
FINAL EVALUATION REPORT
**EVALUATION OF THE CANADIAN COAST
GUARD COLLEGE**

PROJECT NUMBER 6B187

JUNE 6 2017

EVALUATION DIRECTORATE
CHIEF FINANCIAL OFFICER SECTOR
FISHERIES AND OCEANS CANADA

ACKNOWLEDGMENTS

The Evaluation Directorate would like to thank all individuals who provided input in the evaluation of the Canadian Coast Guard College. The Directorate acknowledges the time and effort of key informants and survey respondents who took time to share insights, knowledge and opinions through interviews and survey responses. In particular, the Directorate wishes to acknowledge the efforts of the College employees who took the time to familiarize the evaluation team with the facilities during the evaluation site visit.

ACRONYMS

CBSA	Canada Border Security Agency
CCG	Canadian Coast Guard
CEGEP	Collège d'enseignement général et professionnel
CoE	Centre of Expertise
DFO	Fisheries and Oceans Canada
ER	Environmental Response
FTE	Full-time Equivalent
GBA+	Gender-Based Analysis Plus
MCTS	Marine Communications and Traffic Services
MED	Marine Emergency Duties
MMET	Marine Maintenance and Equipment Training
OTP	Officer Training Program
OTP - E	Officer Training Program- Engineering
OTP - N	Officer Training Program- Navigation
QA	Quality Assurance
SAR	Search and Rescue

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EXECUTIVE SUMMARY

Introduction

The following report presents the evaluation of the Canadian Coast Guard (CCG) College, in accordance with the Treasury Board's *Policy on Results*. Between May 2016 and June 2017, the evaluation examined the performance of the College over the period from 2011-12 to 2015-16, following on from the previous evaluation, which was completed in 2012.

Program Profile

The College is the CCG's national, bilingual, degree-conferring training institution, located in Sydney, Nova Scotia. The College educates the marine professionals necessary to deliver programs in support of CCG's mission and mandate in marine safety, security, and environmental protection. The legal basis for this program is found in the *Constitution Act, 1867*, and the *Oceans Act*.

The College provides the following training for the CCG: Officer Training Program, Marine Communications and Traffic Services, Marine Maintenance and Equipment Training, and Rescue, Safety and Environmental Response Training. To deliver this training, the College spends an average of \$13.6 million dollars annually and employs between 244 and 269 personnel over the five-year period of the evaluation¹.

Evaluation Methodology

The evaluation was designed to assess the College's relevance and performance against intended outcomes within a theory-based context. Following preliminary scoping work to determine how the evaluation could best serve the information needs of the program, the evaluation was calibrated to focus on determining:

- if the College continues to support CCG's needs,
- satisfaction of employers and College graduates,
- innovations in recruitment, and,
- opportunities to increase efficiency.

Multiple lines of evidence were analyzed to determine the extent the College is on track to achieve desired results. These sources included reviews of key program and external documents, a comparison of the College to other marine schools and relevant training programs in government, interviews, surveys, a cost-benefit analysis for delivery of additional in-house training, and a site visit to the College.

Evaluation Findings

Relevance

The evaluation found that the College continues to address an important need for marine training specific to the CCG, as concluded in previous evaluations. The College trains marine personnel to the standards required to meet the government's international obligations and federal priorities

¹ Financial and human resources data provided by the Integrated Business Management Services directorate.

related to marine and aquatic safety, stewardship and prosperity. With a global shortage anticipated for trained seafarers, the College fills a unique role in developing the next generation of marine personnel the CCG will require, with the specific training needed for operations in the CCG.

Overall Performance

Evidence supports that the College provides graduates and trainees with training that prepares them well for a CCG career and the skills to develop their careers in the CCG. Graduates are satisfied with their College program and indicate that their training has a significant influence on their ability to advance in the CCG organization. High graduation rates are evidence that the College is attracting and successfully training academically strong mariners with the potential to make valued contributions to the CCG workforce.

Improving Performance – Looking Forward

The evaluation found that the College is well-positioned for a role as the Centre of Excellence (CoE) for marine training for the CCG. This would improve the consistency and coordination of professional development across the CCG organization. To accomplish this, the College should strengthen its governance by including senior-level regional members on its Academic Council. This would improve regional coordination and provide needed authority to advance the College's role as a CoE. The College should control the training curricula across the CCG and explore options to provide post-graduate training largely sought outside the College. Modernizing the College's current information and communication technology and providing career management and counselling support should be components of the College's transition to a credible CoE.

Evidence supports that the delivery and content of courses effectively prepares graduates for employment. Practical experience and sea phases are highlights for most graduates and trainees, who would like to have more of these opportunities. Added focus on CCG-related material in course content as well as further opportunities to foster leadership and communication competencies were identified for improving program content. The initial Quality Assurance measures recently added at the College are contributing to better teaching consistency and rigour, but continued efforts are needed to further standardize academic instruction, assessment and course material. In particular, the post-training assessment tool for collecting graduate feedback has not been implemented. This tool was recommended in a previous evaluation and, when implemented, would provide valuable information to support continuous program improvement.

Recruitment remains a challenge for the College, where a lack of dedicated resources and unique admissions timeframes hamper recruitment success. The College is collaborating more actively with the regions and leveraging social media outreach resources from academic partners in an effort to maximize recruiting efforts. Alternate course delivery options (e.g., online or distance learning, regional course delivery, distinct modules within courses) may help to expand the training audience, while enhancing the availability and coordination of the College's teaching resources. In particular, the evaluation found that the Marine Communications and Traffic Services (MCTS) program should explore alternate options to deliver this program content. The CCG has a need for more MCTS officers and the training for MCTS officers should be reviewed to examine the optimal mode to train and certify the number of personnel required to meet the CCG's current and growing operational needs.

