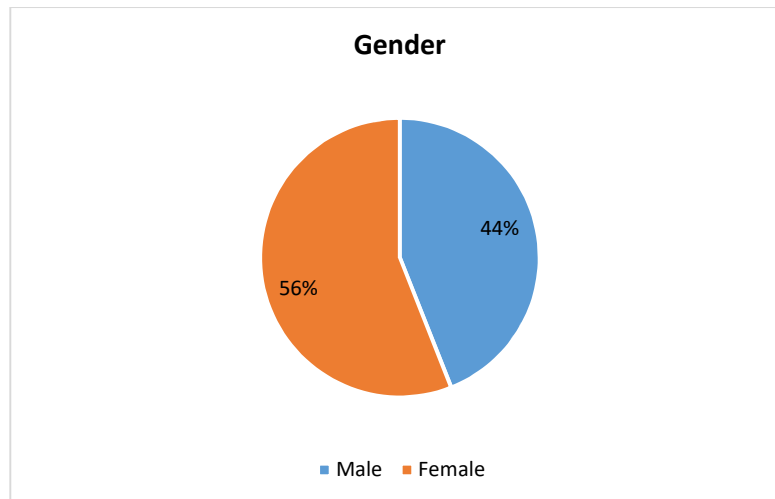
Graph 10: Experience with online classes



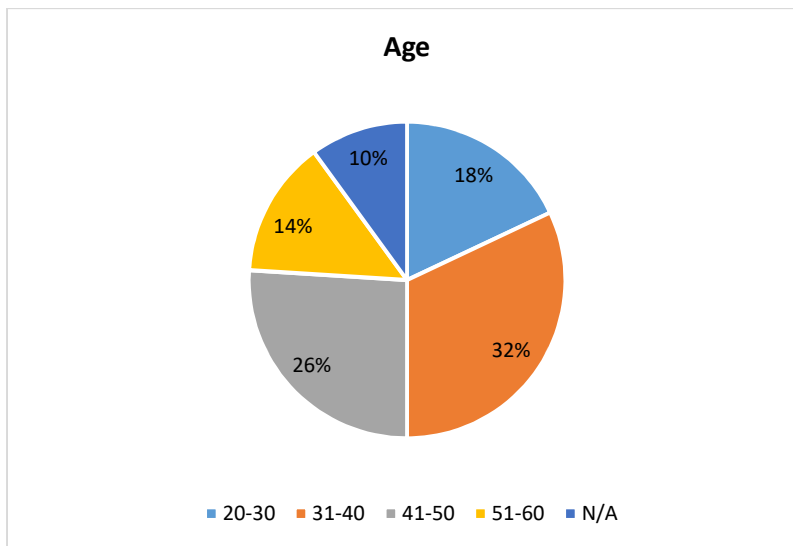
Graph 11: Experience with online classes

3.3 Analysis of questionnaire for stakeholders

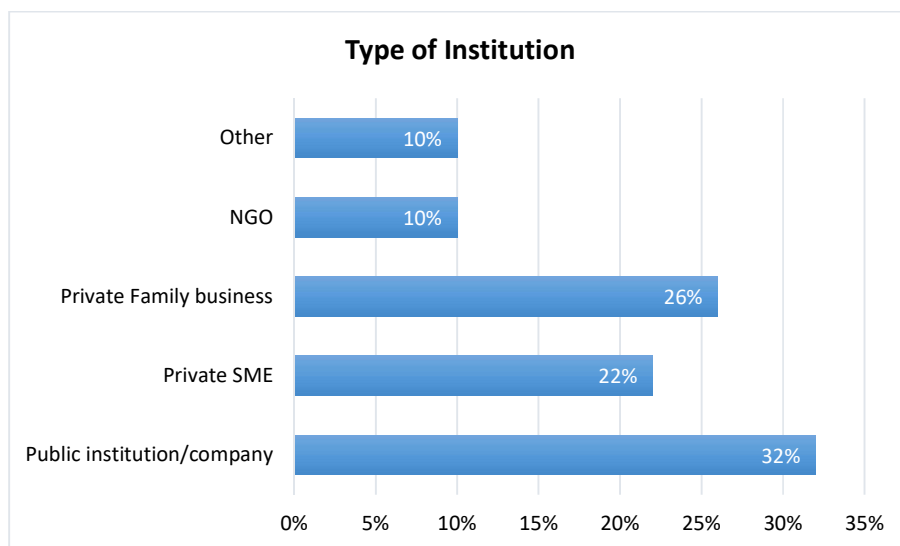
In total 50 stakeholders responded the questionnaire in Vlora. The 44% are of male gender and 56% of female. The most of them belong to age category 31-40 years old and almost half of them have a Master degree. Engineering and Environmental Sciences, Mathematical, Information and Computing Sciences and Biological and Biotechnological Sciences were the field of the expertise of most of the participants (14% each field). Other fields were Humanities and Creative Arts (12%) and Education and Human Society (10%). The 52% of the participants work less than ten years in the company while 34% work more than ten but less than 20 years (**Table 1**). Most of the participants work in public institutions or companies (32%) while 26% work in private family business.



Graph 1: Gender



Graph 2: Age category



Graph 3: Type of Institution

Table 1: Demographic characteristics

	Frequency (N)	Percent (%)
Gender		
Male	22	44.0
Female	28	56.0
Age		
20-30	9	18.0
31-40	16	32.0
41-50	13	26.0
51-60	7	14.0

N/A	5	10.0
Education level		
High school	8	16.0
BSc degree	16	32.0
MSc degree	24	48.0
PhD degree	2	4.0
Education field		
Humanities and Creative Arts	6	12.0
Engineering and Environmental Sciences	7	14.0
Education and Human Society	5	10.0
Mathematical, Information and Computing Sciences	7	14.0
Biological and Biotechnological Sciences	7	14.0
Interdisciplinary sciences	6	12.0
Other	12	24.0
Working in the organization/company		
2-10	26	52.0
11-20	17	34.0
21-30	7	14.0
Entity type		
Public institution/company	16	32.0
Private SME	11	22.0
Private Family business	13	26.0
NGO	5	10.0
Other	5	10.0

As about classification of their organization/company activities 20% categorize in “Agriculture, forestry and fishing”, 12% in “Electricity, gas, steam and air conditioning supply” and 10% in “Information and communication” and “Water supply, sewerage, waste management and remediation activities”. Regarding the size of the companies, almost half of them (48%) have less than ten employees and 40% from 11-49 employees (**Table 2**).

Table 2: Type of organization activity

	Frequency (N)	Percent (%)
Type of organization		
Section A Agriculture, forestry and fishing	10	20.0
Section B Mining and quarrying	4	8.0
Section D Electricity, gas, steam and air conditioning supply	6	12.0

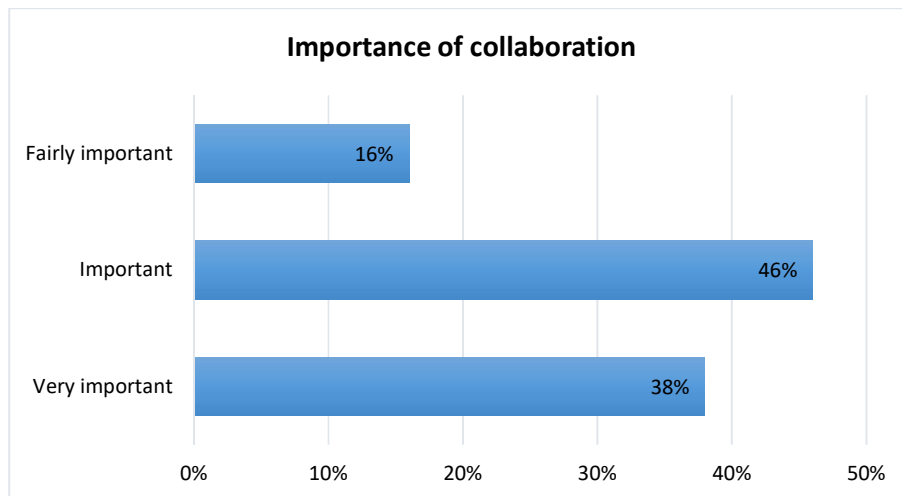
Section E Water supply, sewerage, waste management and remediation activities Section	5	10.0
Section F Construction	4	8.0
Section G Wholesale and retail trade; repair of motor vehicles and motorcycles	2	4.0
Section H Transportation and storage	2	4.0
Section I Accommodation and food service activities	1	2.0
Section J Information and communication	5	10.0
Section J Information and communication	1	2.0
Section L Real estate activities	4	8.0
Section N Administrative and support service activities	1	2.0
Section O Public administration and defense; compulsory social security	4	8.0
Section P Education	1	2.0
Size of the company		
Micro (< 10 employees)	24	48.0
Small (11-49 employees)	20	40.0
Medium (50-249 employees)	6	12.0

Only 34% responded that their companies have cooperated with University of Vlora in the past. Among those reporting not a collaboration till now, half of them is willing to start cooperation with the University while among those saying yes, only 10% have an agreement with the University. The 46% rate as important the current or future cooperation with the University of Vlora "I. Qemali" for their business while 38% and 12.5% reported as very important and fairly important respectively. The 42% indicate that the way of cooperation with the University is through education activities and through innovation while 16% through research. The 38% of the stakeholders that participated in the survey report as very important that students should have experience within the broader fields of Maritime Environmental Protection and Management (MEP&M) while 34% rate as important (**Table 3**).

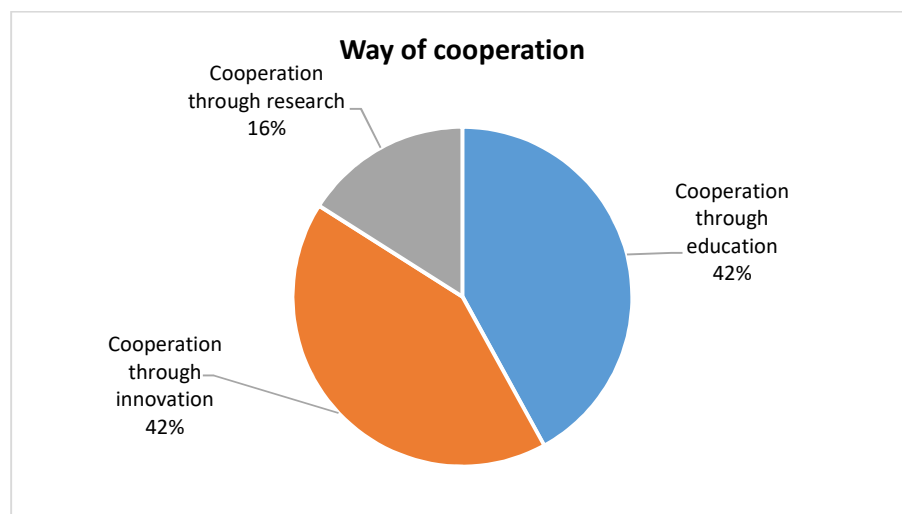
Table 3: University businesses collaboration

	Frequency (N)	Percent (%)
Cooperation with Vlora University		
Yes	17	34.0
No	33	66.0
Importance of collaborating with the University		

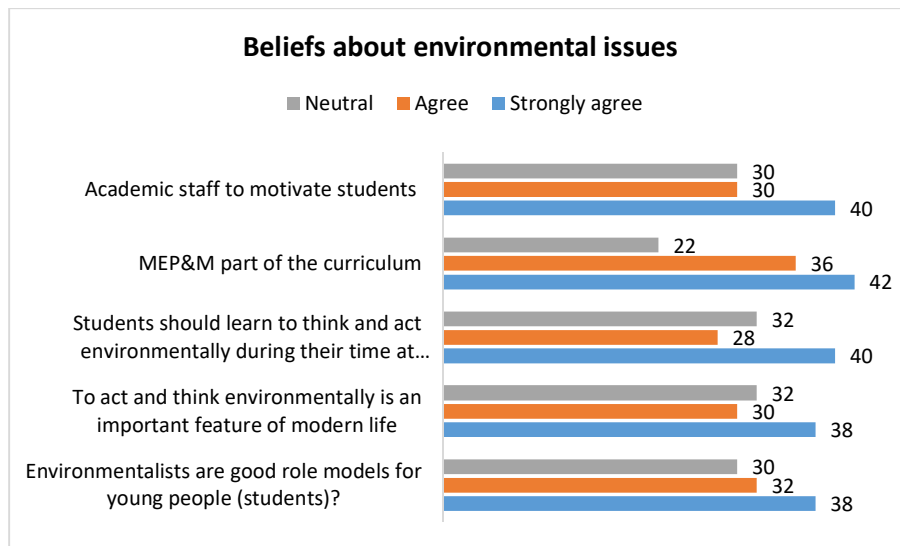
Very important	19	38.0
Important	23	46.0
Fairly important	8	16.0
Way of cooperation		
Cooperation through education	21	42.0
Cooperation through innovation	21	42.0
Cooperation through research	8	16.0
Importance MEP&M		
Very important	19	38.0
Important	17	34.0
Fairly important	8	16.0
Slightly important	6	12.0



Graph 4: Importance of collaboration



Graph 5: Way of cooperation



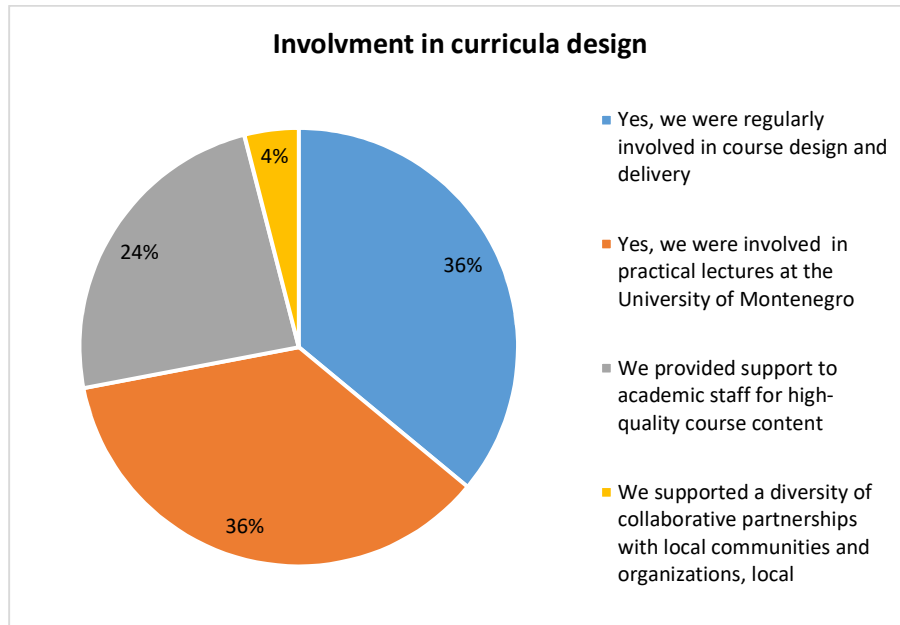
Graph 6: Beliefs about environmental issues

The 70% strongly agree or agree that environmentalists are good role models for young people and 68% strongly agree or agree that to act and think environmentally is an important feature of modern life. The 68% of the participants strongly agree or agree that students should learn to think and act environmentally during their time at university. The 78% strongly agree or agree that education in broader fields of maritime environmental protection and management should be an integral part of the curriculum at all levels of education. However, 70% of the participants strongly agree or agree that academic staff should be able to motivate students to think and act environmentally (**Table 4**). The 38% of the stakeholders' report that are regularly involved in course design and delivery, 36% is involved in practical lectures at the University and 24% provided support to academic staff for high-quality course content (**Graph 7**).

