



Memorial University Academic Unit Planning Department

## Final Report for the School of Maritime Studies of the Marine Institute

Prepared by: The external stakeholder committee of:

- Dr. Cecile Badenhorst – Memorial University Faculty of Education
  - Mr. Leonard Pecore – Genoa Design International
    - Captain Philip McCarter – BCIT

May 28<sup>th</sup>, 2017

## Table of Contents

|   |    |
|---|----|
| Table of Contents .....                                     | 2  |
| 1. Panel Visit Overview .....                               | 3  |
| Section 1 recommendations .....                             | 3  |
| 2. Strategic Objectives .....                               | 4  |
| Summary of section 2 .....                                  | 6  |
| Section 2 recommendations .....                             | 6  |
| 3. Undergraduate Programs (Diploma and Baccalaureate) ..... | 6  |
| Summary of section 3 .....                                  | 9  |
| Section 3 recommendations .....                             | 10 |
| 4. Graduate Programs .....                                  | 10 |
| Summary of section 4 .....                                  | 12 |
| Section 4 recommendations .....                             | 12 |
| 5. Faculty/Centre Research and Scholarship .....            | 13 |
| Summary of section 5 .....                                  | 14 |
| Section 5 recommendations .....                             | 15 |
| 6. Public Engagement and University Collaboration .....     | 15 |
| Summary of section 6 .....                                  | 16 |
| Section 6 recommendations .....                             | 16 |
| 7. Organizational Structure and School Resources .....      | 17 |
| Summary of section 7 .....                                  | 19 |
| Section 7 recommendation .....                              | 20 |
| General comments .....                                      | 21 |

# AUP PANEL'S FINAL REPORT

## 1. Panel Visit Overview

An Academic Unit Planning (AUP) session is required to be conducted on each unit of Memorial University, including the Marine Institute, every three years. The School of Maritime Studies (SMS) of the Marine Institute was chosen to be the first unit within the Marine Institute to undergo such a process. The Academic Unit Planning Committee originally consisted of four external stakeholders. Unfortunately Dr. Bruce Colbourne was unable to attend. The remaining three stakeholders were; one from Memorial University Faculty of Education Dr. Cecile Badenhorst; one from industry Mr. Leonard Pecore; and one from a similar training facility, BCIT, Captain Philip McCarter. The visit spanned two and a half days from April 4<sup>th</sup> to 6<sup>th</sup>, 2017 inclusive.

The panel received a comprehensive report and an agenda from the SMS in advance of the meeting to provide context and data to assist with analysis. An Appendix B titled 'RECOMMENDED FORMAT FOR THE PANEL'S FINAL REPORT' was also provided to the panel to help formulate and standardize this final report. General comments not related to Appendix B and noted by the panel are provided at the end of this report.

The first day consisted of a number of presentations by elements of the School of Maritime Studies and an abbreviated tour of the facilities (due to time constraints). The second day consisted primarily of interviews with the faculty program heads.

The last ½ day consisted of the panel discussing its observations and formulating a timeline to provide its report to the Centre for Institutional Analysis and Planning (CIAP).

It would have been useful to have open sessions where any faculty member or student could provide feedback to the panel. We did meet one student but that student was invited. The panel would have liked a longer tour of the building in order to see the library facilities and/or student spaces.

### Section 1 recommendations

- A. For subsequent AUP sessions at the Marine Institute provide for the AUP panel to have consultations with students and a broader selection of faculty.
- B. For subsequent AUP sessions at the Marine Institute determine the questions in Appendix B 'Format for the AUP report' that are most important for the school in order to have the panel focus its effort.
- C. The AUP report's table of contents should have specified the title contents of the annexes.

## 2. Strategic Objectives

- **What are the strategic objectives of the school?**

The objectives as presented to the AUP panel were outlined in the AUP – Self Study. The use of the terms “goals”, “priorities” “objectives” seem to be used interchangeably. Consistent terminology will help make the messaging clearer. As such, the school’s goals are not as clear as they could be.

### Short term goals

It is noted that only 3 of the strategic goals are measurable. Since they cannot be measured, it will be difficult to determine if the goals are reached. The following goals, however, are measurable:

- a. Create a student course map
- b. Develop a research plan
- c. Develop a plan for Marine Professional development.

The panel noted that SMS and CMS objectives are stated in Annex A, however these are the stated ‘long-term priorities’ on page 6 of the self-study report.

It is recommended that CMS’s columned KPI’s need headings. It is not clear how CMS’s objectives are aligned with the Schools’ and the greater University’s Vision 2020. KPI’s for Centre for Marine Simulation (CMS) are stated on page 6 but these metrics are not aligned to the table of ‘averages sorted by course’ provided.