Health and wellness concerns were raised by Officer Training Program (OTP) cadets involved in the evaluation, particularly related to mental health issues. The evaluation found that dissatisfaction with their College experience is borne in part from poor communication between the College's administration and trainees (i.e., processes, policies) but also from a perceived lack of support for officer-cadets during a very demanding academic program. While wellness supports and services are currently in place at the College, evidence shows that access to and awareness of those resources needs to be better promoted to address the needs of the College population during their training experience.

Recommendations

From the above evidence and findings, the following six recommendations are being made for the College:

Recommendation 1: It is recommended that the Deputy Commissioner, Operations ensure that the role of the College be strengthened to allow its recognition as the Centre of Expertise for marine training for the CCG. This requires the governance model of the College to be strengthened to ensure that the College has appropriate strategic direction and guidance, including senior-level regional representation. This would allow the College to explore various learning platforms and service delivery models to be utilized for training for the CCG.

Recommendation 2: It is recommended that the Deputy Commissioner, Operations ensure the College puts in place the post-training assessment tool and its data repository, to regularly collect performance feedback from trainees and CCG operations' officers/managers, and to utilize the feedback for continuous improvement of the quality of the training.

Recommendation 3: It is recommended that the Deputy Commissioner, Operations strengthen the recruitment of both Officer Training Program cadets and MCTS trainees, and ensure appropriate links of collaboration between the College and the CCG regions with regards to recruitment and associated activities.

Recommendation 4: It is recommended that the Deputy Commissioner, Operations review the ab-initio and the on-the-job training and course material for MCTS to determine if changes of the content and/or alternative delivery of the training are feasible and beneficial. The review and the potential implementation of the alternatives should contribute to a shorter certification time period.

Recommendation 5: It is recommended that the Deputy Commissioner, Operations ensure the College establishes reliable communication practice with officer cadets/trainees and internal staff so that all internal policies and procedures are understood and information related to training and campus life is shared in an effective, transparent and timely manner.

Recommendation 6: It is recommended that the Deputy Commissioner, Operations ensure that (i) all officer-cadets/trainees at the College have access to consulting and support resources related to mental health; (ii) the College initiate a promotion and outreach campaign to draw awareness to mental health support resources currently available at the College.

1.0 INTRODUCTION

1.1 Purpose of the Evaluation

This report presents the results of the evaluation of the Canadian Coast Guard (CCG) College by the Evaluation Directorate within Fisheries and Oceans Canada (DFO). In accordance with Treasury Board's *Policy on Results* and discussions with CCG senior management, the main objective of the evaluation was to examine the performance of the College, in particular its ability to support the workforce needs of the CCG.

1.2 Evaluation Scope and Context

The evaluation covered the five-year period from 2011-12 through 2015-16 and included National Headquarters and all three CCG Regions: Western, Central and Arctic, and Atlantic.

The evaluation commenced in May 2016 and concluded in June 2017. The Evaluation was presented to, and received Deputy Head approval at, the Departmental Performance Measurement and Evaluation Committee in June 2017.

The last evaluation of the College was completed in June 2012.

2.0 PROGRAM PROFILE

2.1 Program Context

The College is the CCG's national, bilingual, degree-conferring training institution, located in Sydney, Nova Scotia. The College educates the marine professionals necessary to deliver programs in support of CCG's mission and mandate in marine safety, security, and environmental protection. The legal basis for this program is found in the *Constitution Act, 1867*, and the *Oceans Act*.

The College provides the following training for the CCG:

Officer Training Program (OTP): A four-year program to train Ships' Officers for the CCG fleet, specializing in either marine navigation or marine engineering². Graduates receive a professional certification from Transport Canada and Bachelor of Technology in Nautical Sciences from Cape Breton University.

Marine Communications and Traffic Services (MCTS): A 25-week *ab-initio* program delivered at the College trains officers in the surveillance of vessel traffic movement in Canadian waters

² In the report, the acronym OTP-N refers to the marine navigation stream of the OTP program, and OTP-E – to the marine engineering stream.

and monitoring of radio-communications for emergency and safety calls. Training culminates with a period of three to six months of *on-the-job* training at an MCTS Centre, after which successful officers receive certification.

Marine Maintenance and Equipment Training (MMET): This training is provided for CCG electronic technology personnel who are responsible to maintain and repair all DFO/CCG assets used on CCG ships, as well as technical equipment used on shore to assist in the safe navigation of all vessels in Canadian waters.

Rescue, Safety and Environmental Response Training: Training includes national search and rescue (SAR) training to CCG and members of the Department of National Defense and training related to environmental response.

The College's training activities and facilities are supported by the following resources:

Table 1. Summary of Expenditures and Full-time Equivalents (FTEs) for the College between 2011-12 and 2015-16.

Dollars (Thousands)	2011-12	2012-13	2013-14	2014-15	2015-16
Salary	9,750.4	10,407.5	10,577.1	9,819.6	10,348.6
Operations and Maintenance, without fuel	3,378.2	3,649.2	3,100.8	3,207.4	3,930.3
Capital	0.0	0.0	0.0	0.0	83.2
TOTAL Expenditures	13,128.7	14,056.7	13,677.9	13,026.9	14,271.7
Cadet FTEs	110	105	111	110	122
Staff FTEs	159	160	143	134	122
TOTAL FTEs	269	265	254	244	244

Source: Integrated Business Management Services

2.2 Outcomes and Performance Measurement

In 2016, the College began an update to their performance measures as part of the department's results framework renewal. While some of the updated data sources have not yet been implemented, the program was able to provide other sources of information to assess progress towards the main outcomes. The College's outcomes that were considered for this evaluation were³:

- Competent and certified officers with knowledge of CCG operations and Programs;
- Trainees have specialized technological knowledge required to support CCG Programs; and,
- Skilled and proficient workforce that meets the operational needs and requirements of the CCG.

³ During the course of this evaluation, amendments to the results and indicators for the College were being made to ensure alignment with the Department's new Departmental Results Framework as per the *Policy on Results*.