Table 4: Beliefs about environmental issues

	Strongly Agree	Agree	Neutral
	N (%)	N (%)	N (%)
Environmentalists are good role models for young people (students)?	19 (38)	16 (32)	15 (30)
To act and think environmentally is an important feature of modern life	19 (38)	15 (30)	16 (32)
Students should learn to think and act environmentally during their time at university	20 (40)	14 (28)	16 (32)
MEP&M part of the curriculum	21 (42)	18 (36)	11 (22)

Academic staff to motivate students	20 (40)	15 (30)	15 (30)
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Graph 7: Involvement in curricula design

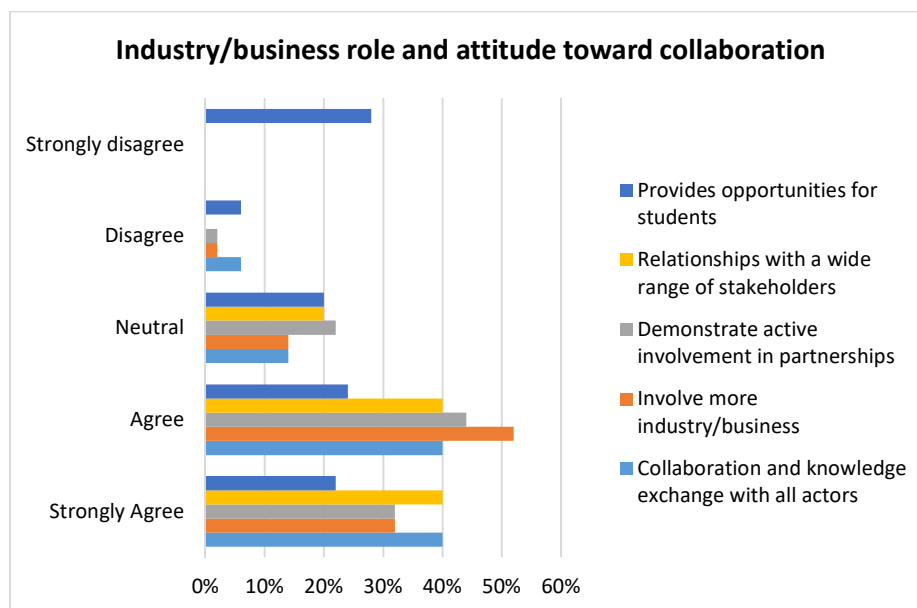
The 80% of the stakeholders strongly agree or agree that the University of Vlora should be committed more to collaboration and knowledge exchange with all actors in the economic market and 84% strongly agree or agree that the University should involve more industry/business sector (wider community) activities to exploit new knowledge. The 72% of the stakeholders strongly agree or agree that their organization/company should demonstrate active involvement in partnerships and relationships with the University of Vlora. However, 80% strongly agree or agree that their organization/company demonstrates active involvement in partnerships and relationships with a wide range of stakeholders. In addition, 46% strongly agree or agree that their organization/company provides opportunities for students to take part in different activities with business/the external environment while 32% disagrees and/or strongly disagrees (**Table 5**). The 54% of the participants report that often or sometimes their organization/company address some of the activities in the fields of Maritime Environmental Protection and Management (**Graph 9**). The specific areas of these activities are presented in table 6.

Table 5: Industry/business role and attitude toward collaboration

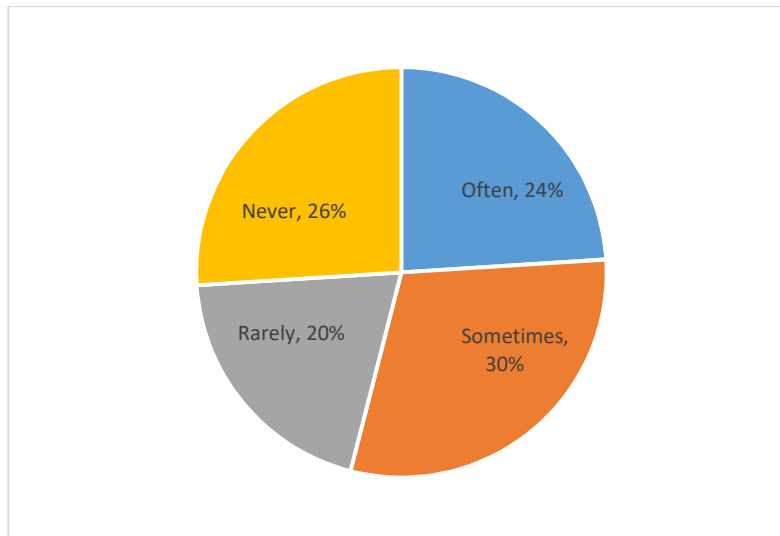
	Frequency (N)	Percent (%)
Collaboration and knowledge exchange with all actors		



Strongly Agree	20	40.0
Agree	20	40.0
Neutral	7	14.0
Disagree	3	6.0
Involve more industry/business		
Strongly Agree	16	32.0
Agree	26	52.0
Neutral	7	14.0
Disagree	1	2.0
Demonstrate active involvement in partnerships		
Strongly Agree	16	32.0
Agree	22	44.0
Neutral	11	22.0
Disagree	1	2.0
Relationships with a wide range of stakeholders		
Strongly Agree	20	40.0
Agree	20	40.0
Neutral	10	20.0
Disagree	0	0
Provides opportunities for students		
Strongly Agree	11	22.0
Agree	12	24.0
Neutral	10	20.0
Disagree	3	6.0
Strongly disagree	14	28.0



Graph 8: Industry/business role and attitude toward collaboration



Graph 9: Organization/company address some of the activities in the fields of MEP&M

Table 6: Specific areas of the activities

	Frequency (N)	Percent (%)
Specific areas of the activities		
Sustainable development	5	10.0
Entrepreneurship and innovation	4	8.0
International conventions on marine environmental protection	3	6.0
Environmental Law	5	10.0
Maritime transport	6	12.0
Marine ecology	5	10.0
Marine environmental protection	6	12.0
Management of protected marine areas	5	10.0
Management and conservation of marine species	3	6.0
Conservation and management of marine environments	1	2.0
Coastal planning and protection	1	2.0
Marine spatial planning	6	12.0

The 54% of the participants report that definitely or probably their organization/company plan to include more activities in its business in the field of Maritime Environmental Protection and Management. The 72% of the participants report that definitely or probably if a 2-year Master degree program in interdisciplinary field of Maritime environmental

protection and management on English and adapted for professionals in companies would have interest in suggesting to their colleagues to enroll in order to get deeper knowledge in this field. Additionally, 76% report that if was a 2-year Master degree program in interdisciplinary field of Maritime environmental protection and management on English their company would have interest in providing internship for students (**Table 7**).

Table 7: Possible future activities of companies if a Master exists in MEP&M

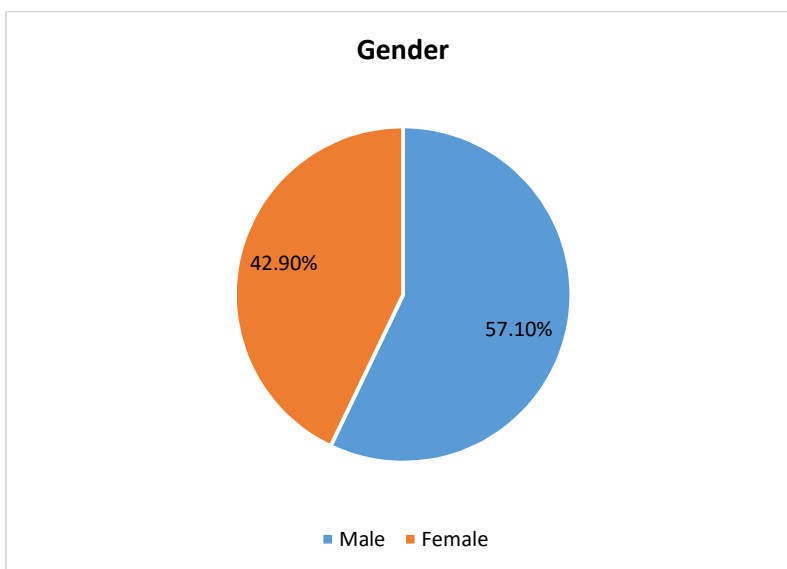
	Frequency (N)	Percent (%)
Include more activities in MEP&M		
Definitely	16	32.0
Probably	11	22.0
Possibly	18	36.0
Probably Not	5	32.0
A 2-year Master degree program interest in suggesting your colleagues to enroll in order to get deeper knowledge in this field		
Definitely	15	30.0
Probably	21	42.0
Possibly	12	24.0
Probably Not	2	4.0
A 2-year Master degree program interest in providing internship for students		
Definitely	11	22.0
Probably	27	54.0
Possibly	6	12.0
Probably Not	6	12.0

4. Questionnaires for University of Durres and its analysis

Author(s) of the Chapter #4: Osman Metalla, Kristofor Lapa, Enkeleint Aggelos Mechili

4.1 Analysis of questionnaire for academic staff

From University of Durres “Aleksander Moisiu” 14 professors in total completed the questionnaire. The 57.1% are of male gender (n=8) and 42.9% of female. Most of them belong to age category 31-40 (50%) and to 51-60 (28.6%). Most of the participants are *Teaching assistant/Research assistant (42.9%)*, *Associate Professor/Senior scientific associate (14.3%)*, *Assistant Professor/Scientific associate (14.3%)* and *others (21.4%)*. The 28.6% have less than ten years of work experience, 35.7% have classes at bachelor level, 28.6% at Master level and 14.3% at PhD level. The 50% have delivered a course in the broader fields of Maritime Environmental Protection and Management (MEP&M) in the last 5 years. These classes have been attended by 1-30 bachelor students approximately (14.3%) and 31-50 bachelor students (28.6%) as well as by 1-10 master students (21,4%). No PhD students have followed these classes. However, 10 participants (71.4%) report that have delivered a seminar/training/workshop to non-student population in broader fields of Maritime Environmental Protection and Management in the last 5 years (**Table 1**). The number of participants that attended these seminar/training/workshop in broader fields of maritime Environmental Protection and Management were less than 5 (50%) and 6-10 (50%). As about the participants teaching/research area, these are presented at Graph 3.



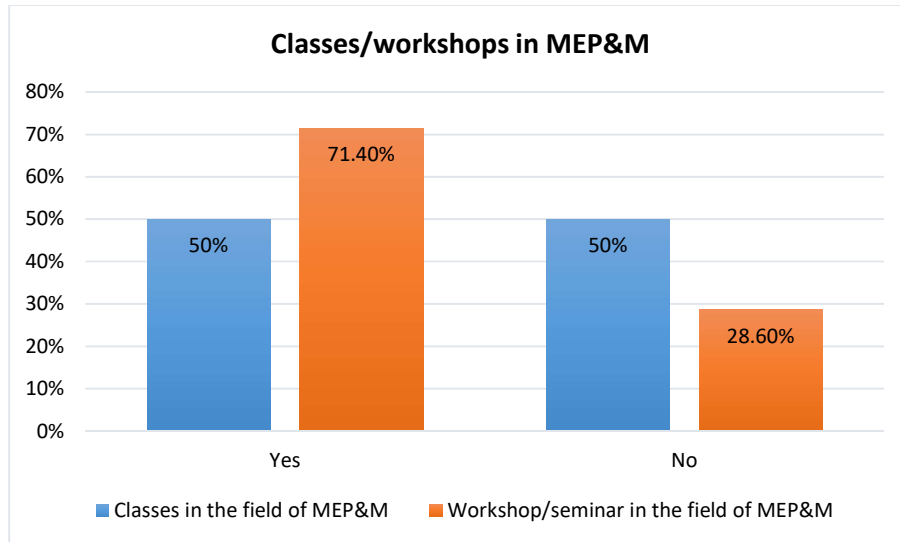
Graph 1: Gender

Table 1: Demographic characteristics

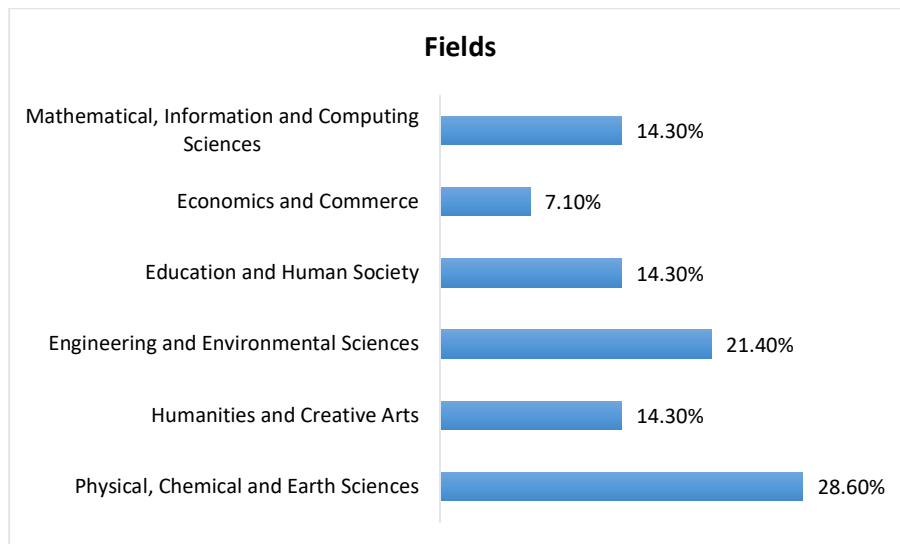
	Frequency (N)	Percent (%)
Gender		
Male	8	57.1
Female	6	42.9
Age		
22-30	1	7.1
31-40	7	50.0
41-50	1	7.1
51-60	4	28.6
>60	1	7.1
Academic level		
<i>Full Professor/Scientific advisor</i>	1	7.1
<i>Associate Professor/Senior scientific associate</i>	2	14.3
<i>Assistant Professor/Scientific associate</i>	2	14.3
<i>Teaching assistant/Research assistant</i>	6	42.9
<i>Other</i>	3	21.4
Years of work experience		
0-10	4	28.6
11-20	10	71.4
Study programs that have classes		
BSc	5	35.7
MSc	4	28.6
PhD	2	14.3
N/A	3	21.4
Classes in the field of MEP&M		
Yes	7	50.0
No	7	50.0
Workshop/seminar in the field of MEP&M		
Yes	10	71.4
No	4	28.6

The 28.6% report that the University of Durres offer in-curricular or extracurricular activities focusing on the behavior, skills, knowledge and creativity development in the broader fields of Maritime Environmental Protection and Management. 14.3% report that their faculty/institution implement activities related the broader fields of Maritime Environmental Protection and Management (e.g., projects, research, workshops, seminars, trainings, summer school etc.). Among the participants, 50% mentioned that these activities have been

previously concluded, 21.4% say that are currently active and 28.6 that are planned for the future.