### Long term goals

It be better communicated how SMS goals align with Marine Institute goals. The long-term goal, “enhance the suite of education and training programs” is not measurable. The priorities appear to support the long-term goal. The terminology used to define goals and priorities, such as words like “enhance”, “restructure”, “increase”, “broaden”, “strengthen” and “establish stronger linkages”, make it difficult to define what the exact outcomes should be for the various programs and initiatives.

- **To what extent are stated school objectives being met? What is the evidence for these achievements?**

Please refer to the earlier comments on strategic goals and KPIs. The strategic objectives are mixed with goals and priorities. The goals and priorities that were established during the SMS retreat of 2016, and thus noted in the AUP Self Study, are not addressed in Annex A.

Annex A provides evidence how the school is presently meeting its long-term priorities. It is not clear whether long-term priorities take priority over short term objectives. A recommendation is that the terms of “goals”, “objectives”, and “priorities” be reconciled, clarified and used similarly in the school, the institute and the university. A

clear path of goals, showing alignment between levels and goals, would help the school work toward objectives within a given timeframe, knowing how success supports higher level goals.

A plan was not presented, showing how the school will enhance the complement and capabilities of faculty, or further develop and strengthen the present suite of programs or increase the School's involvement with international associations.

The panel was unable to determine whether the School of Maritime Studies is meeting its objectives as we are unsure how the KPI's align with goals, objectives or priorities.

- [How does the school support the mission and objectives of the Marine Institute and the University and other programs within the Marine Institute and University? i.e. alignment with the University's Strategic Frameworks - <http://www.mun.ca/president/initiatives/frameworks.php> and other planning documents within the Marine Institute and the University.](http://www.mun.ca/president/initiatives/frameworks.php)

There appears to be alignment, but it is not clearly shown. A summary document, with a graphical illustration of alignment between university, institute and school would be helpful. There is no evidence of the mission and objectives around the physical building and spaces. Posters or wall art would be helpful, and would help to communicate the messages.

The alignment with MI vision 20/20 is referenced on page 7 of the AUP self-study document, and alignment with the University's Strategic Frameworks of 'Teaching and Learning', 'Research Strategy' and 'Public Engagement' are referenced on pages 7 and 8 of the AUP self-study document referred to <http://www.mun.ca/president/initiatives/frameworks.php> and other planning documents within the Marine Institute and the University.

Annex K provides some evidence that the School is trying to better align with the university's research framework through a consultative process with faculty.

There is little evidence how SMS is supporting the other schools within the MI. This is not listed as a short-term or long term priority in Annex A. Interaction with School of Fisheries and the new Holyrood facility was mentioned during a presentation.

- [How are the efforts of the school focused upon achieving the level of excellence \(provincial, national, international\) to which the school aspires?](#)

There appears to be a lack of alignment between staff, faculty, and students, concerning the vision of the SMS. To develop a proper vision, the school should involve all stakeholders including staff, management, faculty, university, students, and student groups.

It is unclear what exact level of excellence the school aspires to. There are many excellent efforts being made on an individual, and management basis, to do the best

that can be done. But it is not clear what specific level of excellence is trying to be achieved. How could this be defined? On what facts would one evaluate the school as a certain level of excellence? The criteria should be visible and shared with faculty and staff. The strategic plan should then include that criteria.

Some evidence was provided on pages 8 and 9 of the AUP self-study document, explaining good relationships with Transport Canada Marine Safety and Security and International Association of Maritime Universities (IAMU); these relationships were confirmed via tele-conferences, and those agencies appreciated their work with SMS.

## Summary of section 2

There is poor alignment of Marine Institute strategic goals with the School of Maritime Studies objectives. KPI's are not measurable.

### Section 2 recommendations

- A. SMS must review its objectives and clearly link them with the Marine Institute's strategic goals
- B. SMS should draft KPI's that are measurable

## 3. Undergraduate Programs (Diploma and Baccalaureate)

- **How well is the school performing its undergraduate teaching and learning function?**  
Feedback from students provided in Annex F of the AUP self-study document suggests that the school is performing its undergraduate teaching and learning function. SMS is meeting Transport Canada Marine Safety and Security (TCMSS) standards as indicated via the teleconference with them on day 1. This meeting also indicated that SMS was involved in curriculum development that helped TCMSS, other Marine institutes as well as SMS.

Student surveys were provided in Annex G of the AUP self-study document. 80% level is the target and this is being met. Student satisfaction with the BMS program was not provided in the AUP self-study document and it was indicated on page 18 that 'specific information on graduate satisfaction is not available'.

Program Advisory Committee (PAC) minutes were provided for Naval Architecture and Marine System Design programs. However PAC meeting minutes for the other programs offered by the school were not provided in the self-study report.