3.0 EVALUATION METHODOLOGY

3.1 Evaluation Approach and Design

The evaluation approach considered the program's theory outlined in the College's logic model and outcome framework, as guided by the Treasury Board's *Policy on Results*. The approach also focused heavily on risk areas and current information gaps identified during consultations with senior management. This emphasis allowed the evaluation to be responsive to the current needs of leadership for the management of the College. An initial review of key program documents and results from previous assessments helped to further refine the approach.

Based on this preliminary work, the evaluation was calibrated to focus on determining:

- if the College continues to support the need of the CCG;
- graduate and employer satisfaction with the College;
- innovations in recruitment for the College; and,
- opportunities for improvements and efficiency.

Annex B provides the detailed Evaluation Matrix.

Extensive use of triangulation was undertaken as an analytical method, where multiple lines of evidence helped corroborate findings. The evaluation also attempted to include "gender-based analysis plus" (GBA+⁴); however, sample sizes were too small to provide any meaningful results and were therefore excluded from this report.

3.2 Data Sources

The evaluation utilized existing administrative and financial data, and where required supplemented with additional data sources. Specifically, existing program expenditure and human resource information was analyzed, as well as any existing performance data where it was available. To supplement weaknesses in existing available data, the following data sources were used:

- Review of key program and external documents;
- Review of available MCTS training assessment forms;
- A comparative analysis of other marine schools and similar training programs from other government departments;

⁴ Gender-based Analysis+ (GBA+) is a method for examining how an issue is affected by gender, and other intersecting identity factors, such as age, culture, language, education, income, etc. Since 1995, GBA+ has been a priority for the Canadian government, and has been applied to assess the potential impacts of policies, programs, services, and other initiatives on diverse groups of women and men, taking into account gender and other identity factors. (reference: <http://www.swc-cfc.gc.ca/gba-acis/index-en.html>)

- Key informant interviews (n=39) with:
 - College staff (n=13)
 - CCG staff from national headquarters and regions (n=7)
 - CCG senior management (n=14)
 - Fleet: Deputy/Marine Superintendents, Commanding Officers and Chief Engineers (n=5)
- Focus group of Commanding Officers at 2016 National Commanding Officer Conference (Montreal, QC);
- Surveys of:
 - College graduates from the last 7 years (90 OTP and 50 MCTS respondents)
 - Current College officer-cadets from the OTP program (58 respondents)
- A site visit to the College and its facilities in Sydney, Nova Scotia; and,
- A cost-benefit analysis of delivering the Marine Emergency Duties (MED) training at the College (conducted by the Strategic Policy Directorate).

3.3 Methodological Limitations and Mitigation Strategies

Although the evaluation encountered some challenges and limitations that are outlined below, these limitations were mitigated, as much as possible, through the use of multiple lines of evidence and triangulation of data. This approach was taken in order to demonstrate reliability and validity of the findings and to ensure that conclusions and recommendations are based on objective and documented evidence. Details on limitations and mitigations can be found below in Table 2.

Table 2. Limitations and Mitigation Strategies to the Evaluation Methodology.

Limitations	Mitigation Strategies
Limited performance and administrative data for economic analysis.	The financial and human resources data available to assess performance against intended outcomes was very limited. This impeded an assessment of efficiency and economy. To mitigate this, the evaluation relied on other data sources such as interviews, documents and findings from other recent evaluations and reports.
Inability to directly reach all targeted OTP graduates resulted in an unknown response rate for the evaluation survey.	Ships' crews often do not use DFO email, the primary mode to disseminate unique survey links to graduates for the evaluation. This was mitigated by sending generic survey links to the regional Marine Superintendents and the College for dissemination via their contacts with graduates. The discreet number of graduates that received the survey cannot be verified and the response rate is therefore unknown. Survey evidence is presented within this narrow context (i.e., cannot be generalized to the overall College population) and with support from other data sources where possible.

4.0 FINDINGS

4.1 Relevance

Key Finding: The College continues to address an important need for CCG-specific marine training, as demonstrated in previous assessments and evaluations.

The College remains the unique provider of CCG- specific training. The College provides standardized training in response to Canada’s signatory requirements on international treaties, conventions and legislation (e.g., International Maritime Organization’s treaty on *Standards of Training, Certification and Watchkeeping (STCW)*; *Canada Shipping Act (2001)*; and *Oceans Act, 1996*). The CCG-specific training offered by the College supports the production of seafarers and marine personnel to address departmental and federal priorities related to safe and secure waters, economic prosperity and aquatic ecosystems management and stewardship.

Global demand for seafarers continues to increase, as per International Marine Organization, and shortages forecasted by the Baltic and International Maritime Council and the International Chamber of Shipping Manpower⁵. The College supports the production of personnel to address staffing needs and pressures compounded by global shortages and resulting demand for trained seafarers. The need for the College was heavily analyzed in the previous evaluation⁶, which concluded that the College’s continued need was supported. This evaluation found no evidence to counter the conclusion that the College continues to address a specific need for the CCG.

4.2 Overall Performance

Key Finding: The College supports the development of competent, knowledgeable officers.

Overall, evidence indicates that the College provides graduates with training that is valued in the marine field and would prepare graduates well for a career in the CCG. Most interviewees indicate that College-trained officers are disciplined professionals with a strong academic foundation and strong potential for leadership. They also agreed that the College provides graduates with the skills they need to advance in their careers at the CCG. Evidence shows that College graduates have a basic standardized knowledge of the CCG, which is missing in mariners trained elsewhere and that this knowledge is seen as an advantage for working within the organization. Graduates surveyed further indicate that their College training has a significant influence on their ability to advance their career in the CCG.