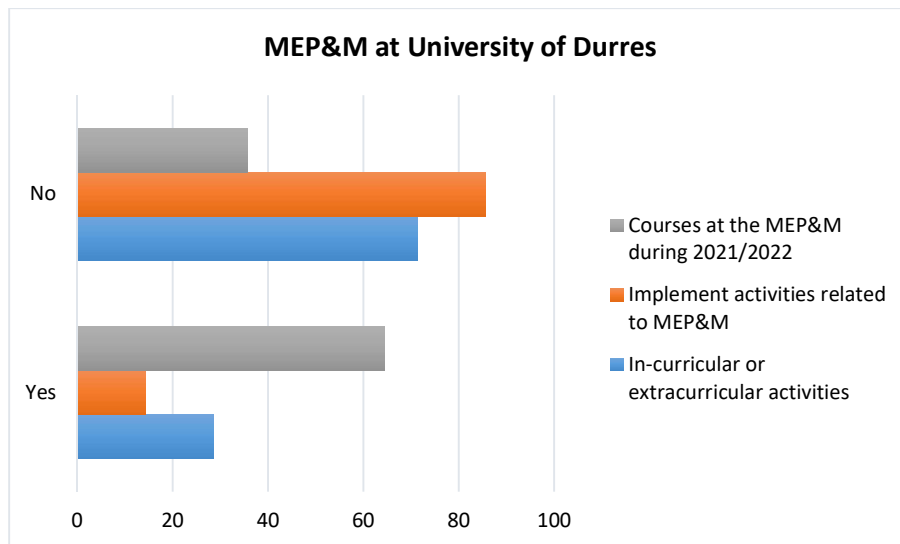
Graph 2: Classes/workshops in MEP&M



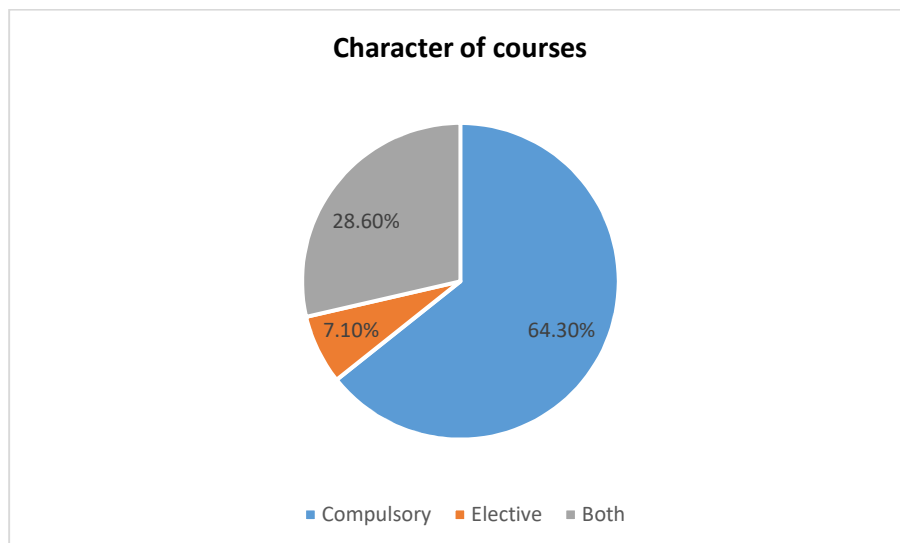
Graph 3: Fields

The 64.3% hold courses/part of the course related to the broader fields of Maritime Environmental Protection and management in academic 2021/2022. Most of the participants that report having classes in the broader fields of MEP&M had 1 course (42.9%), while 2 courses were mentioned by 35.7%, and 3 courses by 21.4%. The 57.1% report that they had these courses at Bachelor level, 28.6% at Master level and 14.3% at PhD level. As about the number of ECTS-s, 64.3% report that range from 1-6 ECTS-s while the rest report more than

6 ECTS-s. However, the classes/courses related to the broader fields of Maritime Environmental Protection and Management are compulsory said the 64.3%, are elective said 7.1% and both were reported by 28.6% (Table 2).



Graph 4: MEP&M at University of Durres



Graph 5: Character of courses

All participants totally agree or agree that the specific fields of Maritime Environmental Protection and Management should be included more in the University existing courses. All participants totally agree or agree that the specific fields of Maritime Environmental Protection and Management should be included more in their research activities. The 35.7% report that have included the industry or business sector staff in the practical part of their

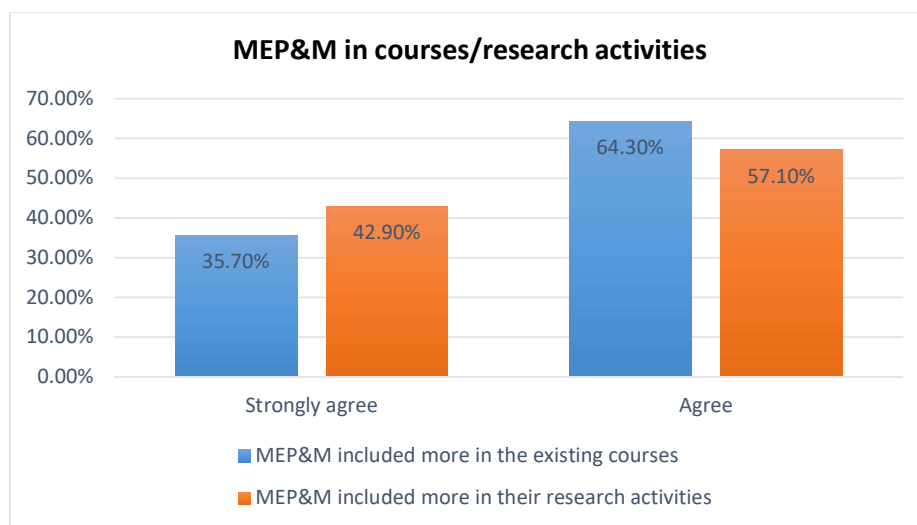
course lectures while 64.3% doesn't have done this. The number of lecturers given by industry or business sector practitioners during the academic year 2020/2021 ranged from 1-5 (57.1%). 6-10 (28.6%) and more than 10 by 14.3%. The 57.1% report that are extremely or very familiar with the policies/strategy/action plans regarding maritime environmental protection in Albania while 14.3% report moderately familiar and 28.6% slightly familiar. The 92.8% of the participants definitely or probably are interested in giving lectures if there is a Master degree program in field of Maritime environmental protection and management on English (**Table 3**). As about their English level, 7.1% report a B1 level, 28.6% report B2 level and 64.3% report a C1 level. In table 4 are presented the topics that professors of Durres University are interested in giving lectures. Sustainable development was the most reported area (28.6%), followed by Entrepreneurship and innovation and Environmental Law (21.4% each) and Maritime transport (14.3%).

Table 3: MEP&M activities and industry/business sector

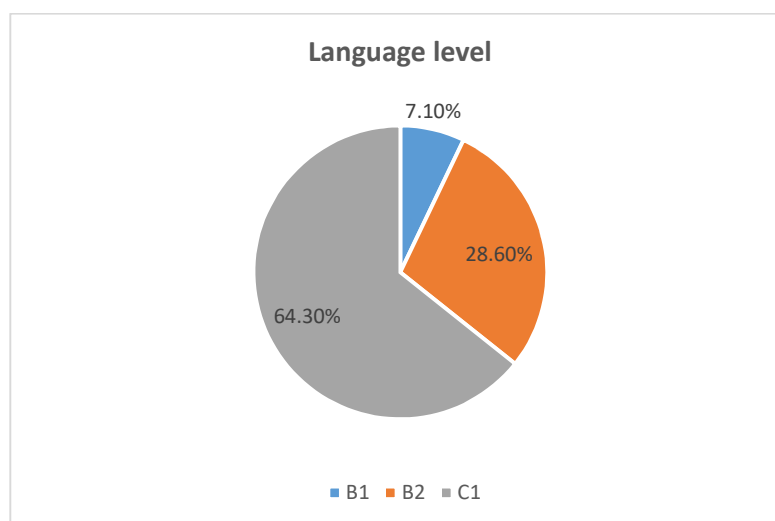
	Frequency (N)	Percent (%)
MEP&M included more in the existing courses		
Strongly agree	5	35.7
Agree	9	64.3
Undecided		
MEP&M included more in their research activities		
Strongly agree	6	42.9
Agree	8	57.1
Undecided		
Industry or business sector staff in courses		
Yes	5	35.7
No	9	64.3
Familiar with policies/strategy/action plans regarding MEP&M in Albania		
Extremely familiar	3	21.4
Very familiar	5	35.7
Moderately familiar	2	14.3
Slightly familiar	4	28.6
Giving lecturers in a Master program in MEP&M		
Definitely	3	21.4
Probably	10	71.4
Possibly	1	7.1
Probably Not		
English language level		
B1	1	7.1
B2	4	28.6
C1	9	64.3

Table 4: MEP&M topics that are interested to give lecturers

	Frequency (N)	Percent (%)
MEP&M topics that are interested to give lecturers		
Sustainable development	4	28.6
Entrepreneurship and innovation	3	21.4
International conventions on marine environmental protection	1	7.1
Environmental Law	3	21.4
Maritime transport	2	14.3
Climate change	1	7.1



Graph 6: MEP&M in courses/research activities



Graph 7: Language level

The 78.6% of the participants report that lectures are often or sometimes used in the Maritime Environmental Protection and Management education while case studies were reported often or sometimes by 57.1% of the participants. The 57.1% of the participants report that Entrepreneurs/practitioners in the classroom are often or sometimes used in the Maritime Environmental Protection and Management education while 42.9% reported rarely. As about project teams were reported often or rarely by 35.7% and 64.3% respectively by the participants. Company visits are reported often or sometimes by 42.9% and 7.1% respectively while rarely was mentioned by 50%. However, students from different faculties/disciplines to mix in the classroom activities were reported by 28.6% (often), 21.4% (sometimes) and 50% (rarely). Participants report that exploring complex real-world problems are often (35.7%) and sometimes (14.3%) used in the Maritime Environmental Protection and Management education while 50% report that are rarely used (**Table 5**).

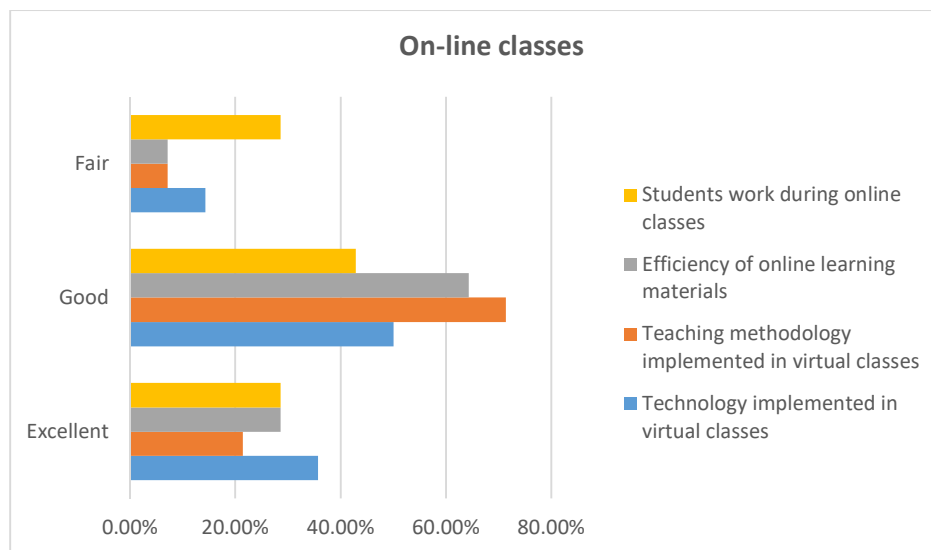
The 64.3% of the participants report that are extremely or very familiar with on-line classes while 14.3% report that are slightly familiar. The 85.7% of the participants reported that the teaching technology implemented in virtual classes at their faculty is excellent or good. However, the teaching methodology implemented in virtual classes was reported as excellent and good by 21.4% and 71.4% respectively. As about the efficiency of online learning materials used in virtual classes at their faculty 28.6% report that was excellent and 64.3% report as good. Students work during online classes at the faculty was evaluated as excellent by 28.6% of the participants, as good by 42.9% and as fair by 28.6% (**Table 6**).

Table 5: Frequency use of teaching methods

Teaching method	Often	Sometimes	Rarely	Never	I don't know
	N (%)	N (%)	N (%)	N (%)	N (%)
Lecturing	10 (71.4)	1 (7.1)	3 (21.4)	0	0
Case studies	4 (28.6)	4 (28.6)	6 (42.9)	0	0
Entrepreneurs/practitioners in the classroom	6 (42.9)	2 (14.3)	6 (42.9)	0	0
Project teams	5 (35.7)	9 (64.3)	0	0	0
Company visits	6 (42.9)	1 (7.1)	7 (50)	0	0
Students from different faculties/disciplines to mix in the classroom	4 (28.6)	3 (21.4)	7 (50)	0	0
Exploring complex real-world problems	5 (35.7)	2 (14.3)	7 (50)	0	0

Table 6: Knowledge and skills about online classes

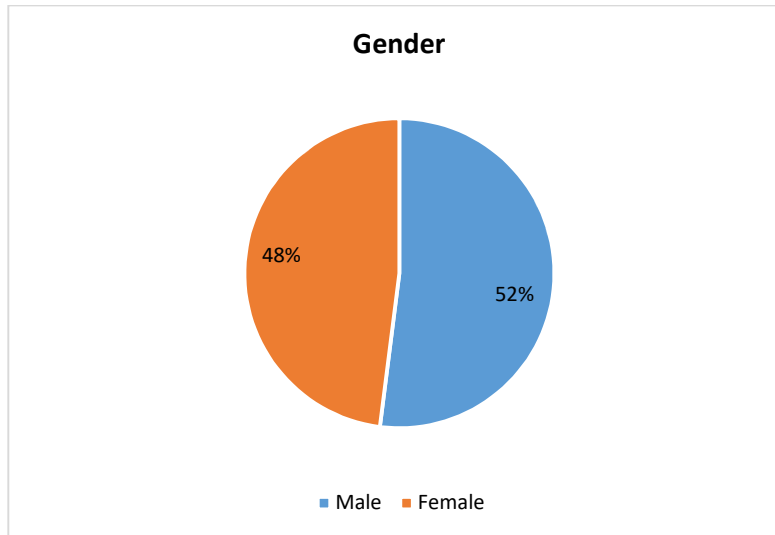
	Frequency (N)	Percent (%)
Familiar with online lectures		
Extremely familiar	3	21.4
Very familiar	9	64.3
Slightly familiar	2	14.3
Technology implemented in virtual classes		
Excellent	5	35.7
Good	7	50.0
Fair	2	14.3
Teaching methodology implemented in virtual classes		
Excellent	3	21.4
Good	10	71.4
Fair	1	7.1
Efficiency of online learning materials		
Excellent	4	28.6
Good	9	64.3
Fair	1	7.1
Students work during online classes		
Excellent	4	28.6
Good	6	42.9
Fair	4	28.6



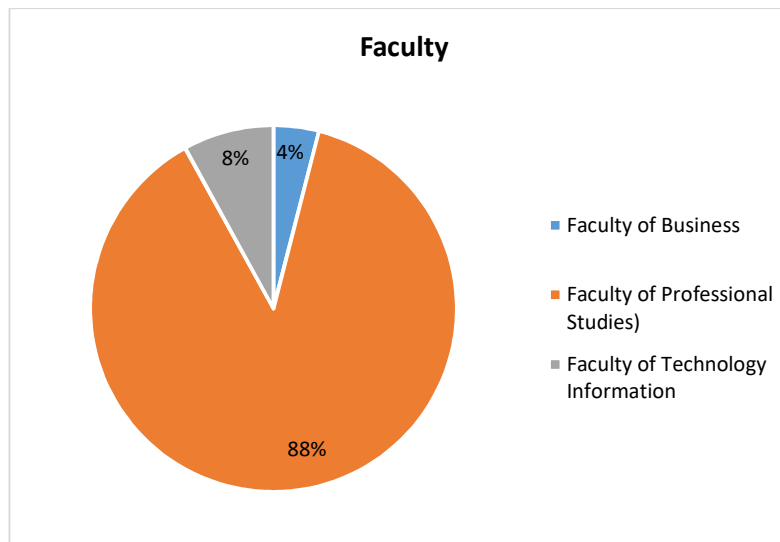
Graph 8: On-line classes

4.2 Analysis of questionnaire for students

From University of Durres participated in total 25 students. Most of them are of male gender (52%) while the rest are of female (Graph 1). All of the participants belong to age group 18-25 years old (Graph 2) and 88% are at Faculty of Professional studies (**Table 1**). The majority of the participants are on their third year of studies (32%) followed by those on the second year (24%).