Work terms provided and berths for the cohorts are in place – a challenge given the limited number of spaces available for cadets nationally.

Comments were made that the content of the BMS program needs to be updated. Some argued that there was a need for faculty to stay contemporary. There was a strong sentiment articulated by some of the interviewees that teaching and learning at the diploma level is to ‘train students to work on ships’ only and not to ‘educate’ them with soft skills.

The capacity for online delivery of TCMSS courses is developing well.

- [Is the curriculum sufficiently comprehensive and rigorous compared to similar programs in Canada and elsewhere?](#)

Very detailed curriculum is available on the MI intranet/SharePoint. If this is a goal, then some definition around ‘comprehensive’ and ‘rigor’ needs to be created upon which to measure.

- [Are the grading norms consistent with those used in similar programs in Canada and elsewhere?](#)

Grading norms for diploma programs are consistent with TCMSS requirements. For BMS program grading norms information upon which to measure this against other international institutes was not provided to the panel members. The Marine Institute is a member of the International Association of Maritime Universities (IAMU). There was reference to collaboration with other universities however it was not framed in the context of grading norms. Such a baccalaureate program is not offered elsewhere in Canada.

- [Is the school properly staffed to fulfill its undergraduate responsibilities?](#)

The answer to this question presents challenges to the SMS. It is summarized in section 8.3 of the AUP self-study document. This essence of this important issue is captured in the last paragraph of section 8.3 on page 26. Some Faculty Chairs indicated that class sizes are too large and teaching quality is compromised as a result. With a big class it becomes difficult to see if students are in trouble and to help them in time. More lab assistants to help with increased student numbers would be helpful.

The panel concluded that it is staffed to barely meet existing responsibilities; and would be stretched to meet the school’s proposed goals. Trying to stay contemporary due to technological advances is a challenge for some programs; and is often held back by budget. The union collective agreement (CA) is seen as an obstacle to moving forward.

- [Are classes the appropriate size to accomplish its teaching and learning goals?](#)

Class size was mentioned during the interviews with program chairs. Class size is limited by TCMSS and due to restrictions in the number of laboratories. 48 students in a cohort for some programs were viewed to be too large.

- **Is there sufficient demand from students for the program?**

Enrolment numbers were provided in Annex C of the AUP self-study document. Demand is stable for all programs except for Naval Architecture and Marine Systems Design (NA and MSD). Some programs appear to be full with long waitlists. There definitely seems to be demand. Faculty Chairs also indicated that there was demand for the program. From a quality perspective TC recommends 24 students per class; SMS enrolls 48 in some courses, which perhaps indicates degradation in quality. Faculty Chairs mentioned that they did not want to graduate too many students because it would 'flood the market'. They were very concerned about finding students employment.

This is likely a question that deserves more time than this panel can dedicate to such a critical question.

- **How competitive are the school's undergraduate programs nationally and regionally in attracting qualified students and placing graduates in suitable positions?**

Enrolment numbers and employment rates were provided in Annexes C and F. They are fairly consistent over the years. One note of concern: there are two naval architecture programs within the same university. What would be the defining factor for how a student chooses which program is appropriate? A good question to ask...what answer does the school give to a student who is considering both courses and asks the question of an instructor? What would a Marine Institute instructor say? What would a faculty of engineering professor say? Compounding this issue; there appears to be little or no cooperation between these two similar programs. Enrollment targets for the BMS program were not provided to the panel.

- **Are recruiting and retention opportunities being maximized by the school, the Marine Institute and by the University?**

The Retention report – July 2016 provided in Annex D of the AUP self-study document. The retention rate in 2015/2016 as noted on page 15 of the AUP self-study document shows a decrease. Report in Annex D suggests weak academics are a cause. During a presentation there was evidence that the School is trying to address this issue however there are no clear strategies to reduce attrition. There are even some opinions that attrition is good because it motivates the remaining students!

- **Does the Marine Institute/University supply the library resources, computing and laboratory facilities, and other resources necessary to support the undergraduate program?**

Facilities were noted in Annex L of the AUP self-study document and some were viewed during the tour on day 1. The report describes the facilities but apart from the Centre for Marine Simulation (CMS) and some facilities the panel did not get to see and review. Some faculty Chairs spoke about needing upgrading to technology. Suggestions were a model building shop, propeller testing facilities, tank testing. They mentioned that they used to go to MUN engineering test tank facilities but 'that door is now closed'.



- [Is the school fulfilling its service responsibilities to other units in the University and/or community?](#)

Extensive community involvement noted in section 7.2 of the AUP self-study document. Within the university – the panel didn't have the data to explore this issue. This suggests that the SMS does NOT support other units of the University.