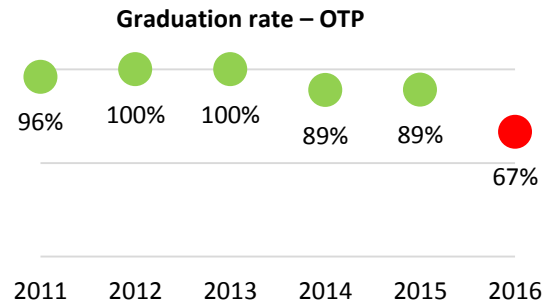
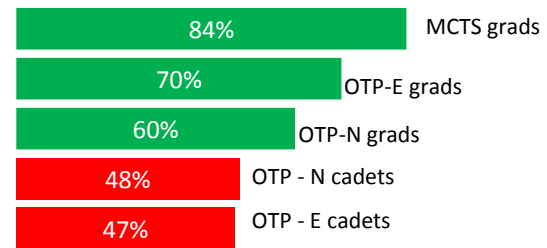
⁵ International Association of Maritime Universities. (December 2015). Sustainable and Quality Manpower Supply for Shipping Industry: System Approach.

⁶ Canadian Coast Guard College Evaluation Report, June 2012.

Trainees and graduates in all program streams surveyed are largely satisfied with the College program overall, and with the role the College plays in developing their technical skills and expertise required for their job within the CCG.

Graduation rates for the College have been consistently high between 2011 and 2015. Between 86 percent and 91 percent of trainees admitted to the MCTS program successfully graduated; as did 89 percent to 100 percent of third-year OTP trainees over the same time period⁷. The 2016 graduation rate for the OTP program is noticeably lower. Program staff indicated this drop is likely due to a change in admission criteria for this cohort where marine experience was prioritized over academic record. As a result, academically weaker officer-cadets in the cohort who were admitted to the program dropped out in higher numbers within the first two program years than in other cohorts. This left fewer officer-cadets by the 2016 graduating year and a proportionally lower graduation rate.

The level of satisfaction is the highest for MCTS grads and less than 50% for OTP cadets



The College does not currently have a strategic intake plan nor was the CCG able to provide an evidence-based establishment requirement that would inform the College’s intake levels each year. To date, the applicant intake for the College has largely been based on available resources and establishment gaps conveyed by the CCG in each region. In the absence of a comprehensive establishment analysis for the CCG, the evaluation was unable to determine if the annual quantity of graduates from the College is meeting the personnel requirements of the CCG organization.

Given the intense rigour of these College program streams, high graduation rates indicate that the College is effective in attracting and successfully training mariners with valued competencies for the CCG. Satisfaction from trainees, graduates and current CCG staff is further evidence that the College is developing marine officers with the knowledge and aptitude desired in the CCG.

4.3 Improving Performance – Looking Forward

In the past five years, the College has continued its efforts toward becoming more efficient, building on the momentum generated by the implementation of the CCG Transformation Plan (2009)⁸. More specifically, progress has been made with regards to the implementation of quality

⁷ Having successfully met a large portion of the program’s academic criteria and the challenges of a sea phase, the College uses the attainment of third-year of the OTP program as a benchmark for strong candidates for a sea-going career.

⁸ In 2009, the College developed a College Transformation Plan, as a guiding document for the strategic repositioning of the College. The transformation was intended to enhance the integration and modernization of the

assurance, the use of training advisory groups as part of College governance, and upgrades to the technological equipment and simulators. However, evidence emerged from the analysis of the key barriers and success factors impacting College results, highlighting the potential for further improvement of the performance of the College. The evaluation findings, by area, are presented in more detail below.

Centre of Expertise

Key Finding: There is a role for the College as the Centre of Expertise for marine training for the CCG.

Evidence indicates that there is a need and desire for the College to take a role as the Centre of Expertise (CoE) for marine training for the CCG. The potential benefits to the College being positioned and recognized within the organization as the CoE include better training consistency across the organization, better value for money invested in training, and a simpler and more coordinated professional development process for CCG employees. In order to adopt this role, the College would need to:

- Strengthen its current governance model;
- Be recognized as the holders of the training curriculum;
- Be given an increased role in career management and counselling;
- Expand the scope of training and course offerings; and,
- Modernize the learning environment and implementation of alternative service delivery models.

Strengthened governance model

The existing governance model of the College is limited in its ability to provide strategic perspective and guidance. Current membership and focus of the College's Academic Council⁹ is primarily internal to the College. This contributes to insufficient integration of the College within the governance, business planning and decision-making at the CCG. Furthermore, the gaps in coordination and communication with the CCG regions have been identified by interviewees as a barrier to College's activities such as recruitment, outreach, and sea-phase training, where the regions are expected to actively collaborate. For comparison, other federal training institutions (e.g., Royal Military College of Canada) have a higher-level strategic Board of Governors comprised with over half of its representatives from academia and private and public sectors external to the organization. This composition reduces internal bias and provides diverse perspectives on training and broader education practices, as well as a sufficient authority to affect changes in the institution. To strengthen the College's governance model, the Academic Council should include senior regional representatives to provide a direct link between the College and the regions with the authority to action required changes to training in the organization.

College to respond to a growing demand for CCG training. The need for the plan was supported by the client training requirements, strategic priorities and emerging Government of Canada direction support.

⁹ The Academic Council is the main training and education decision making body for the College. The key function of the Council is coordination and analysis related to training and education related decisions.

Holders of the curriculum

Several previous evaluations, audits, and other documents have demonstrated that training across the CCG is not nationally consistent¹⁰. These reports and evidence from the current evaluation indicates that there are gaps in the consistency, coordination and control of training delivered at the College and across the CCG regions. These gaps introduce risk to the standard of knowledge and preparedness for operations across the organization. As stewards of the training curriculum for the CCG, the College could expand its current quality assurance function to improve the standardization and consistency of training across the CCG. The College currently provides for its instructors a training program¹¹ developed by the Quality Assurance unit, in order to upgrade their pedagogical competence. This could be expanded to all instructors delivering training within the organization ensuring that all those who deliver training have the same basic knowledge of instruction.