Graph 1: Gender

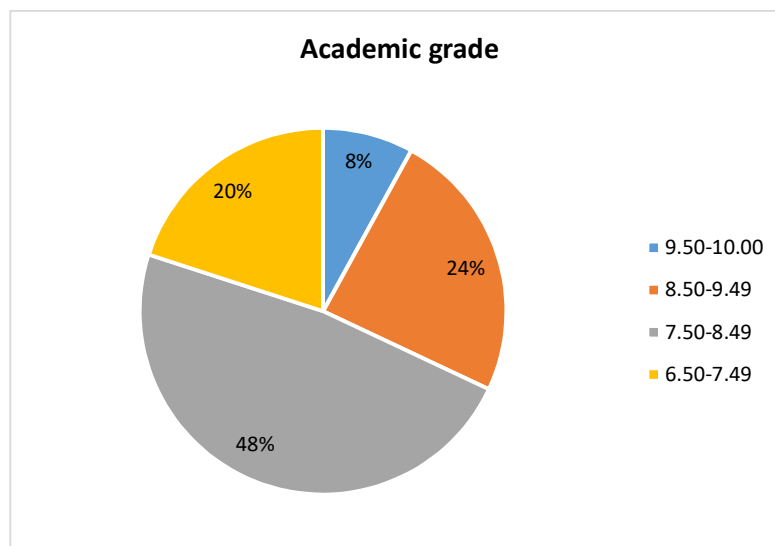


Graph 2: Faculty

Table 1: Demographic characteristics of participants

	Frequency (N)	Percent (%)
Gender		
Male	13	52.0
Female	12	48
Age		
18-25	25	100
Faculty		
Faculty of Business	1	4.0
Faculty of Professional Studies)	22	88.0
Faculty of Technology Information	2	8.0
Year of studies		
BSc 1st year	5	20.0
BSc 2nd year	6	24.0
BSc 3rd year	8	32.0
BSc graduate	1	4.0
MSc 1st year	2	8.0
MSc 2nd year	3	12.0
Academic Grades		
9.50-10.00	2	8.0
8.50-9.49	6	24.0
7.50-8.49	12	48.0
6.50-7.49	5	20.0

*BSc=Bachelor **MP=Professional Master ***MSc= Master of Science



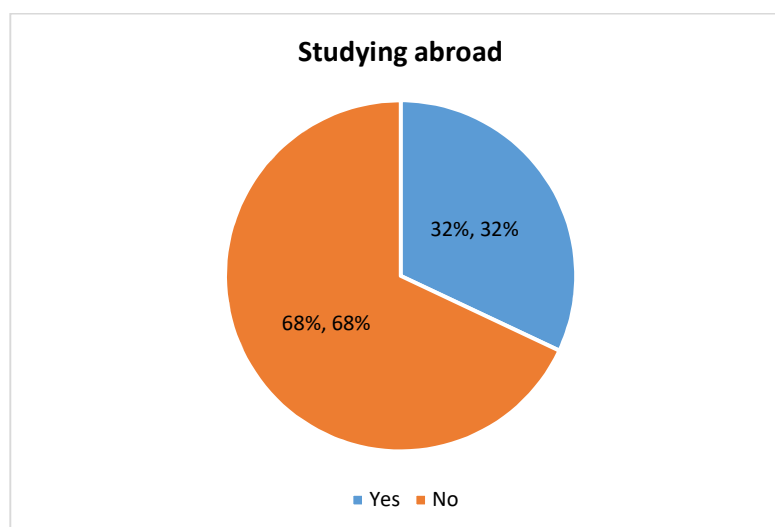
Graph 3: Academic grade of participants

The 32% of the participants have conducted part of their studies abroad while. Most of them have had one semester abroad while one participants has had one whole year abroad. The

54.5% characterize this experience as excellent while the 27.2% as fair. The 60% have no work experience or practical work (**internship**) with most of them having less than 6 months experience (66.7%). The 50% of the students characterize their experience as good while the 40% as excellent (**Table 2**).

Table 2: Work/practical experience

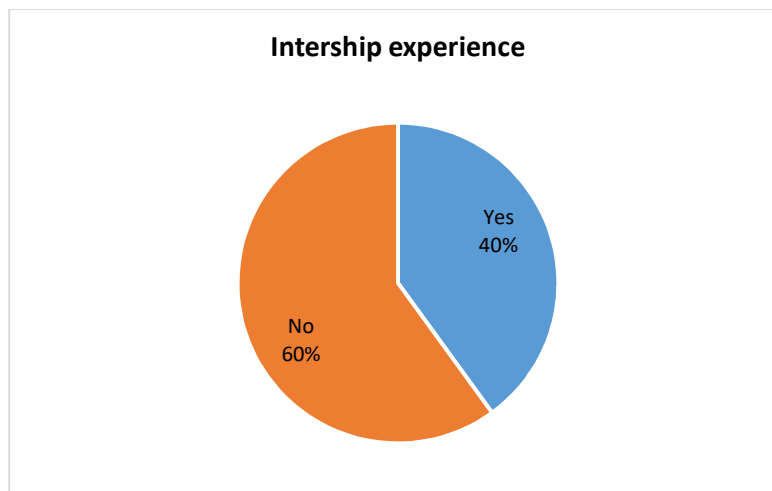
	Frequency (N)	Percent (%)
Conducting part of the studies abroad		
Yes	8	32.0
No	17	68.0
Satisfaction with studying abroad		
Excellent	6	54.5
Fair	1	9.2
Good	3	27.1
Very Poor	1	9.2
Work/practical/internship experience		
Yes	10	40.0
No	15	60
Period of experience		
0-6 months	6	66.7
6-12 months	3	33.3
>12 months	1	11.0
Satisfaction with this experience		
Excellent	4	40
Fair	1	10
Good	5	50



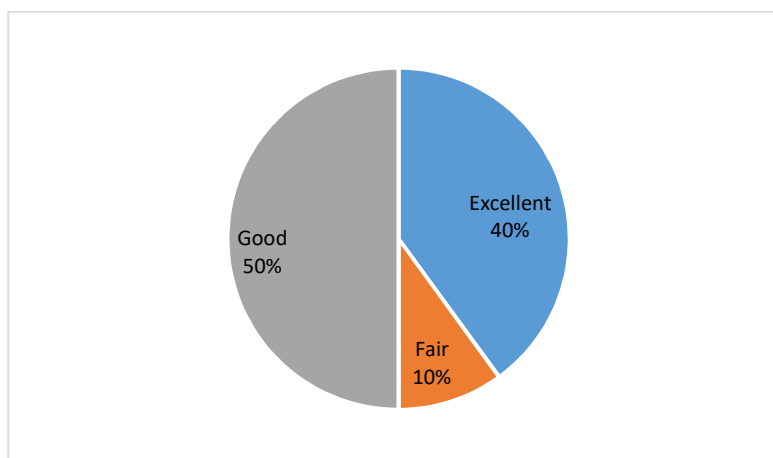
Graph 4: Part of the studies abroad



Graph 5: Satisfaction with studying abroad



Graph 6: Work/internship experience



Graph 7: Satisfaction with work/practical/internship experience

Table 3: Maritime Environmental Protection and Management

	Frequency (N)	Percent (%)
Classes in MEP&M after enrolment at University		
Yes	10	41.6
No	14	58.4
Satisfaction with classes content		
Excellent	9	64.2
Fair	1	7.2
Good	4	28.6
Part of curricula in MEP&M		
Yes	15	62.5
No	9	37.5
Satisfaction with curricula content		
Excellent	11	64.7
Fair	1	29.4
Good	5	5.9
Broader fields of Maritime Environmental Protection and Management education is relevant for your future career		
Agree	13	52.0
Disagree	1	4.0
Strongly agree	7	28.0
Strongly disagree	3	12.0
Undecided	1	4.0

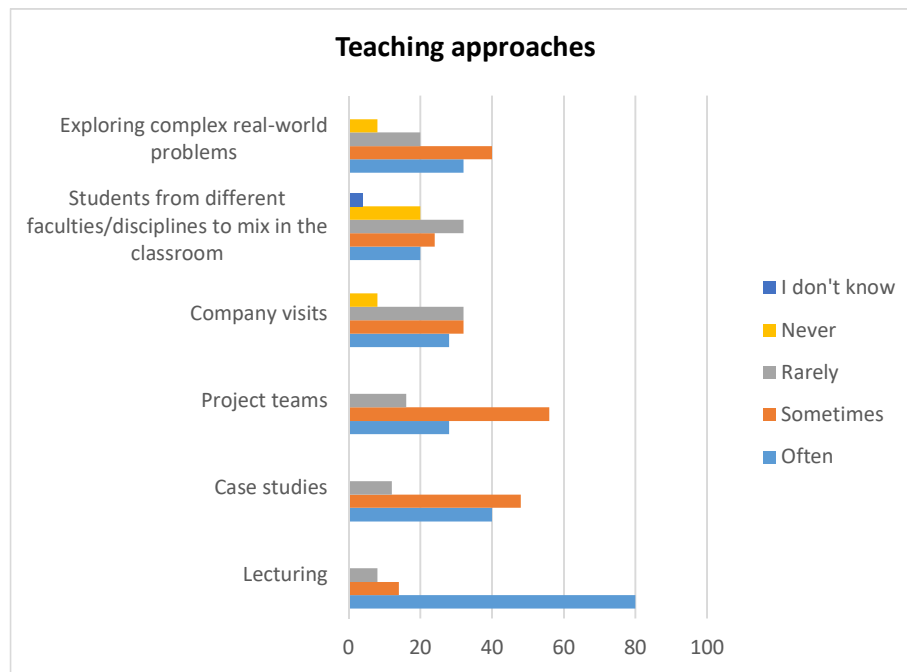
The 41.6% of the students had courses in broader fields of Maritime Environmental Protection and Management since their enrolment at the University of Durres. More than half of them (64.2%) report that are very much satisfied with these classes content and 28.6% reported them as good (**Table 3**). The 62.5% reported that have had part of curricula dedicated to fields of Maritime Environmental Protection and Management with the majority of participants (64.7) reporting that the content of these curricula are excellent and 29.4 characterize them fair. The 64% of the participants strongly agree and agree that broader fields of Maritime Environmental Protection and Management education is relevant for their future career while 16% disagree and/or strongly disagree.

Lecturing was mentioned as one of the most often teaching method that students have (80%) while case studies were conducted sometimes (48%). Company visits wasn't something that happened often as well as the mix in the classroom with students from different faculties/disciplines. Exploring complex real-world problems was something that happened often (32%) and sometimes (40%) (**Table 4**).

Table 4: Frequency use of teaching methods

Teaching method	Often	Sometimes	Rarely	Never	I don't know
-----------------	-------	-----------	--------	-------	--------------

	N (%)	N (%)	N (%)	N (%)	N (%)
Lecturing	20 (80)	3 (12)	2 (8)	-	-
Case studies	10 (40)	12 (48)	3 (12)	-	-
Project teams	7 (28)	14 (56)	4 (16)	-	-
Company visits	7 (28)	8 (32)	8 (32)	2 (8)	-
Students from different faculties/disciplines to mix in the classroom	5 (20)	6 (24)	8 (32)	5 (20)	1 (4)
Exploring complex real-world problems	8 (32)	10 (40)	5 (20)	2 (8)	-

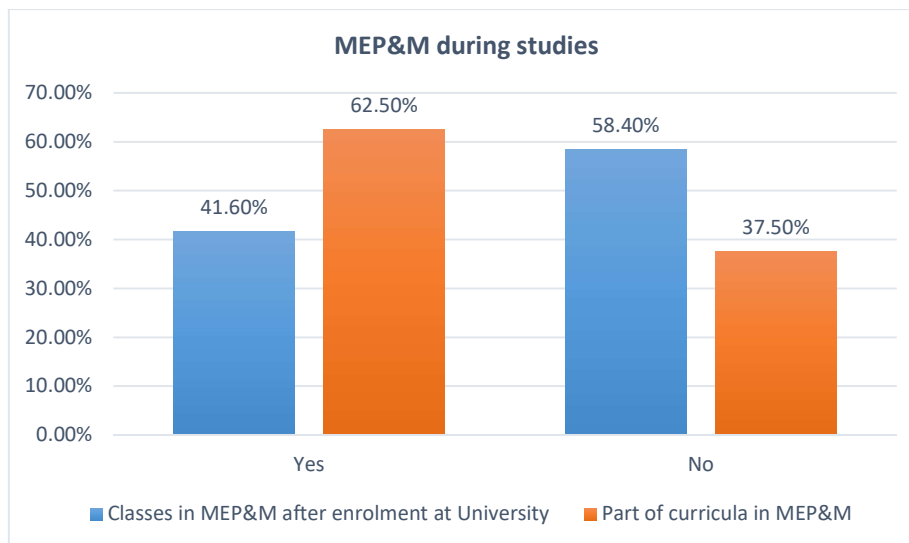


Graph 8: Teaching approaches

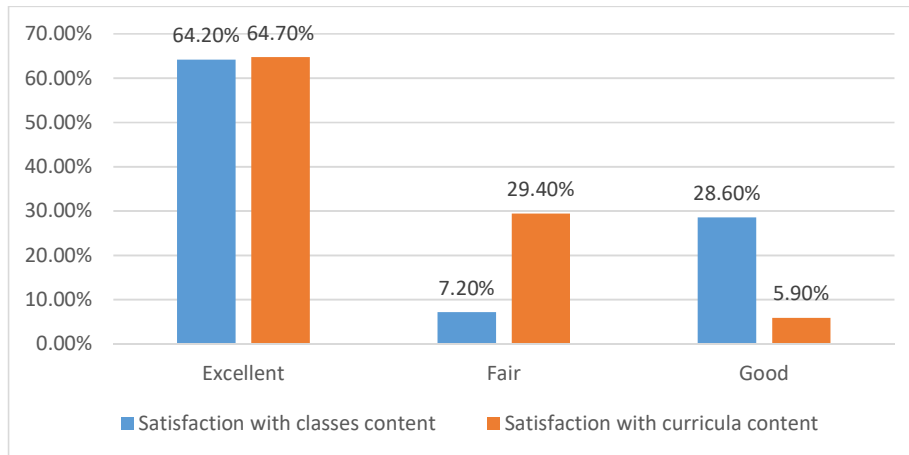
The 88% of the participants totally agree and/or agree that the Faculty should integrate more activities related to broader fields of Maritime Environmental Protection and Management fields. The 48% of the participants believe that the Maritime Environmental Protection attitudes and culture at their faculty is very important, while 40% believe that is important and 12% moderately important. The 44% of the participants believe that the environmentalist behavior among student population at their faculty is very important, while 40% believe that is important and 4% moderately important. If a Master degree program in field of Maritime Environmental Protection and Management on English was available, 40% of the participants will definitely be enrolled and 40% most probably will (**Table 5**).