### Summary of section 3

Retention opportunities could be an area of focus. SMS indicated in the report – Annex H that they have a target of 90% retention for first year students but the retention rates are well below this. The main reason students are dropping out is for academic reasons. Faculty indicated that Math and Physics were problem areas for students and that they were working to scaffold these courses and build capacity in incremental stages to ensure that students were able to manage these courses successfully.

The diploma to degree issue also resonated strongly with faculty. Some Faculty chairs said that there was no need to change the diploma program and hold students back from employment while others felt strongly that students want degrees and that is the way forward. Some faculty said that all courses in some areas were determined by TCMSS and they asked how this would work with a degree. Some said that students seem happy with the diploma. What seems to be missing from the curriculum are the 'soft skills' – communication, leadership, etc. If diplomas become degrees, these will need to be incorporated.

There is also a strong need for the curriculum to respond to industry, so the School has to be very flexible in order to incorporate curriculum changes and updates as they happen.

The issue of the application of online learning to TCMSS approved courses is complex requiring further dialogue with the regulator.

Generally faculty chairs said that the existing program was working. They felt it was important to maintain control and where possible, enhance with degrees. Faculty seem dedicated and passionate about their programs. There appears to be desire to improve the programs, but the panel could not evaluate if the school's strategic direction is fully aligned with the faculty's vision.

The general consensus of all faculty interviewed are that the current suite of undergraduate programs are NOT adequately staffed. Most agree that student numbers per class are high, and have potential of compromising program quality. More staff is recommended, or decreased students per class per instructor.

For BMS degrees the School of Maritime Studies needs to ensure that there is a confident understanding of what industry expects from an employee with a Bachelor's degree, compared to an advanced technologist or technician, and then ensure that the BMS program prepares the student to operate at the level of an employee with a degree.

### Section 3 recommendations

- A. Obtain student satisfaction metrics for BMS program.
- B. Develop a process to measure student hours actually 'worked' in the program including studying time. The panel suggests a student survey to determine how many hours they work to pass certain courses and then compare this number to other schools to gauge rigor.
- C. SMS to continue the development of TCMSS approved courses.
- D. SMS ascertain its ranking on grading norms against its IAMU members.
- E. SMS to undertake a thorough review of its current CA with a view of proposing changes that will allow for SMS's strategic goals and objectives to be achieved.
- F. SMS to conduct a comparative study to determine how it ranks on class sizes nation-wide with institutes delivering similar courses and programs.
- G. SMS to investigate why enrollment numbers are consistently low for its NA and MSD programs and determine strategies to reverse the trend.
- H. SMS to investigate a process to integrate the two naval architecture programs.
- I. SMS to investigate a process to integrate the two University Naval Architecture programs.
- J. SMS to ascertain why facilities at MUN are not being made available to NA, MSD and Marine Engineering programs and develop strategies to resolve this block for the School to progress forward.
- K. For subsequent AUP sessions for the Marine Institute the panel should be provided with evidence to support that the unit is fulfilling its service responsibilities to other units of the University.

## 4. Graduate Programs

- **How effective is the school in performing its graduate teaching, learning and supervision responsibilities?**

The Master of Maritime Management (MMM) is a professional and interdisciplinary degree program and is course-based so there is no research thesis to supervise. The MMM started in 2010 with 18 students and has increased to 36 students in 2015. There has been a drop-off to 28 students in 2016. The aim of the degree was to provide a graduate degree opportunity to marine professionals. Courses include required and elective courses in two areas: Management and communication, and marine-related courses. It seems very important to SMS to maintain control over the degree curriculum

and required courses. The MMM is completed part-time and online. It is a course-based program and no supervision is required. This program appears to be successful.

- **Is the research and scholarly productivity of the school's faculty appropriate to its graduate responsibilities?**

The MMM is a course-based degree although it does contain a graduate research project. There was some indication from a few faculty who would like to extend the master's program to include a thesis-based masters. While others indicated that a research-based masters was not feasible because SMS lacks enough faculty who conduct research or have PhDs. Some faculty are involved in applied research but this research is primarily being driven by industry.

- **Are the graduate program's admissions criteria appropriate?**

Admission to the MMM program is competitive. To be admitted, applicants are required to have a second class or better undergraduate degree in an appropriate maritime sector, or appropriate technical knowledge. There is an option for recognition of prior learning for applicants who do not have an undergraduate degree. Preference is given to those who have at least 10 years relevant professional and managerial experience. These criteria seem appropriate. In Annex J, students, faculty and administrators suggested that SMS could be more flexible in their credit transfer policy which would allow for greater enrollment.

- **How successful are the school's graduate programs nationally and regionally in attracting qualified graduate students and placing graduate degree holders in professional employment?**

Twenty-seven students have graduated from the MMM since 2010. All are employed, since students enrolled in the degree to study part-time while employed. Students usually take the degree for career progression and register part-time. Annex J reported that some students, faculty and administrators feel that courses in the program could be more rigorous and that there was varying expectation in the program.