To further facilitate the consistency of training delivery, the College should be given recognized control of training curricula and the standards, against which training is delivered. Regional facilities could continue to be leveraged to facilitate training opportunities and these additional controls would provide assurance that the same course is being delivered to a national standard and consistently across the country.

Career management and counselling

A lack of post-graduation career management and counselling in the CCG was identified by the evaluation. Interviewees and internal documents indicate that after graduation, there is limited career guidance and support available for officers looking to obtain higher levels of certification and to advance in the CCG. Career development is provided “ad-hoc” and graduates are left to navigate their career progression on their own. Given the significant training investment made by the CCG in each College graduate¹², a lack of career guidance is a risk to retaining and realizing the potential return on investment to the organization. Moreover, the lack of opportunities for CCG officers to develop their career internally results in many leaving the organization, thus, increasing the risk of losing the corporate knowledge and having an impact on the succession planning. A comprehensive career management function would support individuals to access opportunities needed for career progression (e.g., guidance, funding, time off, and course availability). The College is well-positioned to take on this role for its alumni as it would be able to determine where individuals are positioned within the organization, provide advice on how they could be developed along a desired career path that meets operational needs, and leverage knowledge nationally from the CCG.

¹⁰2015 Environmental Response Evaluation Report; 2013 Spring Report of the Auditor General of Canada - Chapter 7- Federal Search and Rescue Activities; 2012 Internal Audit of Fleet Operational Capability; 2010 Report of the Commissioner of the Environment and Sustainable Development; 2016 CCG National Training Plan

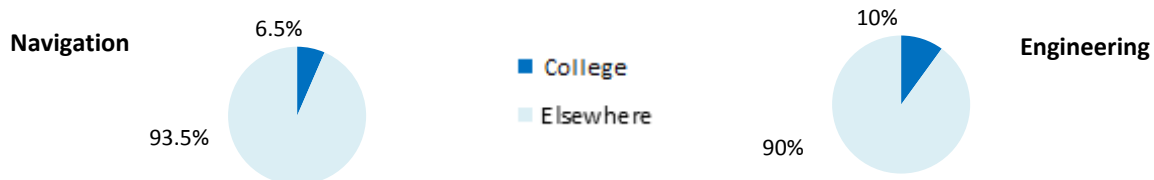
¹¹ This program consists of five modules covering the basic aspects of instruction (learning planning, course delivery, assessment, and classroom management).

¹² The 2012 evaluation of College estimated that the average annual cost per OTP cadet was about \$47 000, or about \$188 000 for the duration of the program; and the average cost per MCTS student for the *ab-initio* training was about \$26 000.

Expanding the scope of training

Interviewees expressed a desire for the College to have an expanded role in training CCG employees. With the facilities currently in place, the College is not being utilized to its full potential as a learning institution. Evaluation evidence indicates that more than 70 percent of OTP graduates go on to receive additional post-graduate training or certification; however, there are currently limited offerings for training for fleet personnel at the College.

At least 90% of the post-graduate training for fleet personnel is received outside the College



A cost-benefit analysis was completed to assess the investment feasibility for providing the Marine Emergency Duties (MED)¹³ training program at the College. The analysis indicates that after three years, the initial investment to deliver the course would be recovered and a cost savings of \$495,000 annually would be realized thereafter. While only the MED training was considered, the results suggest that post-graduate training could be economical and other courses should also be investigated. In addition to specialized mariner training, evidence from the evaluation suggests that the College may be well-positioned to provide general CCG-initiation training (e.g., culture and mission) for all CCG personnel and to act as a continuing professional development hub for conferences, workshops and international exchanges in the Public Service.

Modernization of the learning environment and implementation of alternative service delivery models

Evidence indicates that there is a need to upgrade the Information and Communication Technology at the College to a level comparable with the technology available at other Canadian post-secondary institutions, in order to bring the education experience up to the expectations of the post-secondary education of the 21st century.

The current state of technology needed to facilitate course delivery, learning management and self-directed learning at the College is not up-to-date. A wireless internet network has been established only recently at the College, however, connectivity is restricted in some areas of the campus. The College does not have a learning platform allowing shared learning space and communication between instructors and trainees. The College has limited ability to incorporate interactive course materials and learning activities in the education process, yet, these are

¹³ Marine Emergency Duties (MED) training and regular renewal training is required as part of the International Convention on Standards of Training Certification and Watchkeeping for Seafarers (STCW), with the goal to provide seafaring vessel crew with an understanding of the hazards associated with the marine environment/vessel, and shore-based training in the skills, which are required to cope with such hazards. Furthermore, MED training instructs on how to properly inspect and maintain all emergency equipment on board a vessel. The successful completion of MED training is part of the mandatory College curriculum for cadets, as well as for all CCG officers and crew. Refreshers are required for active officers every five years to maintain their qualifications. Currently, CCG cadets are sent to a private emergency training institution in Halifax, Nova Scotia for MED training, while CCG officers and crew members receive their MED training at private institutions close to their place of residence.

considered common learning practices in other schools. The younger generations of learners are accustomed to them and expect to have access to a similar technological environment at the College.

Further, the implementation of an appropriate learning platform and technology would enable the College to be more efficient by providing relevant online/distance training to a broader range of people across the regions, including professional development for seagoing CCG personnel.

Quality Assurance

Key Finding: The Quality Assurance Framework has a positive impact on the teaching process at the College.

According to interviewees, the Quality Assurance Framework in place has had a positive impact on the teaching process at the College. Since the creation of the Quality Assurance and Academic Excellence Unit in 2011 and the initiation of the Quality Assurance Framework in the following years, the structure and the rigour of teaching has improved. For example, a requirement for a vetting process has been put in place for all changes in the content; many courses underwent audits, and the information management procedures have been strengthened.