Table 5: Maritime Environmental Protection and Management education

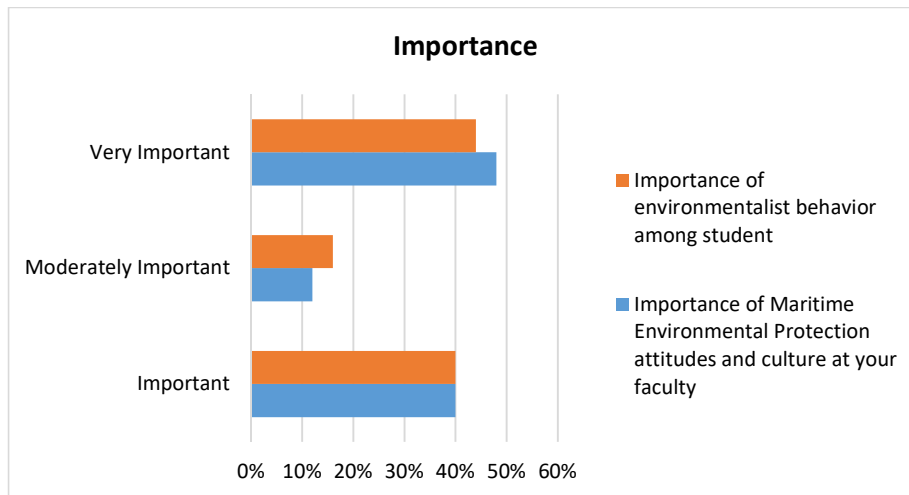
	Frequency (N)	Percent (%)
Faculty should integrate more activities related to MEP&M		
Agree	12	48.0
Strongly Agree	10	40.0
Undecided	3	12.0
Importance of Maritime Environmental Protection attitudes and culture at your faculty		
Important	10	40.0
Moderately Important	3	12.0
Very Important	12	48.0
Importance of environmentalist behavior among student		
Important	10	40.0
Moderately Important	4	16.0
Very Important	11	44.0
Attending a Master degree program in field of MEP&M		
Definitely	10	40.0
Definitely Not	1	4.0
Possibly	2	8.0
Probably	10	40.0
Probably Not	2	8.0



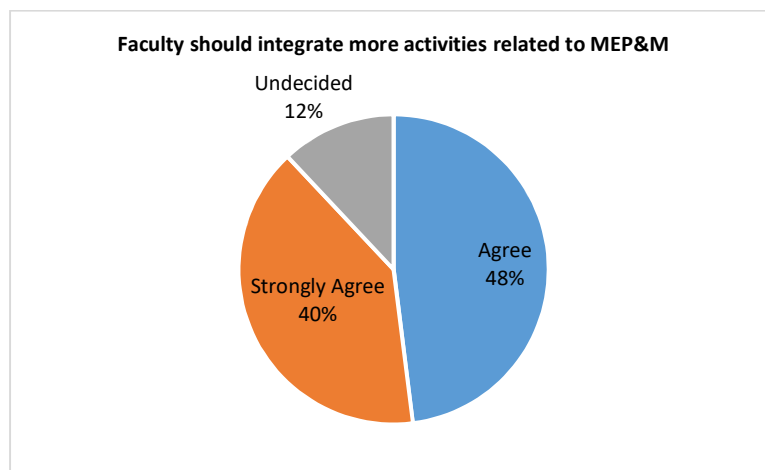
Graph 9: MEP&M during studies



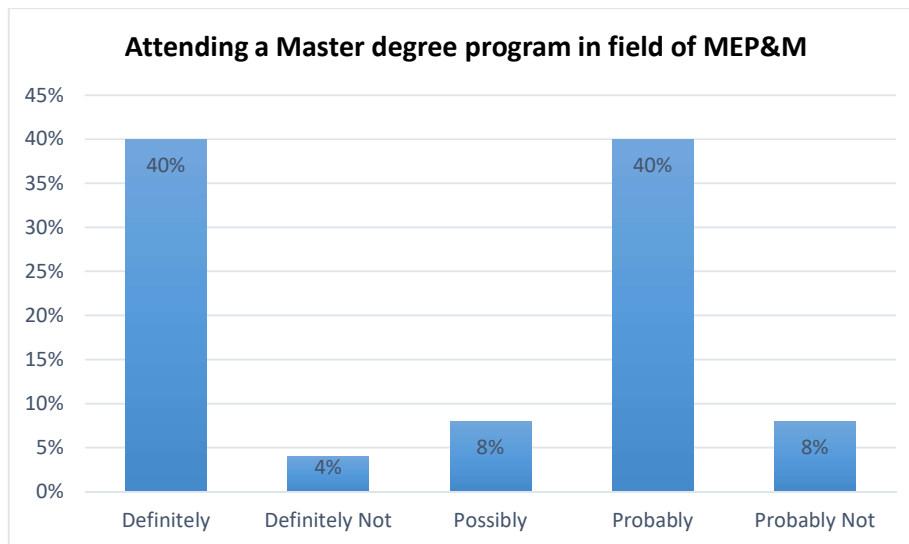
Graph 10: Satisfaction level



Graph 11: Importance



Graph 12: Faculty should integrate more activities related to MEP&M



Graph 13: Attending a Master degree program in field of MEP&M

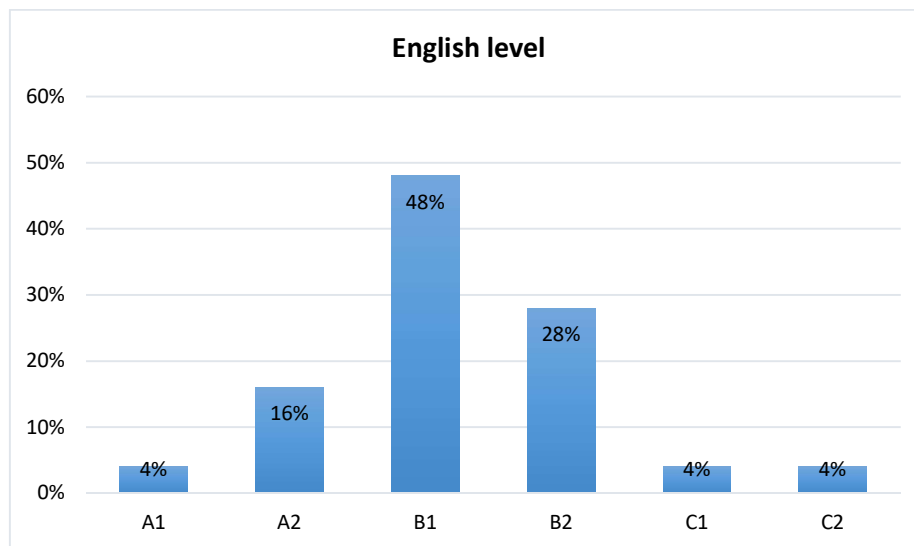
As about the level of English language, students rate it as B2 (48%), C1 (28%) and as B1 (16%). The 96% of the participants have plans to be employed after graduation in one of the mentioned areas of Maritime Environmental Protection and Management (**Table 6**).

Table 6: Future experience with MEP&M

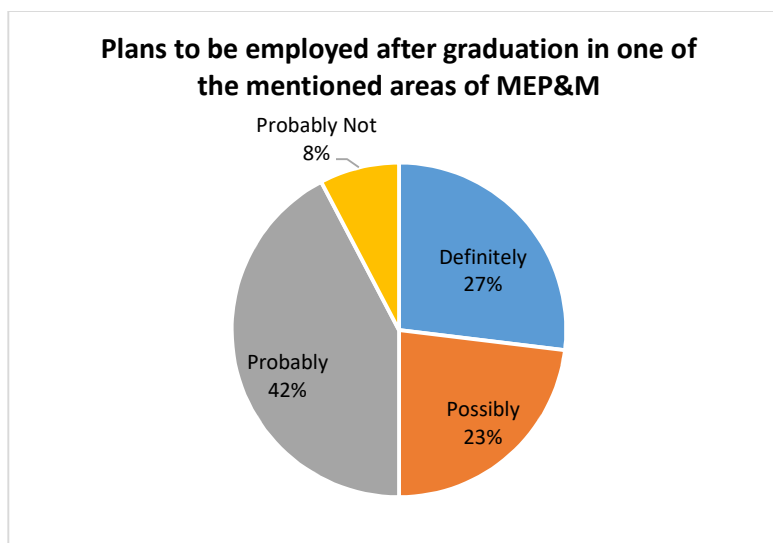
	Frequency (N)	Percent (%)
English language level		
A1	1	4.0
A2	4	16.0
B1	12	48.0
B2	7	28.0
C1	1	4.0
C2	1	4.0
Plans to be employed after graduation in one of the mentioned areas of MEP&M		
Definitely	7	28.0
Possibly	6	24.0
Probably	11	44.0
Probably Not	1	8.0

Among the participants, 88% reported being extremely, very and/or moderately familiar with online studies while only 12% reported slightly or not at all known. The 8% reported that the online classes were excellent, 68% rated them good, 16% as fair and the rest (8%) as poor. As about the assessment of the technology used it was rated as good by the 60%, as excellent by

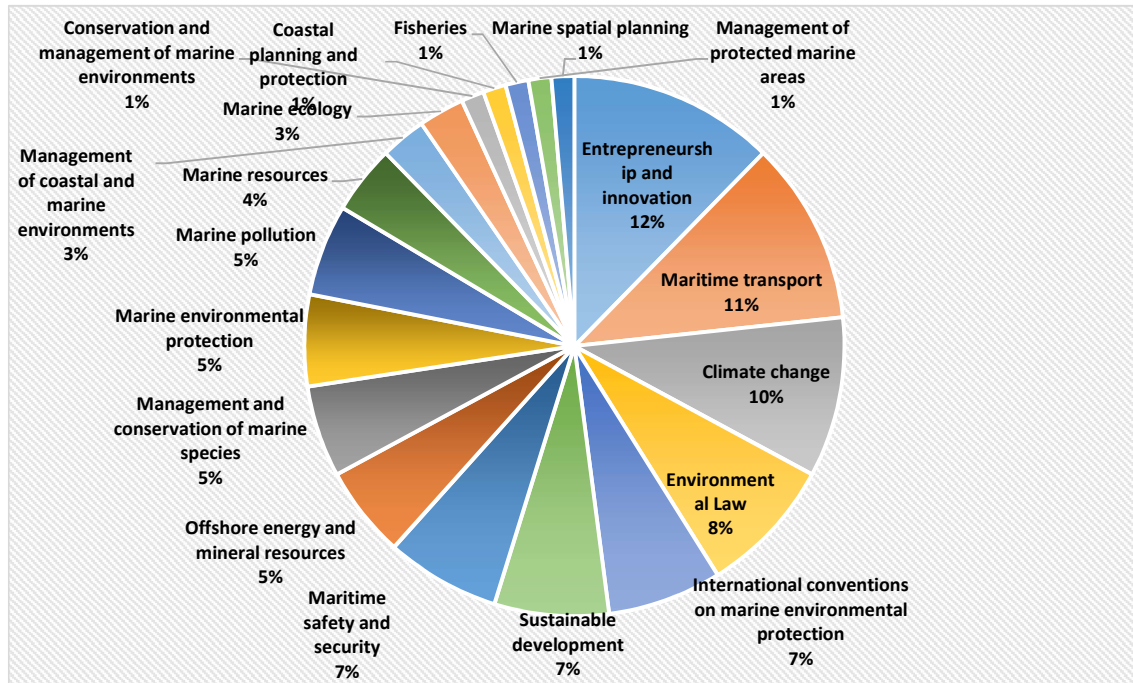
20%, as fair by 12% and as poor by 8% of the participants. Students assessed the teaching approach as excellent at 24% level, as good at 60% level, as fair and poor at 8% level. The efficacy of the material used during the online classes was assessed as excellent by 20%, as good by 64% and as fair and poor by 8% of participants respectively. Finally, the presence of the lecturers during the online classes was evaluated as excellent (32%) and as good by 68% of the students (**Table 7**).