- **How competitive are the school's graduate programs nationally and regionally in attracting qualified graduate students and placing graduate degree holders in professional employment?**

See above.

- **Is the curriculum sufficiently comprehensive and rigorous compared to similar programs in Canada and elsewhere?**

The only comparable program is the Master of Marine Management at Dalhousie University. There was no way for the panel to assess the curriculum or its rigor. However, in Annex J, students, faculty and administrators contended that while the program was 'solid', the rigour and cohesiveness of the program was called into question.

- [Are the assessment standards consistent with those used in graduate programs in Canada and elsewhere?](#)

Again here, the panel could not assess the standards of assessment.

- [Is financial support for students at a level appropriate for the scope of graduate education activities desired within the school?](#)

Since this is a part-time, online program, financial support is not available to students.

- [Is the school appropriately resourced to action its responsibilities with respect to graduate programs?](#)

There are two internal faculty who regularly teach on the MMM. Two part-time instructors also teach on the program. A number of courses are taught by faculty in the School of Ocean Technology. Some faculty feel that it is necessary to move to a research-based masters, and a PhD program, to develop research capacity and expertise in SMS. If this move were to happen, further resources would be needed. Additional faculty with PhD's and research supervision capacity would be necessary.

- [Does the Marine Institute/University supply the library resources, computing and laboratory facilities, and other resources necessary to support the graduate program?](#)

Since the MMM is delivered online, the library facilities are the main resources that support the program. The Dr C.R. Barrett library is part of MUN's QEII library system and is located at the Marine Institute. It offers a comprehensive range of research material to students. The library collection supports the study of research in fisheries and aquaculture, marine technologies, nautical science, and the ocean environment. Library staff is available for online consultations.

#### Summary of section 4

The current MMM is well subscribed but lacks international exposure. Better marketing is needed. It is completely offered online. In order to broaden the MMM program into research then faculty members will need to be recruited. The current collective agreement will need to be negotiated to provide for a non-teaching 'instructor'.

#### Section 4 recommendations

- A. Develop consistency and rigour in the MMM program through regular monitoring and quality controls.
- B. Grow the MMM program by increasing intake and marketing to a wider range of students.
- C. Begin developing faculty research capacity with the aim of moving towards a research Master's degree.

- D. Develop partnerships with institutions in the field that could aid research/supervision capacity for a research Master's degree.

## 5. Faculty/Centre Research and Scholarship

- Is the balance of research, creative activity, and scholarship of the faculty appropriate for providing first-rate academic programs?

A large portion of SMS' budget comes from applied research. This is research conducted in response to industry demands. Although many faculty do not want to do research, others indicated that they would like to conduct more academic research. However, since the NAPE collective agreement specifies that instructors are hired to teach, there is little room to develop a research portfolio with heavy teaching loads. Resources have focused on students and applied research clients. Comparatively little time and capital has been devoted to research. SMS has identified research as an area for development and recognises the importance of research especially with regard to the funding that accompanies impactful research. The Centre for Marine Simulation (CMS) is the school's flagship for applied research. CMS possesses a comprehensive suite of marine simulation capabilities and competes regularly for project-based applied research and training. The main focus for research is modelling and simulation of harsh environments.

- How does the school rank among those in similar institutions regarding research productivity and quality, external funding, academic programs and teaching loads?

From a marine school perspective, SMS is really the only one in Canada that would be doing any kind of research. Some institutions do small amounts of work using their simulators to support industry. Internationally, of the IAMU member universities, SMS has been very successful and consistent in projects supported by the IAMU itself. However, as mentioned, teaching loads were described as being too high in order to properly pursue research endeavours.

- Are research facilities and library resources sufficiently supportive of faculty research and scholarly activities?

Library facilities are in place to support research. SMS has a number of facilities, particularly simulators that can be used for research. In a number of the marine/mechanical labs there is equipment that can be used for research, such as engine performance, although they are more geared towards teaching. The SMS library, which is part of the QEII library, houses books and resources (periodicals) focused on marine applications, which would be most applicable to research focused on marine transportation. The library has access to many on-line resources to support our programs and research. The Centre for Marine Simulation appears to be involved in most of the research currently being conducted, but the centre basically closes down for the summer, therefore most activity stops. The union regulations orchestrate this unusual and restrictive requirement.