A key factor for the quality of learning process is the qualification and the pedagogical competence of instructors. To ensure that best education practices are used in the College programs, the Quality Assurance unit has developed a five-module teaching program, which integrates theoretical and practical components and covers basic aspects of instruction (planning, assessment, teaching approaches and classroom practices). The program is delivered to all newly hired instructors at the College, as refreshment training for some returning instructors, or to “train the trainer”, when training is delivered externally (for example, the on-the-job training for MCTS).

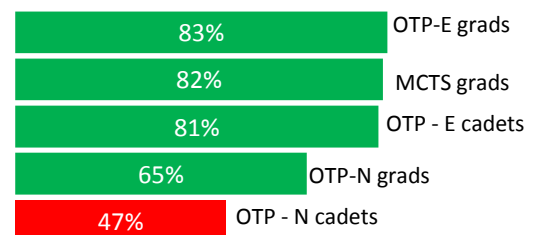
Evidence from surveys suggests that most instructors at the College are knowledgeable and dedicated, and are able to engage with the students. Their professionalism and involvement is highly regarded by all groups of survey respondents.

Key Finding: The implementation of the Quality Assurance Framework has not reached its full potential. The positive impact can be increased by expanding Quality Assurance Framework to all aspects of the College’s programs.

Evidence indicates that despite the positive results of the application of the Quality Assurance Framework, the quality standards in terms of content, instructions, assessment, and course materials are not consistently followed by all instructors.

In terms of quality of instruction, the survey respondents noted that some instructors lack up-to-date skills and knowledge from the operations field; there are not enough instructors with CCG

Among survey respondents, the level of satisfaction with the quality of instruction is the lowest among navigation cadets and graduates.



experience, as well as francophone instructors. Some examples of inconsistencies in the course delivery were also provided.

Regarding the quality of assessment, some weaknesses were shared by the survey respondents, namely: assessment methods not being standardized across the French and the English programs; lack of consistent, meaningful assessment and feedback on at-sea phases; and lack of consistency and coordination between instructors in the feedback conveyed and marks assigned.

The quality of the course materials was identified as an issue by survey respondents. It was more prominent for the MCTS program, where disjointed, vague, inaccurate and inconsistent course materials appeared to be a consistent complaint in about 70 percent of the teaching assessment forms. Other concerns shared by survey respondents apply to both MCTS and OTP programs, such as the quality of the course material in French being lower than the quality of the material for the same course in English.

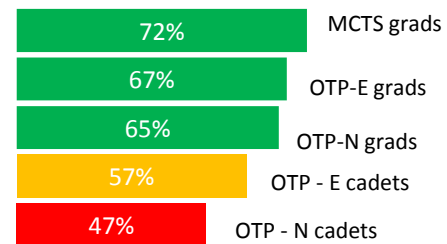
To address the issues of inconsistency and lack of standardization, the reach of the quality assurance function could be further expanded to all courses and programs at the College.

Key Finding: The lack of an effective mechanism to obtain and respond to performance feedback with regards to training is a barrier to the improved effectiveness of the training programs at the College.

In June 2012, the previous evaluation of the College reported on the need to develop a post-training mechanism, and made a recommendation that assessment tools, processes and implementation plan be developed by the CCG for all training programs at the College. In the execution of the Management Action Plan, some progress has been made in this regard. A Post-Training Assessment process was developed and presented in January 2015, and the Quality Assurance Unit of the College was seen as the key player in conducting the process. The process was to be piloted with the Marine Maintenance and Equipment Training program in April 2015, and eventually applied to all Operational training. Though the Management Action Plan was closed in 2015, a working mechanism to obtain performance feedback after completion of the training is not in place. According to interviewees, such feedback is not collected and is not available, and they are unaware of any post-course assessment tools and processes.

Furthermore, there is a perception that the College does not address student concerns about the quality of instructions (regarding some instructors, content, or assessment). It was noted that the course assessments would provide the College the opportunity to identify and address potential gaps or examples of inadequate instructions.

The level of satisfaction with the quality of assessment is lower for OTP cadets compared to OTP and MCTS graduates.

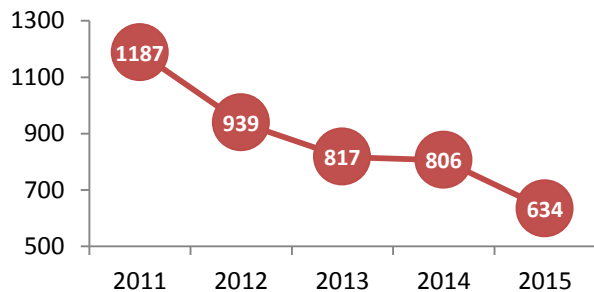


Recruitment

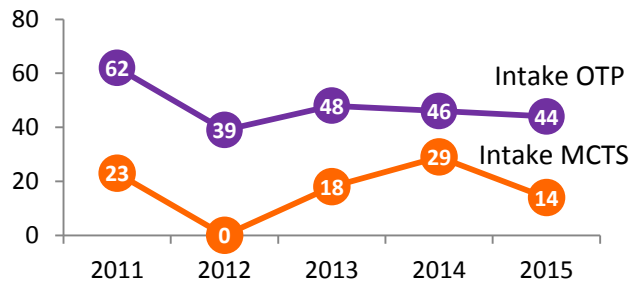
Key Finding: The recruitment of cadets is a risk area where there is need for improvement.

Recruitment of officer-cadets is not a new issue and risk area for the College; however, it is still persistent, based on the most recent evidence. According to administrative data, the number of OTP applicants as well as the number of admitted OTP cadets decreased between 2011 and 2015.

The number of OTP applicants decreased by 47% between 2011 and 2015.



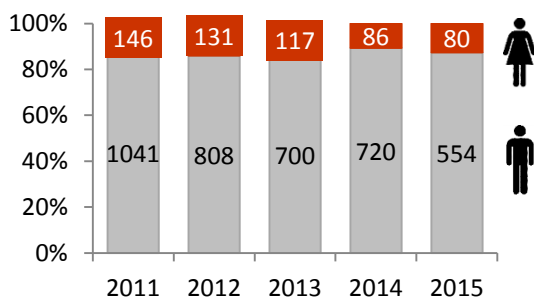
The number of OTP students admitted was the lowest in 2012.