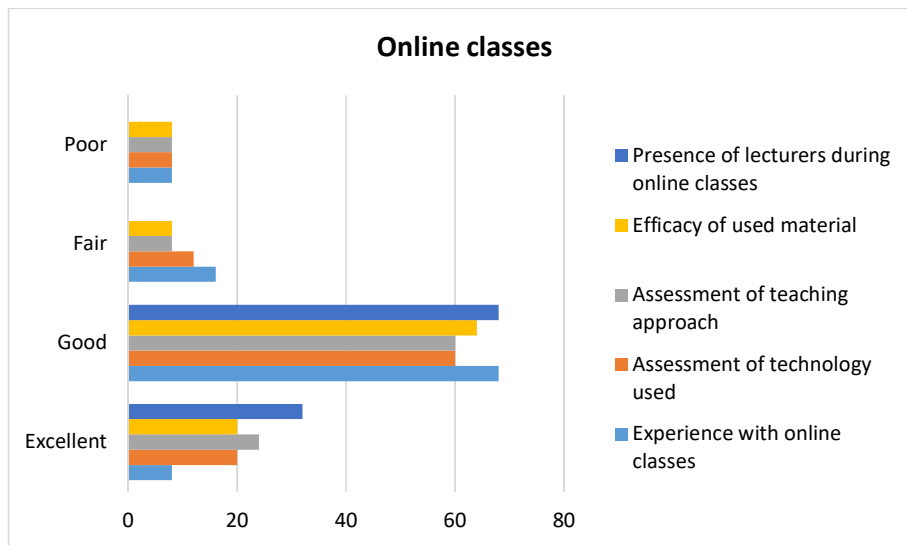
Graph 14: English level



Graph 15: Plans to be employed after graduation in one of the mentioned areas of MEP&M



Graph 16: Interest of students for future employment in different fields MEP&M

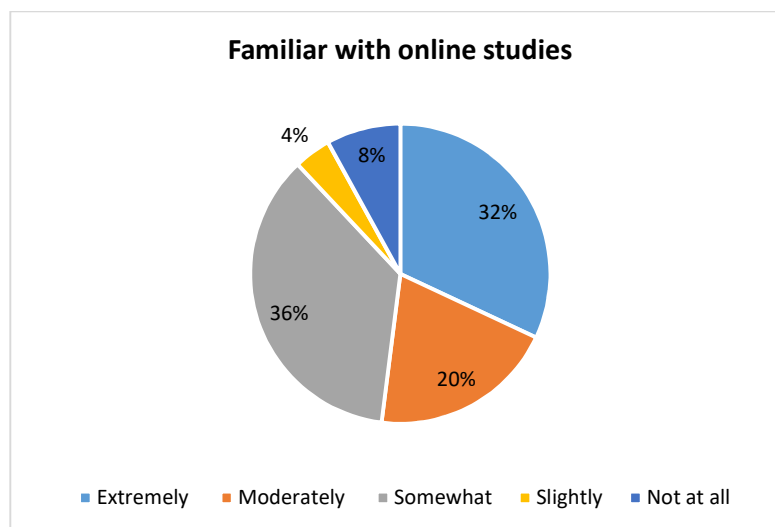


Graph 17: Online classes

Table 7: Online classes experiences

	Frequency (N)	Percent (%)
Familiar with online studies		
Extremely	8	32.0

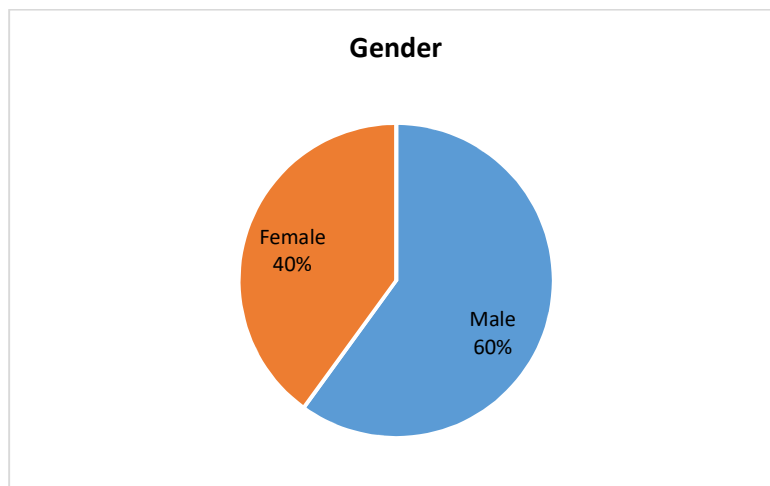
Moderately	5	20.0
Somewhat	9	36.0
Slightly	1	4.0
Not at all	2	8.0
Experience with online classes		
Excellent	2	8.0
Good	17	68
Fair	4	16
Poor	2	8
Assessment of technology used		
Excellent	5	20.0
Good	15	60.0
Fair	3	12.0
Poor	2	8
Assessment of teaching approach		
Excellent	6	24.0
Good	15	60.0
Fair	2	8.0
Poor	2	8.0
Very Poor		
Efficacy of used material		
Excellent	5	20.0
Good	16	64.0
Fair	2	8.0
Poor	2	8.0
Presence of lecturers during online classes		
Excellent	8	32.0
Good	17	68.0



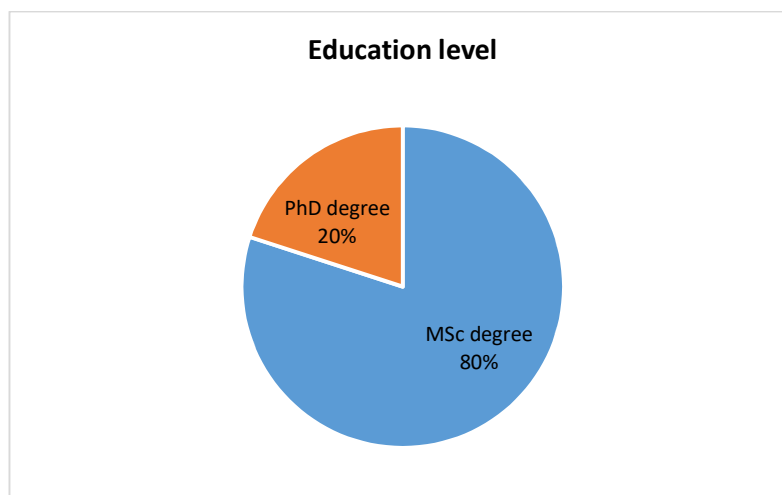
Graph 18: Familiar with online studies

4.3 Analysis of questionnaire for stakeholders

In total 5 stakeholders responded the questionnaire in Durres. The 60% are of male gender and 40% of female. The most of them (60%) belong to age category 31-40 years old and 80% of them have a Master degree. Education and Human Society, Biological and Biotechnological Sciences and Interdisciplinary sciences were the field of the expertise of most of the participants (40%, 20% and 20% respectively). The 60% of the participants work less than ten years in the company while 20% work more than ten (11-20) and other 20% more than 20 years (**Table 1**). Most of the participants work in private SME (60%) while 40% work in public institution/company.



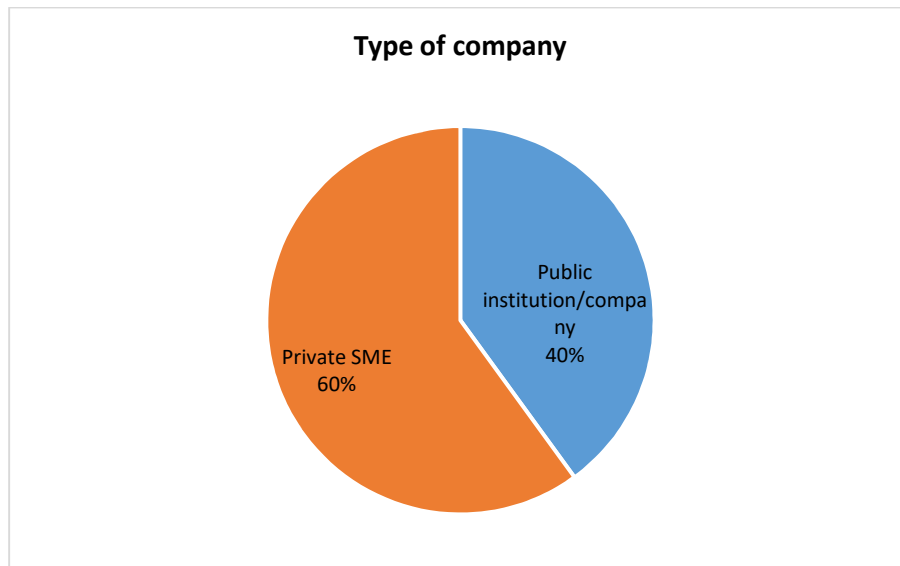
Graph 1: Gender



Graph 2: Education level

Table 1: Demographic characteristics

	Frequency (N)	Percent (%)
Gender		
Male	3	60.0
Female	2	40.0
Age		
31-40	3	60.0
51-60	2	40.0
Education level		
MSc degree	4	80.0
PhD degree	1	20.0
Field of expertise		
Education and Human Society	2	40.0
Biological and Biotechnological Sciences	1	20.0
Interdisciplinary sciences	1	20.0
Other	1	20.0
Working in the organization/company		
2-10	3	60.0
11-20	1	20.0
21-30	1	20.0
Entity type		
Public institution/company	2	40.0
Private SME	3	60.0



Graph 3: Type of company

As about classification of their organization/company activities 20% categorize in “Agriculture, forestry and fishing”, 20% in “Administrative and support service activities”, 20% in “Information and communication” and 40% in “Education activities”. Regarding the size of the companies, 20% have less than ten employees and 40% from 50-249 employees and >250 employees respectively (**Table 2**).

Table 2: Type of organization activity

	Frequency (N)	Percent (%)
Type of organization		
Section A Agriculture, forestry and fishing	1	20.0
Section J Information and communication	1	20.0
Section N Administrative and support service activities	1	20.0
Section P Education	2	40.0
Section A Agriculture, forestry and fishing	1	20.0
Size of the company		
Micro (< 10 employees)	1	20.0
Medium (50-249 employees)	2	40.0
Large (> 250 employees)	2	40.0

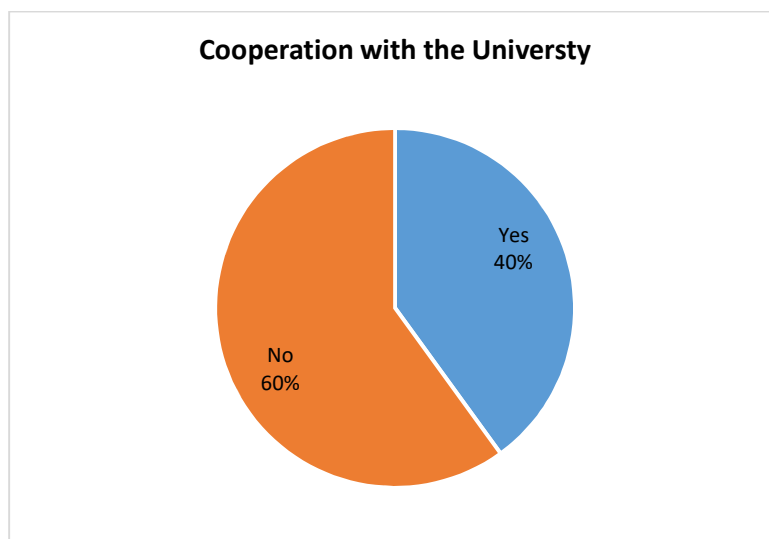
The 40% responded that their companies have cooperated with University of Durres in the past. Among those reporting not a collaboration till now, 40% is willing to start cooperation with the University while among those saying yes, 60% have an agreement with the University. As about the quality of this cooperation, 60% rate it as very good and 40% as good. The 60% rate as very important the current or future cooperation with the University of Durres "A. Moisiu" for their business while 20% reported as slightly important and fairly important respectively. The 60% indicate that the way of cooperation with the University is through education activities and 40% through innovation activities. All of the stakeholders that participated in the survey report as very important that students should have experience within the broader fields of Maritime Environmental Protection and Management (MEP&M) (**Table 3**).

Table 3: University businesses collaboration

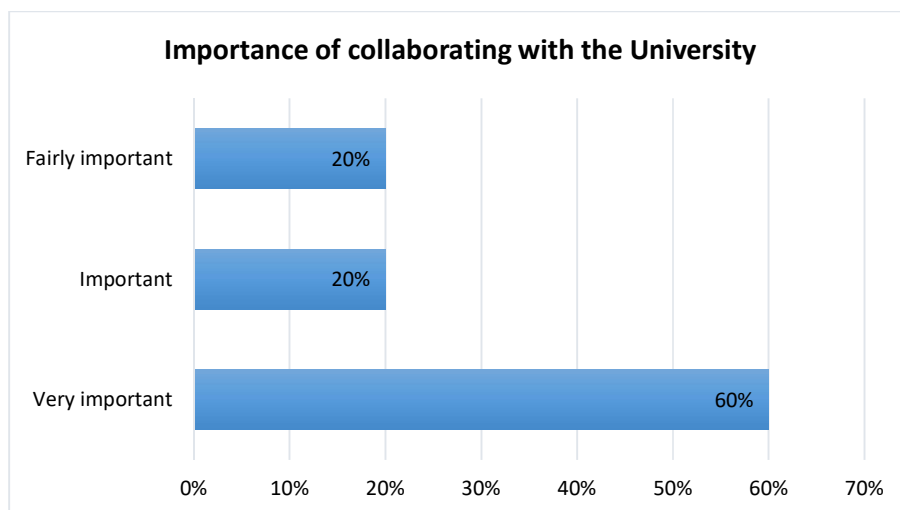
	Frequency (N)	Percent (%)
Cooperation with Durres University		
Yes	2	40.0



No	3	60.0
Importance of collaborating with the University		
Very important	3	60.0
Important	1	20.0
Fairly important	1	20.0
Way of cooperation		
Cooperation through education	3	60.0
Cooperation through innovation	2	40.0
Importance MEP&M		
Very important	5	100.0



Graph 4: Cooperation with the University



Graph 5: Importance of collaborating with the University



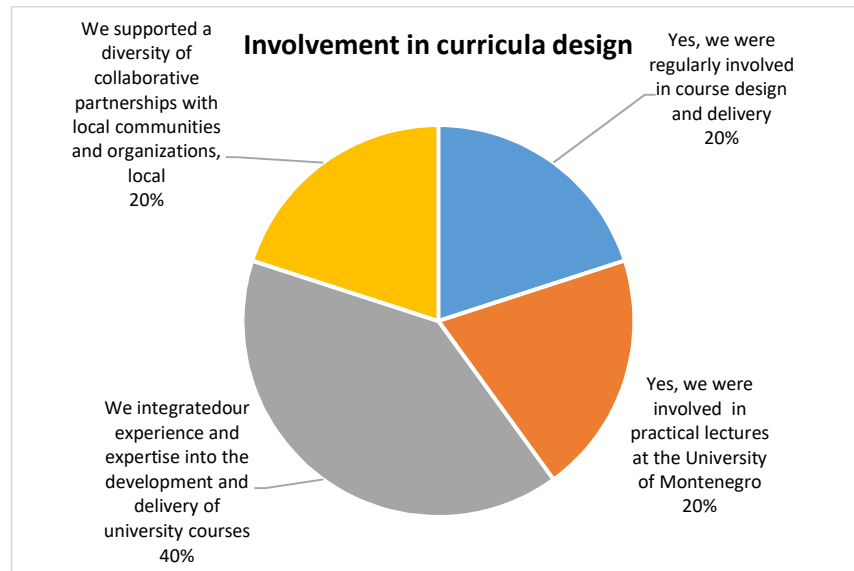
All participants strongly agree and/or agree that Environmentalists are good role models for young people and 80% strongly agree that to act and think environmentally is an important feature of modern life. All participants strongly agree that students should learn to think and act environmentally during their time at university. The 80% strongly agree that education in broader fields of maritime environmental protection and management should be an integral part of the curriculum at all levels of education. However, 80% of the participants strongly agree that academic staff should be able to motivate students to think and act environmentally (**Table 4**). The 20% of the stakeholders' report that are regularly involved in course design and delivery, 20% is involved in practical lectures at the University and 40% provided support to academic staff for high-quality course content (**Graph 6**).