- **Are faculty generating external funding up to their full potential?**  
There are no formal specific requirements for faculty to conduct research or generate external funding. A few faculty members do obtain funding for projects. It is difficult for faculty to engage in research because of workload and union requirements. Also, there are few incentives to conduct research. Faculty feel that their teaching workloads are too heavy and that they are not staffed/equipped to do research. About 1/3 to 1/4 of faculty think that a research focus was a good idea, that research would feed into teaching and generate income but some felt that their strongest capacity was as teachers. Many faculty members felt that research is conducted on an ad hoc basis and is not systematically institutionalized. They suggested a formal appraisal to ascertain interest in research, clearly allocated time for research for those who want to research, and more consultation between faculty, administration and union. Some faculty felt that they barely had enough time to teach, let alone generate external funding.
- **Are there potential barriers to research success within the school?**  
The strongest barrier to research is the NAPE collective agreement. Currently research is being conducted by a few faculty 'champions' who are interested in research and are willing to put the time into it. These faculty members submit grant proposals, conference papers and conference publications. CMS, in partnership with other departments at MUN, publish their applied research. Some faculty not motivated to do research.
- **Are there opportunities that may contribute to future research success for the school?**  
**One of the main barriers to research is tied to workload.**  
Faculty are hired to teach, not to conduct research. Most faculty have qualifications tied to industry certification and not the traditional academic qualifications such as bachelors, masters and PhD degrees. There are a few faculty who pursue research projects, and often take it on with no real change in their workload. SMS, however, does not have the capacity to free up faculty full time to undertake research unless the project was sufficiently large enough to allow additional hires. Research capacity needs to be developed and a culture of research encouraged. Workshops on publishing, academic writing, grant writing could be organised to develop a research culture. Course remissions and freeing time up for those who are interested would create the space for research. Research assistants who could assist with data collection would also help.

## Summary of section 5

Applied research is the focus of the School of Maritime Studies, primarily at the Centre for Maritime Simulation. A mechanism has to be developed to allow the School to further develop its pure research and/or academic research capabilities.

## Section 5 recommendations

- A. Identify faculty who want to conduct research and provide supports to grow a research base.
- B. Identify research goals for SMS.
- C. Create mechanisms to develop a research culture that enables research capacity and productivity such as professional development on publishing or grant writing.
- D. Hire more faculty with PhD's who are part of MUNFA.
- E. SMS to undertake a thorough review of its current Collective Agreement with a view of proposing changes that will allow for research goals and objectives to be achieved.
- F. Strengthen research linkages to other units at Memorial.

## 6. Public Engagement and University Collaboration

- **Is the school fulfilling opportunities to engage with and support the community?**  
Engagement activities are summarized in section 7 of the AUP self-study document. These activities are student centric in nature. There are some excellent initiatives including model boat race, informal links with alumni. Excellent engagement with industry was noted and demonstrated. Excellent relationship with Transport Canada witnessed. There is no evidence of engagement with local community. This was not explored by the panel.
- **Is the school, where appropriate, effectively introducing students to professional community service opportunities?**  
The Nautical Skills competition mentioned in the AUP self-study report is affiliated with the Canadian Company of Master Mariners. It appears that faculty try hard to introduce students to professional community service organizations. There does not appear to be a formal strategy to accomplish this goal.
- **Are the faculty/staff engaged in regional, national and international professional organizations?**  
SMS is a member of IAMU. How many faculty members actually contribute or are engaged? Maybe the same faculty always attend. It was noted during discussions that there was a school's desire to get more faculty involved.
- **Are faculty/staff engaged in relationships with business, government, cultural, or other relevant communities?**  
SMS is a leading and founding member of the Canadian Association of Maritime Training Institutes (CAMTI) and its association with TCMSS is evidence of a strong relationship. Participation in dragon boat races was mentioned in passing. Contribution by faculty, like the question above, may be limited to only those that show interest.

Industry/business relationships are conducted primarily through the Centre for Marine Simulation (CMS).

- **Does the school effectively reinforce the goals of other units?**  
Goals of other units were not discussed. There is little evidence to suggest that SMS does; Anecdotal in that the Holyrood base will support the School of Fisheries.
- **Do its members encourage and contribute to interdisciplinary activities?**  
It was suggested that the organizational structure, scheduling and workload inhibits inter-disciplinary activities. The different programs appeared to be siloed. There does not appear to be collaboration between programs, and definitely little collaboration seen between school and main campus.
- **Should it [the school] apply its efforts and resources in new or different ways in order to enhance its role within the Marine Institute and University?**  
The panel answers this question affirmatively. There is little evidence of university collaboration. Noted that faculty 'in the valley' has little knowledge of what is going on at MI. The SMS is having internal discussions on how to apply its resources to enhance its role within the Marine Institute and University.
- **What role are faculty playing in the Marine Institute's and University's research centres, interdisciplinary research groups, collaborating teaching initiatives and external partnerships?**  
Focus is in CMS and applied research. There is little or no evidence of scholarly or academic research by faculty members.