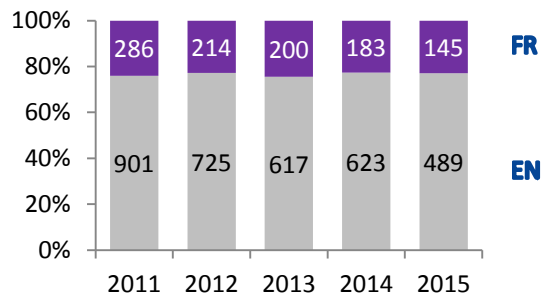
The limited capacity of the College to handle the heavy workload related to the recruitment and selection of OTP candidates was noted as an issue in the 2012 Evaluation. The significance of the problem was reiterated in 2015-16, when the Corporate Risk Profile identified recruitment and retention risk as a key risk to program delivery and stated that addressing the risk and decreasing its severity requires implementation of action plans, part of them specific to succession planning and career development¹⁴. Interviewees confirmed that College recruitment activities were also impacted by overall funding restrictions and major reorganization initiatives experienced by CCG in 2012¹⁵.

The demographic profiles of applicants and admitted cadets suggest that the promotion and the reach of recruitment among employment equity groups and Francophones may not be sufficient.

About 13% of all OTP applicants between 2011 and 2015 were females



About 24% of all OTP applicants between 2011 and 2015 were Francophones



¹⁴ CCG National Training Plan (2016).

¹⁵ In 2012, the MCTS program started a complex Consolidation and Modernization project, reducing the 22 MCTS centres to 12, which had an impact on the hiring and training of MCTS officers. In particular, there was no recruitment for MCTS *ab-initio* officers in 2012-13.

The OTP Aboriginal applicants represented 2-5 percent of all applicants between 2011 and 2015. However, data is not strong enough to be analyzed and compared to employment equity targets of the department.

Insufficient dedicated resources for recruitment

The College relies on one indeterminate Full-Time Equivalent (FTE) position, with little temporary support and limited Operations and Maintenance budget (\$70 000) to run a national recruitment campaign and associated activities. These resources are a small fraction of what other federal agencies with similar recruiting needs and objectives spend. A comparative analysis of several institutions found other organizations have extensive full-time recruiting offices across country. In the Canada Border Security Agency (CBSA), approximately \$5M is spent annually on recruitment, and there is a designated National Recruitment Division responsible for the implementation of a national recruitment initiative, modernized approaches and best practices.

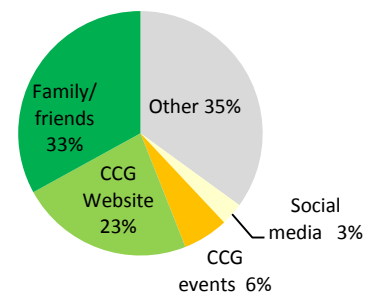
CCG regions are not actively involved in outreach, promotion and recruitment for the College. Despite the benefits to recruit regionally and in locations with traditional marine orientation, the College does not have permanent regional resources dedicated to recruitment, and may only occasionally rely on some ad-hoc regional assistance.

Lack of visibility and exposure of the College

The College and the CCG are not as known and as present to the public as other agencies with similar public significance (e.g., CBSA, Royal Canadian Mounted Police, and the Royal Military College). The evaluation evidence indicates that the College participates in a limited spectrum of outreach and promotion activities, and does not have effective tools to reach the target population, whose preferred means of information and communication are internet and social media. As a comparison, the institutions, with which the College is in competition for potential applicants, run regular advertising campaigns via YouTube and social media accounts, and provide appealing opportunities to introduce young people to their programs (e.g., tours, orientation sessions, “student-for-a-day”, etc.). Furthermore, search engines do not select the College when a “marine training” search is requested. In addition, the College does not have a separate website; its information is accessible only via the CCG website.

Potential applicants obtain information about the College predominantly from friends and family. Moreover, interviewees noted that the College needs a marketing/branding strategy, which promotes the mandate, values and the contributions of the career and shares stories of success. There is a potential to improve recruitment results by promoting careers at CCG to younger school grades - senior students may need time to obtain the required academic credentials, and junior students get an early opportunity to meet, and be inspired by, real heroes and role models.

A few potential applicants learn about the College from CCG recruitment events or social media. (Survey respondents, n=195)



Limitations due to the current application process

The current application process places the College in a disadvantaged position relative to other universities and post-secondary institutions. Quality candidates are being lost because of the inability to synchronize the College's admission timeframe with the acceptance timelines of other post-secondary institutions (e.g., not offering early admission, confirming acceptance too late). In addition, the process lacks flexibility to take into consideration the specifics of provincial education systems¹⁶. About 67 percent of survey respondents said they were satisfied with application tools and processes; nonetheless, they mentioned issues and challenges, such as application tools not being user-friendly, inaccuracies in recruitment materials, delays in communication, and lack of client support on behalf of the College.

Addressing some of the recruitment challenges

In April 2016, the College put in place a recruitment plan, which is expected to address some of the issues identified. The short-term initiatives include targeted outreach in Francophone communities, engaging indigenous groups, and organizing more events tailored to the profile of 17 to 24 year-old people. Future opportunities rely on utilization of social media and web platforms; building an interactive, engaging and informative website of the College; incorporating innovative approaches and products into the recruitment and promotion (e.g., daily tweets and live feeds on College events and success stories; interactive questionnaires; a virtual classroom Periscope; and, connecting learners at the College with high school students).