Table 4: Beliefs about environmental issues

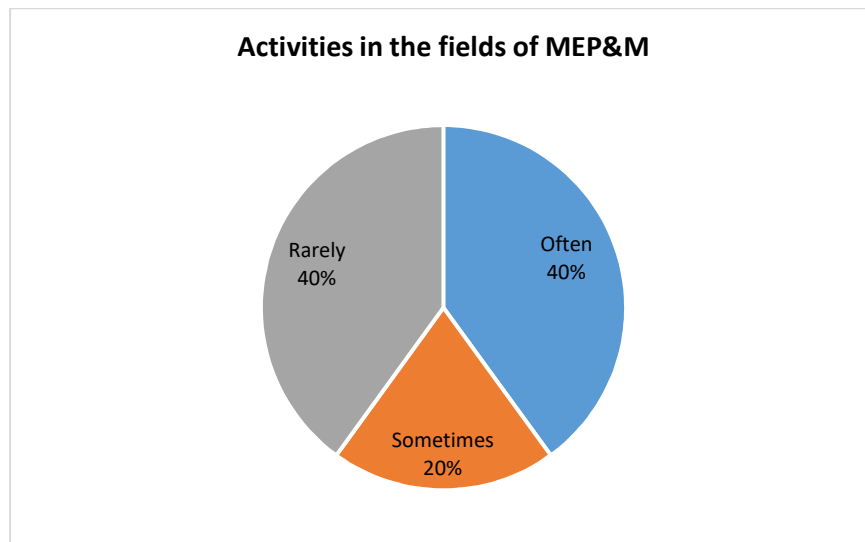
	Strongly Agree	Agree	Neutral
	N (%)	N (%)	N (%)
Environmentalists are good role models for young people (students)?	3 (60)	2 (40)	0
To act and think environmentally is an important feature of modern life	4 (80)	1 (20)	0
Students should learn to think and act environmentally during their time at university	5 (100)	0	0
MEP&M part of the curriculum	4 (80)	1 (20)	0
Academic staff to motivate students	4 (80)	1 (20)	0

The 80% of the stakeholders strongly agree and/or agree that the University of Durres should be committed more to collaboration and knowledge exchange with all actors in the economic market and all participants strongly agree and/or agree that the University should involve more industry/business sector (wider community) activities to exploit new knowledge. The 80% of the stakeholders agree that their organization/company should demonstrate active involvement in partnerships and relationships with the University of Durres. However, 60% strongly agree that their organization/company demonstrates active involvement in partnerships and relationships with a wide range of stakeholders. In addition, 60% strongly

agree and/or agree that their organization/company provides opportunities for students to take part in different activities with business/external environment while 20% are neutral (**Table 5**). The 60% of the participants report that often and/or sometimes their organization/company address some of the activities in the fields of Maritime Environmental Protection and Management (**Graph 7**). The specific areas of these activities are presented in table 6.



Graph 6: Involvement in curricula design



Graph 7: Activities in the fields of MEP&M

Table 5: Industry/business role and attitude toward collaboration

	Frequency (N)	Percent (%)
Collaboration and knowledge exchange with all actors		
Strongly Agree	2	40.0
Agree	2	40.0
Neutral	1	20.0
Involve more industry/business		
Strongly Agree	1	20.0
Agree	4	80.0
Demonstrate active involvement in partnerships		
Strongly Agree	1	20.0
Agree	4	80.0
Relationships with a wide range of stakeholders		
Strongly Agree	3	60.0
Agree	2	40.0
Provides opportunities for students		
Strongly Agree	1	20.0
Agree	2	40.0
Neutral	2	40.0

Table 6: Specific areas of the activities

	Frequency (N)	Percent (%)
Specific areas of the activities		
Entrepreneurship and innovation	2	40.0
Marine ecology	1	20.0
Marine environmental protection	1	20.0
Management of protected marine areas	1	20.0

The 80% of the participants report that probably or possibly their organization/company plan to include more activities in its business in the field of Maritime Environmental Protection and Management. All participants report that definitely or probably if a 2-year Master degree program in interdisciplinary field of Maritime environmental protection and management on English and adapted for professionals in companies would have interest in suggesting to their colleagues to enroll in order to get deeper knowledge in this field. Additionally, 60% report that definitely if was a 2-year Master degree program in interdisciplinary field of Maritime environmental protection and management on English their company would have interest in providing internship for students (**Table 7**).



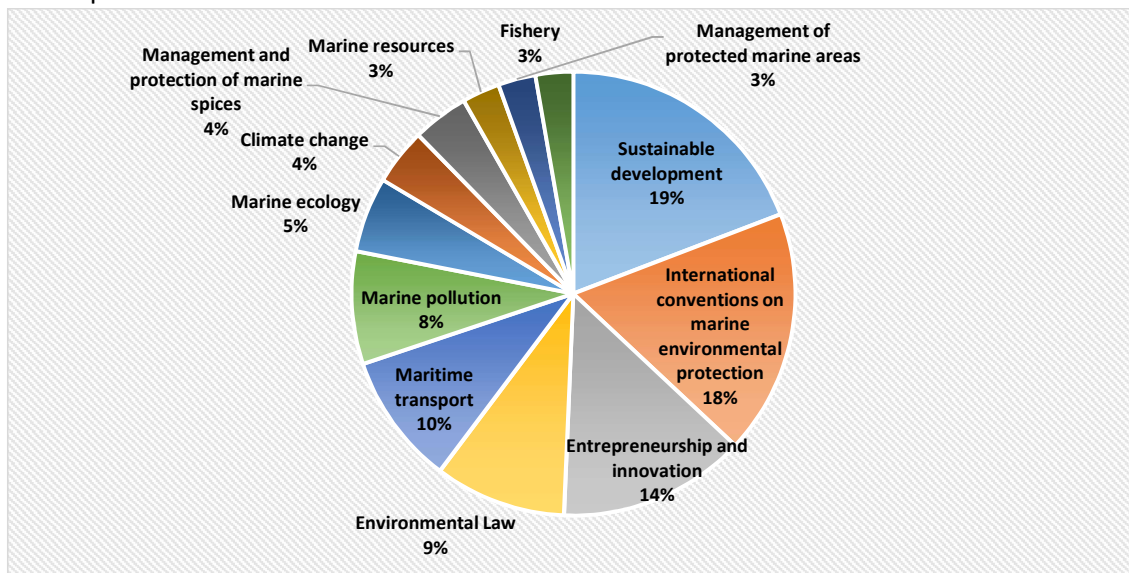
Table 7: Possible future activities of companies if a Master exists in MEP&M

	Frequency (N)	Percent (%)
Include more activities in MEP&M		
Probably	1	20.0
Possibly	3	60.0
Definitely Not	1	20.0
A 2-year Master degree program interest in suggesting your colleagues to enroll in order to get deeper knowledge in this field		
Definitely	3	60.0
Probably	2	40.0
A 2-year Master degree program interest in providing internship for students		
Definitely	3	60.0
Probably	2	40.0

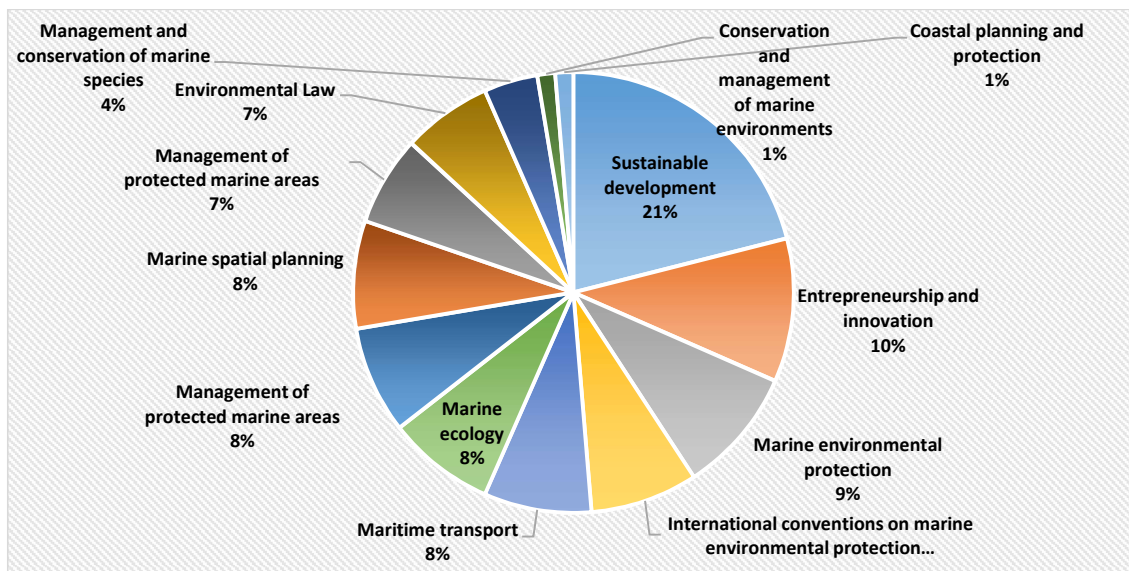
5. Overview of results on preferable topics in MEP&M field among academic staff, students and stakeholders in Montenegro and Albania

Author of Overview: Danilo Nikolic, Maja Skuric, Radmila Gagic, University of Montenegro (Montenegro)

This section graphically reviews the results of all three universities in the field of MEP&M in which professors, students and stakeholders are most interested (Graphs 1, 2 and 3). These results will be used for DEV 1.3 Report in which will be given directions for curriculum development in MSc MEP&M.



Graph 1: Interest of academic staff in MEP&M topics for all 3 universities



Graph 2: Interest of Montenegrin and Albanian stakeholders in MEP&M topics



6. Concluding remarks

Author of Concluding remarks: Srdjan Redzepagic, Université Côte d'Azur (France)

Thru three parts with relevant questionnaires from three partner countries universities (one from Montenegro and two from Albania) respectively: University of Montenegro, University of Vlore and University of Durres, we have seen here the comparison of actual performances with the desired ones that have been delivered in DEV 1.2 through this GAP analysis. Reading the document, we have seen that each of these three universities has provided also questionnaires for their university and very clear analysis, showing results from questionnaires for academic staff, students but also for stakeholders. This has given very clear understanding of all issues needed to ensure that all the best practices from EU will be used to meet the needs of partner countries higher education institutions, and that prepared MSc program curricula and course catalogues will be synchronized with relevant national and international legislation and strategies in field of marine environmental protection. There are seen the main results of a GAP analysis that are showing additional sub-areas that should be included for developing teaching methodology and practical skills in new joint MSc in MEP&M.



APPENDIX I

Authors of Questionnaires: Danilo Nikolic, Maja Skuric, Radmila Gagic, University of Montenegro, Montenegro

The questionnaire was available at link:

https://docs.google.com/document/d/1-ZE3j6voIXIdUq1Dyr23fvJWta_Mabg-/edit?usp=sharing&oid=105214250995290918895&rtpof=true&sd=true;



Co-funded by the
Erasmus+ Programme
of the European Union

Questionnaire for academic/research staff

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The project will address the following specific objectives:

- Based on the state-of-the-art in Maritime Environmental Protection and Management (MEP&M) education and research, to develop regional joint interdisciplinary master program in the English language for students and professionals having at least a BSc degree, to address the long-term needs in specific issues of coastal and marine environmental protection and management in South Adriatic and Ionian Seas, thus strengthening the international competitiveness of Montenegrin and Albanian HEIs.
- To build up human and technical capacities of PC HEIs to support the new master program in MEP&M.
- To enhance networking among PC HEIs, governmental institutions, Blue economy sector enterprises, and NGOs in order to act regionally in order to prevent and cope with consequences of global climate change and local/regional marine pollution.

All information will be treated in the strictest confidence and all will be used only for purpose of this study.

1. *What is your gender?*

M

F

Other



2. *What's your age?*

22 - 30

31 - 40

41 - 50

51 - 60

61 and higher

Other _____

3. *Please choose the name of your Faculty at the University of Montenegro:*

Faculty of Maritime Studies Kotor

Institute for Marine Biology

Other _____

4. *What is your position at the University?*

Full Professor/Scientific advisor

Associate Professor/Senior scientific associate

Assistant Professor/Scientific associate

Teaching assistant/Research assistant

Researcher/Researcher

Other _____

5. *How many years have you been working as an academic/research staff?*

0 - 10

11 - 20

21 - 30

31 - 40

6. *Specify your teaching/research area (multiple choice available)*

Physical, Chemical and Earth Sciences

Humanities and Creative Arts

Engineering and Environmental Sciences

Education and Human Society

Economics and Commerce

Mathematical, Information and Computing Sciences

Biological and Biotechnological Sciences

Interdisciplinary sciences

Other _____

7. *Specify the level of studies that you are teaching in 2021/22 academic year (multiple choices available)?*

BSc

MSc

PhD

8. *Have you delivered a course in broader fields of Maritime Environmental Protection and Management (MEP&M) in the last 5 years?*

Yes



No

9. *If yes, please give yearly approximation of number of students that attended your lectures on course(s) in broader fields of Maritime Environmental Protection and Management (according to study level):*

Bachelor

None

1-30

31-50

51-80

More than 80

Master

None

1-10

11-20

More than 20

PhD

None

1-5

6-10

More than 10

10. *Have you delivered a seminar/training/workshop to non-student population in broader fields of Maritime Environmental Protection and Management in the last 5 years?*

Yes

No

11. *If yes, specify the number of participants that attended your seminar/training/workshop in broader fields of Maritime Environmental Protection and Management:*

<5

6-10

11-20

More than 20

12. *Does your institution offer any in-curricular or extracurricular activities focusing on the behavior, skills, knowledge and creativity development in the broader fields of Maritime Environmental Protection and Management?*

Yes

No

13. *Please specify the number of academic/research staff involved in your institution's activities development in the broader fields of Maritime Environmental Protection and Management. If you do not know the exact figure, please give us your best estimate.*



14. Did your faculty/institute implement activities related the broader fields of Maritime Environmental Protection and Management (e.g. projects, research, workshops, seminars, trainings, summer school etc.)?

Yes

No

15. If yes, when (the possibility of multiple answers):

Previously concluded

They are currently active

Activities are planned for the upcoming period

16. If no, are they planned for the future?

Yes

No

17. Do you hold courses/part of the course related to the broader fields of Maritime Environmental Protection and Management in academic 2021/22?

Yes

No

18. If yes, please specify a number of courses:

19. If yes, please specify level of study (the possibility of multiple answers):

BSc

MSc

PhD

20. If yes, please specify total number of ECTS:

21. If yes, are your courses related to the broader fields of Maritime Environmental Protection and Management:

Compulsory

Elective

Both

22. Do you agree that the specific fields of Maritime Environmental Protection and Management should be included more in your existing courses?