## Summary of section 6

This section of the expected outcome of the AUP report was not well supported by evidence in the self-study documentation provided to the Panel. Public engagement and University collaboration therefore appears to be weak and needs improvement; particularly if the school wishes to embark on its ambitious plans to elevate its credibility.

## Section 6 recommendations

- A. For subsequent AUP sessions for the Marine Institute the panel should be provided with evidence to support that the unit is supporting the local community.
- B. SMS develop a formal strategy to introduce students to professional community service opportunities.
- C. SMS develop a formal strategy to provide ALL faculty the opportunity to meaningfully contribute to professional organizations.



- D. SMS should develop a formal strategy to provide ALL faculty the opportunity to meaningfully contribute to government, cultural or other relevant community. This could include rotating faculty through CMS and instructional duties.
- E. For subsequent AUP sessions for the Marine Institute the panel should be provided with evidence to answer this, and the next two questions, if it is deemed important by the school.
- F. The SMS should develop strategies/mechanisms to have its faculty conduct scholarly or academic research.

## 7. Organizational Structure and School Resources

- **How effective and appropriate is the school's organizational structure and policies and procedures?**

The NAPE union seems inappropriate for the school instructors. The union rules and regulations restrict the ability of the instructor to conduct research or balance research with class instruction. There is no research position, such as a research chair, to guide research within the school. There are no guidelines for instructors to conduct research, other than 1 for 1 replacement of class time with research time due to union rules and regulations. Instructors do not appear to be involved with strategic and management activities.. There is evidence that they have no input into class size. Other organizational structures appear to be effective and appropriate. The panel saw no evidence of ISO, and therefore there was no ability to review or evaluate ISO compliance or relevance.

- **Are promotion and tenure policies appropriate to the school's mission and aspirations?**

This was not a focus of the panel. No access to policies in the two day period were provided. People seem restricted by their collective agreement. A collective agreement is in place that is 'trades' focussed and is very different from MUN. The collective agreement seems to be a stumbling block for CMS, for research and for teaching innovation.

Faculty appear engaged and enjoy their work at the school, but the union agreement holds them back from being able to perform like faculty. They are not empowered.

- **How successful is the school in implementing Marine Institute/University employment equity policies?**

This was not investigated by the panel. The statistics showing females and different nationalities amongst employees was not provided to the AUP team.

The general impression is that there is not very much diversity in terms of nationalities. In terms of gender equity, it was noted that Cathy Dutton is head of the School of Maritime Studies, and the panel also met with a female program head.

- **Are faculty and staff workloads equitable and appropriate to the school's missions?**  
This does not appear to be the case. Please refer to previous comments about the union. Also, in keeping with Section 2 on Strategic Objectives, there is no evidence that faculty have KPI to self-assess their performance, or direct their goals.

- **Are administrative decisions made and administrative tasks carried out efficiently and effectively?**

It appeared to the panel that yes, administrative decisions and tasks are carried out efficiently and effectively. Please refer to previous comments about involving faculty and staff with strategic directions. Once faculty and staff are aligned with overall strategic directions, administrative decisions and tasks become easier. There is evidence provided in the AUP self-study document that administration/management consulted with faculty regarding research and scholarship (Annex K) and the direction of changing diploma's to degrees' (Annex M). There is no evidence to support that faculty and staff has been consulted on the school, the institute's and the university's goals and objectives. Faculty chairs did mention that they needed more staff and would like more time to do teaching innovation, and research.

- **Does the reporting structure ensure managerial efficiency and administrative effectiveness within the school?**

The panel review was minimal in evaluating this aspect, but generally managerial efficiency and effectiveness appear positive. Management know their job well, so they have room to do more strategic work if they are empowered to do so.

- **How well are faculty and staff resources being used?**

Faculty are not involved with their course planning activities. They are assigned the number of students they must teach during any given year. They do not have control over numbers, but they have control over content. Faculty would like to have more control and ownership of their courses.

Some staff commented that their independent work to make changes to their program has been stifled by senior levels of management after significant amount of work.

Faculty have expressed that they could benefit from lab assistants.

One panel member notes that the faculty barely meet current demands; therefore they are being utilized fully. The appears to be no room for expansion unless changes are made to the funding model, reducing the number of course offerings, or reducing the number of students, in order to free up faculty to pursue long term goals of the school.

- **Is the school receiving adequate resources from the Marine Institute and University at large?**

This was not investigated, but there are some indicators that there are problems. There appears to be no collaboration between main campus and MI.

Branding at School of Maritime Studies appears to be separate from MUN branding.

There is little cooperation between the Naval Architecture department at SMS, and the Naval Architecture department in the department of engineering. The Naval Architecture department on the main campus appears to restrict the SMS from sharing any facilities. This is a missed opportunity.

The report indicated that almost half of the funding comes from applied research. This could be a growth area if faculty are supported to develop expertise in research.

- [Are its facilities adequate? Attention should be paid to space, equipment, computing, laboratory, library resources, etc.](#)  
Generally, facilities seem adequate, impressive and clean, but the panel did not investigate this in depth. Classroom space seems filled. There does not appear to be any research-oriented space available in the building. Faculty expressed satisfaction with available laboratory spaces and commented that they were pleased with some improvements. One panel member noted that while laboratory facilities are listed in Annex L, we did not visit them.
- [Is it adequately staffed?](#)  
During the visit, the panel did not assess staff. Through some faculty interviews, it was expressed that faculty need help. Staff appears adequate if the metric is general condition of the building and equipment.
- [If the school has made requests for additional resources, which requests does the Panel support and why?](#)  
The panel would support increasing faculty. Also, funding appears to be needed for research and innovation initiatives.
- [How might the school's resources be redistributed to realize its goals and those of the Marine Institute and University?](#)  
As per the above statement, more space and resources appear to be needed for research. More funding from either government or industry would be required.

### Summary of section 7

Current resources are stretched. The organizational structure will need to change in order to pursue the articulated goals/objectives of the School. It is recognized that this process will take time.

## Section 7 recommendation

- A. SMS/MI should re-negotiate its collective agreement with the instructors to allow for a broadening of program offerings.

## 8. Overall Assessment

- **Are the objectives of the school appropriate to the mission of the Marine Institute and University?**  
In general and overall, the long term priorities of the school are aligned to the mission of MI and MUN. Also refer to section 2 for additional information about objectives.
- **Is the school trying to do too much?**  
To achieve the school's long term priorities, without additional faculty, or change in workload, then the school is trying to do too much.
- **What opportunities exist that may allow the school to better meet their objectives and strategic goals?**  
First and foremost, improve the goals with measurable metrics, involve all key stakeholders in forming strategic goals and objectives to create ownership, allow faculty to have a say. The school does not need to necessarily adopt all recommendations and ideas, but they should be heard.
  - Change diplomas into degrees
  - Implement a supervised research based master's program.
- **What potential changes or enhancements could be implemented by the school, faculty, staff and administrators to better meet objectives?**
  - Make MI and MUN calendars the same
  - Re-negotiate their collective agreement to recognize the importance of academic/scholastic research
  - Provide better access to MUN facilities to MI faculty to use in the teaching delivery and research
  - Provide time and opportunity for faculty to pursue their research passion(s)

## General comments

The panel used Appendix B to frame this report; however, some issues emerged that were not covered in Appendix B. These issues are reported on here in these general comments.

- Faculty interviewed by the panel appeared committed to students, loyal to SMS and wanted their programs to succeed. However, there seemed to be a clash of values: Some faculty saw the SMS's core value as the school exists to train people to work on ships, while others seemed to think that the school could play a larger role in research.
- There's a culture of teaching only, amongst faculty, which is strongly engrained and is resistant to research innovation.
- Faculty appear engaged and enjoy their work at the school, but the union agreement holds them back from being able to perform like faculty.
- Faculty do not have KPI to self-assess their performance, or direct their goals.
- There does not appear to be the same level of awareness and engagement amongst staff, faculty, and students, for the vision of the SMS. To develop a proper vision, the school should involve all stakeholders including staff, management, faculty, university, students, and student groups.
- There has been a significant investment by faculty to bring some courses online. There is potential for the school to deliver courses globally by utilizing online course delivery.
- Instructors would like to have lab assistants.
- During the AUP review, staff and students were not available for consultation. Only one student was available for discussion (plans to meet with students were later made but were unsuccessful due to panel member's prior commitments). Therefore, not all stakeholders were consulted during the AUP process.
- It is not clear how SMS goals align with Marine Institute goals, and how Marine Institute goals align with MUN goals.
- This panel can only assess overall performance impressions. Nobody on the panel can do much more than get a glimpse into anybody's job. And even that glimpse might be flavoured by the type of day the interviewee is having. However, with proper KPIs in place, the external panel can review the KPIs, look for trends, and help troubleshoot if necessary.
- There seems to be an overall perception that diploma programs should be degree programs. Some metrics, such as course hours, indicate that the time and work done in diploma programs equals or exceeds similar degree programs across the country. But if the programs become degree programs, some instructors may need to change. More requirements for higher educated faculty with Masters and PhD's are needed.
- Nautical Science could easily become a degree, and should.
- MESD, NARC, MARE – appears to be duplication and competitive with main campus programs. This must be fixed.

- Significant opportunity exists for online programs. More students for less preparation and class time.