Strongly Agree

Agree

Undecided

Disagree

Strongly Disagree

23. Did you include the industry or business sector staff in the practical part of your course lectures?

Yes

No



24. *If yes, please specify the number of lectures given by industry or business sector practitioners during the academic year 2020/21?*

1-5

6-10

More

25. *Do you agree that the specific fields of Maritime Environmental Protection and Management should be included more in your research?*

Strongly Agree

Agree

Undecided

Disagree

Strongly Disagree

26. *Are you familiar with the policies/strategy/action plans regarding maritime environmental protection in Montenegro?*

Extremely familiar

Very familiar

Moderately familiar

Slightly familiar

Not at all familiar

27. *How often does your faculty make use of the following teaching methods in the Maritime Environmental Protection and Management education?*

Lecturing

Often Sometimes Rarely Never I do not know

Case studies

Often Sometimes Rarely Never I do not know

Entrepreneurs/practitioners in the classroom

Often Sometimes Rarely Never I do not know

Project teams

Often Sometimes Rarely Never I do not know

Company visits

Often Sometimes Rarely Never I do not know

Students from different faculties/disciplines to mix in the classroom

Often Sometimes Rarely Never I do not know

Exploring complex real-world problems

Often Sometimes Rarely Never I do not know

28. *Would you have interest in giving lectures if there is a Master degree program in field of Maritime environmental protection and management on English?*

Definitely

Probably

Possibly

Probably Not

Definitely Not

29. *If yes, please select topic you are interested in giving lectures:*



Sustainable development
Entrepreneurship and innovation
International conventions on marine environmental protection
Environmental Law
Maritime transport
Climate change
Marine pollution
Marine resources
Fisheries
Marine ecology
Marine environmental protection
Management of protected marine areas
Management and conservation of marine species
Management of coastal and marine environments
Conservation and management of marine environments
Offshore energy and mineral resources
Natural resources valorization
Integrated coastal zone management
Coastal planning and protection
Marine spatial planning
Maritime safety and security
Other _____

30. *If yes, rate your knowledge of English language?*

A1 – Low beginner

A2 – Advanced beginner

B1 – Low intermediate

B2 – Advanced intermediate

C1 – Lower advanced native speaker

C2 – Advanced native speaker

31. *How familiar are you with online teaching?*

Extremely familiar

Very familiar

Moderately familiar

Slightly familiar

Not at all familiar

32. *How would you assess teaching technology implemented in virtual classes?*

Excellent

Good

Fair

Poor

Very Poor

33. *How would you assess teaching methodology implemented in virtual classes?*



Excellent
Good
Fair
Poor
Very Poor

34. How would you assess the efficiency of online learning materials used in virtual classes?

Excellent
Good
Fair
Poor
Very Poor

35. How would you assess in general your student's performance in a virtual classes?

Excellent
Good
Fair
Poor
Very Poor

36. Questions or remarks?



APPENDIX II

Authors of Questionnaires: Danilo Nikolic, Maja Skuric, Radmila Gagic, University of Montenegro, Montenegro

The questionnaire was available at link:

<https://docs.google.com/document/d/1yGR8Peekbk5b9lspxs61lwHqnI8xB7M2/edit?usp=sharing&oid=105214250995290918895&rtpof=true&sd=true>;



Co-funded by the
Erasmus+ Programme
of the European Union

Questionnaire for students

This survey is conducted by the University of Montenegro within a project: „Development of Regional Joint Master Program in Maritime Environmental Protection and Management (MEP&M)” of the Erasmus + programme CBHE. This project has been funded with support from the European Commission. Project coordinator is University of Montenegro, Faculty of maritime studies Kotor. Project duration is 3 years (15/01/2021 – 14/01/2024).

The project will address the following specific objectives:

- Based on the state-of-the-art in Maritime Environmental Protection and Management (MEP&M) education and research, to develop regional joint interdisciplinary master program in the English language for students and professionals having at least a BSc degree, to address the long-term needs in specific issues of coastal and marine environmental protection and management in South Adriatic and Ionian Seas, thus strengthening the international competitiveness of Montenegrin and Albanian HEIs.
- To build up human and technical capacities of PC HEIs to support the new master program in MEP&M.
- To enhance networking among PC HEIs, governmental institutions, Blue economy sector enterprises, and NGOs in order to act regionally in order to prevent and cope with consequences of global climate change and local/regional marine pollution.

All information will be treated in the strictest confidence and all will be used only for purpose of this study.

1. *What is your gender?*



M
F
Other

2. *What is your age?*

18-25
26-30
31-35
More than 36

3. *Please choose the name of your Faculty/Institute at the University of Montenegro:*

Faculty of Maritime Studies Kotor

Other _____

4. *What study program are you enrolled in?*

5. *What study year are you at?*

BSc 1st year
BSc 2nd year
BSc 3rd year
BSc graduate
MSc 1st year
MSc 2nd year
MSc graduate

6. *What is your approximate cumulative grade?*

(A) 9.50-10.00
(B) 8.50-9.49
(C) 7.50-8.49
(D) 6.50-7.49
(E) 6.00-6.49

7. *Did you spend part of your higher education abroad (e.g. Erasmus + mobility)?*

Yes
No

8. *If yes, please state the time period you spent abroad?*

9. *If yes, please rate your satisfaction with this experience?*

Excellent
Good
Fair
Poor
Very Poor



10. Do you have working/internship experience? (e.g. at Student Service, participation in Work & Travel program, part-time jobs)

Yes

No

11. If yes, how many months have you been employed/engaged?

0-6

7-12

More than 12

12. If yes, please rate your satisfaction with this experience?

Excellent

Good

Fair

Poor

Very Poor

13. In which broader field of Maritime Environmental Protection and Management (MEP&M) are you interested in (multiple option):

Sustainable development

Entrepreneurship and innovation

International conventions on marine environmental protection

Environmental Law

Maritime transport

Climate change

Marine pollution

Marine resources

Fisheries

Marine ecology

Marine environmental protection

Management of protected marine areas

Management and conservation of marine species

Management of coastal and marine environments

Conservation and management of marine environments

Offshore energy and mineral resources

Natural resources valorization

Integrated coastal zone management

Coastal planning and protection

Marine spatial planning

Maritime safety and security

Other _____

14. Did you have courses in broader fields of Maritime Environmental Protection and Management since your enrolment at the University of Montenegro?

Yes

No

15. If yes, please rate your satisfaction with the content of those lectures?

Excellent

Good



Fair
Poor
Very Poor

16. *Did you have part of curricula dedicated to fields of Maritime Environmental Protection and Management?*

Yes
No

17. *If yes, please rate your satisfaction with the content of those lectures?*

Excellent
Good
Fair
Poor
Very Poor

18. *Do you agree that broader fields of Maritime Environmental Protection and Management education is relevant for your future career?*

Strongly Agree
Agree
Undecided
Disagree
Strongly Disagree

19. *What kind of other extracurricular activities focusing on broader fields of Maritime Environmental Protection and Management have you experienced? (multiple choice available)*

Seminars/workshops
Business plan/venture capital competitions
Company visits
Matchmaking events between students and stakeholders
Summer schools
Other _____

20. *How often does your faculty make use of the following teaching methods?*

Lecturing

Often Sometimes Rarely Never I do not know

Case studies

Often Sometimes Rarely Never I do not know

Project teams

Often Sometimes Rarely Never I do not know

Company visits

Often Sometimes Rarely Never I do not know

Students from different faculties/disciplines to mix in the classroom

Often Sometimes Rarely Never I do not know

Exploring complex real-world problems

Often Sometimes Rarely Never I do not know



21. *Do you agree that your Faculty should integrate more activities related to broader fields of Maritime Environmental Protection and Management?*

- Strongly Agree
- Agree
- Undecided
- Disagree
- Strongly Disagree

22. *Please rate the importance of Maritime Environmental Protection attitudes and culture at your faculty?*

- Very Important
- Important
- Moderately Important
- Slightly Important
- Unimportant

23. *Please rate the importance of environmentalist behavior among student population at your faculty?*

- Very Important
- Important
- Moderately Important
- Slightly Important
- Unimportant

24. *If there is a Master degree program in field of Maritime Environmental Protection and Management on English would you have interest in its enrolment?*

- Definitely
- Probably
- Possibly
- Probably Not
- Definitely Not

25. *Rate your knowledge of English language?*

- A1 – Low beginner
- A2 – Advanced beginner
- B1 – Low intermediate
- B2 – Advanced intermediate
- C1 – Lower advanced native speaker
- C2 – Advanced native speaker

26. *Do you have plans to be employed after graduation in one of the mentioned areas of MEP&M?*

- Definitely
- Probably
- Possibly



Probably Not
Definitely Not

27. *If yes in which specific filed:*

Sustainable development
Entrepreneurship and innovation
International conventions on marine environmental protection
Environmental Law
Maritime transport
Climate change
Marine pollution
Marine resources
Fisheries
Marine ecology
Marine environmental protection
Management of protected marine areas
Management and conservation of marine species
Management of coastal and marine environments
Conservation and management of marine environments
Offshore energy and mineral resources
Natural resources valorization
 Integrated coastal zone management
Coastal planning and protection
Marine spatial planning
Maritime safety and security
Other _____

28. *How familiar are you with online studying?*

Extremely familiar
Very familiar
Moderately familiar
Slightly familiar
Not at all familiar

29. *How would you evaluate your online courses experience?*

Excellent
Good
Fair
Poor
Very Poor

30. *How would you assess teaching technology implemented in virtual classes (DL platform, ZOOM, Microsoft Teams, etc.)?*

Excellent
Good
Fair
Poor
Very Poor



31. *How would you assess teaching methodology implemented in virtual classes?*

- Excellent
- Good
- Fair
- Poor
- Very Poor

32. *How would you assess the efficiency of online learning materials used in virtual classes?*

- Excellent
- Good
- Fair
- Poor
- Very Poor

33. *How would you assess in general your professor's performance in a virtual classes?*

- Excellent
- Good
- Fair
- Poor
- Very Poor

34. *Questions or remarks?*



APPENDIX III

Authors of Questionnaires: Danilo Nikolic, Maja Skuric, Radmila Gagic, University of Montenegro, Montenegro

The questionnaire was available at link:

https://docs.google.com/document/d/1gJAVcdU32d9VvXyzJFqF-Ea45SN_xVfo/edit?usp=sharing&oid=105214250995290918895&rtpof=true&sd=true;



Co-funded by the
Erasmus+ Programme
of the European Union

Questionnaire for stakeholders

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- To build up human and technical capacities of PC HEIs to support the new master program in MEP&M.
- To enhance networking among PC HEIs, governmental institutions, Blue economy sector enterprises, and NGOs in order to act regionally in order to prevent and cope with consequences of global climate change and local/regional marine pollution.

All information will be treated in the strictest confidence and all will be used only for purpose of this study.



1. *What is your gender?*

M

F

Other

2. *How old are you?*

20-30

31-40

41-50

51-60

>61

3. *Please specify your education level:*

High school

BSc degree

MSc degree

PhD degree

4. *What is your field of expertise?*

Humanities and Creative Arts

Engineering and Environmental Sciences

Education and Human Society

Economics and Commerce

Mathematical, Information and Computing Sciences

Biological and Biotechnological Sciences

Interdisciplinary sciences

Other _____

5. *How many years have you been working in the organization/company?*

<1

2-10

11-20

21-30

>31

6. *What is your position in the organization/company?*

7. *What is the structure of the business entity you are working at?*

Public institution/company

Private SME

Private Family business

NGO

Other _____

8. *Please specify the year of organization's/company's establishment:*



9. Please choose an appropriate classification of your organization/company activities according to sections:

Section A Agriculture, forestry and fishing

Section B Mining and quarrying

Section C Manufacturing

Section D Electricity, gas, steam and air conditioning supply

Section E Water supply, sewerage, waste management and remediation activities

Section F Construction

Section G Wholesale and retail trade; repair of motor vehicles and motorcycles

Section H Transportation and storage

Section I Accommodation and food service activities

Section J Information and communication

Section K Financial and insurance activities

Section L Real estate activities

Section M Professional, scientific and technical activities

Section N Administrative and support service activities

Section O Public administration and defense; compulsory social security

Section P Education

Section Q Human health and social work activities

Section R Arts, entertainment and recreation

Section S Other service activities

Section T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

Section U Activities of extraterritorial organizations and bodies

10. Please categorize the size of your organization/company:

Micro (< 10 employees)

Small (11-49 employees)

Medium (50-249 employees)

Large (> 250 employees)

11. Has your organization/company cooperated with the University of Montenegro?

Yes

No

12. If not, is your organization/company willing to start cooperation with the University of Montenegro?

Yes

No

13. If yes, did your organization/company sign the agreement with the University of Montenegro (e.g. became a member of the teaching or research base)?

Yes

No

14. If yes, please rate quality of the cooperation with the University of Montenegro?



Very good
Good
Fair
Poor
Very poor

15. *Please rate the importance of current or future cooperation with the University of Montenegro for your business?*

Very important
Important
Fairly important
Slightly important
Not important

16. *Please indicate the way of cooperation with the University of Montenegro? (multiple choice available)*

Cooperation through education
Cooperation through innovation
Cooperation through research
All above listed
Other _____

17. *In your opinion, rate importance that students should have experience within the broader fields of Maritime Environmental Protection and Management (MEP&M):*

Very important
Important
Fairly important
Slightly important
Not important

18. *What is your opinion on the following statements?*

Environmentalists are good role models for young people (students)

Strongly Agree
Agree
Neutral
Disagree
Strongly disagree

To act and think environmentally is an important feature of modern life

Strongly Agree
Agree
Neutral
Disagree
Strongly disagree

Students should learn to think and act environmentally during their time at university

Strongly Agree
Agree
Neutral



Disagree

Strongly disagree

Education in broader fields of maritime environmental protection and management should be an integral part of the curriculum at all levels of education

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree

Academic staff should be able to motivate students to think and act environmentally

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree

19. *Did the University of Montenegro contact you to participate in designing curricula? (multiple choice available)*

Yes, we were regularly involved in course design and delivery

Yes, we were involved in practical lectures at the University of Montenegro

We provided support to academic staff for high-quality course content

We integrated our experience and expertise into the development and delivery of university courses

We supported a diversity of collaborative partnerships with local communities and organizations, local and regional governments, chambers of commerce, industry and university alumni

Other _____

20. *Do you find that the University of Montenegro should be committed more to collaboration and knowledge exchange with all actors in the economic market?*

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree

21. *Do you agree that the University of Montenegro should involve more industry/business sector (wider community) activities to exploit new knowledge?*

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree

22. *Do you agree that your organization/company should demonstrate active involvement in partnerships and relationships with the University of Montenegro?*

Strongly Agree

Agree

Neutral

Disagree



Strongly disagree

23. *Your organization/company demonstrates active involvement in partnerships and relationships with a wide range of stakeholders.*

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree

24. *Your organization/company provides opportunities for students to take part in different activities with business/the external environment.*

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree

25. *Does your organization/company address some of the activities in the fields of Maritime Environmental Protection and Management?*

Often

Sometimes

Rarely

Never

I do not know

26. *If yes, please describe specific areas of the activities:*

Sustainable development

Entrepreneurship and innovation

International conventions on marine environmental protection

Environmental Law

Maritime transport

Climate change

Marine pollution

Marine resources

Fisheries

Marine ecology

Marine environmental protection

Management of protected marine areas

Management and conservation of marine species

Management of coastal and marine environments

Conservation and management of marine environments

Offshore energy and mineral resources

Natural resources valorization

Integrated coastal zone management

Coastal planning and protection

Marine spatial planning

Maritime safety and security



Other _____

27. Does your organization/company plan to include more activities in its business in the field of Maritime Environmental Protection and Management?

Definitely

Probably

Possibly

Probably Not

Definitely Not

28. If there is a 2-year Master degree program in interdisciplinary field of Maritime environmental protection and management on English and adapted for professionals in companies would you have interest in suggesting your colleagues to enroll in order to get deeper knowledge in this field?

Definitely

Probably

Possibly

Probably Not

Definitely Not

29. If there is a 2-year Master degree program in interdisciplinary field of Maritime environmental protection and management on English would your company have interest in providing internship for students?

Definitely

Probably

Possibly

Probably Not

Definitely Not

30. Questions or remarks?

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