The dedicated recruitment team and the collaboration of some instructors and regional staff with regards to recruitment efforts are factors supporting the successful realization of the recruitment plan. The College will also gain some additional recruitment resources: a new recruitment officer for the Francophone market, 1-2 casual employees to assist with recruitment visits to high schools, regional support for recruitment and outreach events in the CCG regions, and leveraging resources of Cape Breton University for outreach through social media. There are, however, challenges identified in the plan. In particular, at the time of the evaluation the College did not have the authority to reach its target market on social media. It is expected that the development and approval of the Social Media Plan and the Media/Advertising Plan¹⁷ would address this issue.

¹⁶ For example, the high school in Quebec ends after grade 11, but there is no transition option for high school graduates to apply to the College directly; they must complete an extra year in CEGEP, which turns some of them out to other career paths.

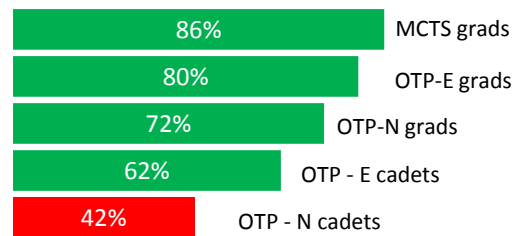
¹⁷ The completion of these plans was scheduled for 2016-17. As of April 2017, there is no information of whether this was achieved.

Program delivery and course content

Key Finding: Overall, the program delivery and content are appropriate and effective in preparing graduates for their duties after graduation. However, there are some gaps and areas of improvement that need to be addressed.

Over 70 percent of graduates of both OTP and MCTS programs felt prepared for their duties after graduation. However, results vary for different categories of survey respondents. Of the OTP cadets surveyed, the gaps mentioned are day-to-day operations (e.g., deckhand procedures, seamanship practices, and watch keeping duties), safety inspections of the equipment and bridge resource management.

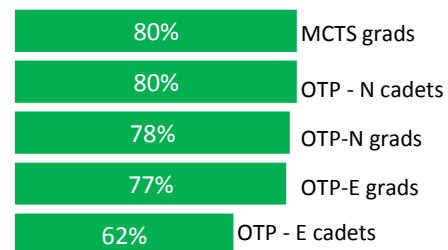
While 86% of MCTS graduates felt prepared to do their job, only 50% of OTP cadets felt prepared for their first at-sea phase



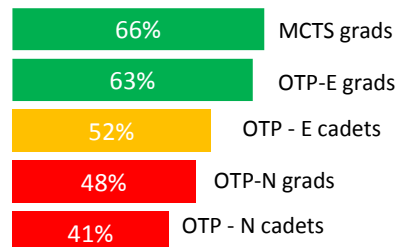
Practical experience and at-sea phase

The at-sea practice and practical experience is highly regarded by both survey respondents and interviewees. Nonetheless, the evaluation found that there is a gap in the clarity and guidance provided by the College related to some aspects of the at-sea practice. First, there is a significant variability in the learning experience and evaluation criteria of officer-cadets. The quality of the training varied greatly depending on the region, ship, and crew the cadets were placed with. Some cadets were exposed to the range of CCG programs, whereas others received very limited experience. Second, about 17 percent of cadets reported gaps and lack of clear communication between the College and the regions, and between the cadets and the administration with respect to the expectations and the administrative procedures linked to the at-sea phase. Some specifically mentioned that sea phase manuals were issued shortly before the start of the practice; they had limited opportunity to communicate their questions with training officers and to obtain clear instructions and support. Finally, ship officers were not provided information and directions about the ship crew’s responsibilities and expectations related to the training and the evaluation of cadets. They often had divergent opinions on the usefulness, clarity and appropriateness of the sea manuals, regardless of the fact that completing these documents is part of the certification process governed by Transport Canada.

Overall, graduates and cadets are very satisfied with the hands-on activities and experience, including at sea practice (77%, n=195)



The level of satisfaction with the program in terms of course progression, structure, innovation in teaching methods is less than 50% for navigation graduates and cadets.



Furthermore, 54 percent of all respondents are satisfied with their programs in terms of course progression, structure, and innovation in teaching

methods. Some stated that the sequencing of the courses taught at the College does not always provide cadets with all skills and knowledge needed prior to the at-sea phase, which may explain the lower level of satisfaction of cadets and graduates from the OTP navigation stream.

About 19 percent of the survey respondents were of the opinion that the content taught at the College is not comprehensive, up-to-date or aligned with what is expected on ships. Their views were corroborated by some interviewees confirming that there is little feedback from the CCG operational staff (and fleet) on the relevance and appropriateness of the content and in general; the updates of the course content are made by the College instructors in isolation, thus, may not be as accurate and timely as needed. The MMET courses were mentioned as an exception and an example of best practice – they were developed in collaboration between instructors and Integrated Business Management Services staff.

The training equipment is a significant success factor for the programs at the College. Both those surveyed and interviewed are in agreement that most of the simulators and the training workshops are state-of-the-art and allow provision of high-quality training for the two OTP streams and for the MCTS *ab-initio* courses¹⁸.

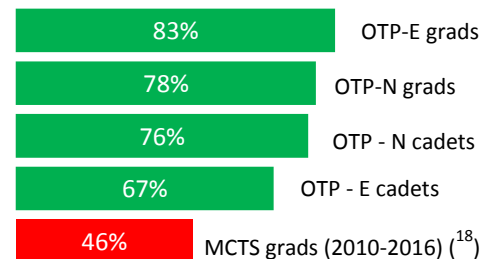
Although the graduates and cadets are satisfied overall with the development of the technical knowledge and expertise needed to do their job, they are of opinion that there is a desire, and potential, to further increase the practical and the hands-on component of the training and to optimize the utilization of the training simulators and equipment.

Some further feedback suggested reviewing the ratio between the theoretical and practical content, coordinating course schedules to maximize the time spent on simulators, and providing more access for officer-cadets to the equipment for self-directed learning. In the training assessment, some MCTS trainees argued that alternating the theoretical and practical aspects of the topics would help with the application of the theory in practice.

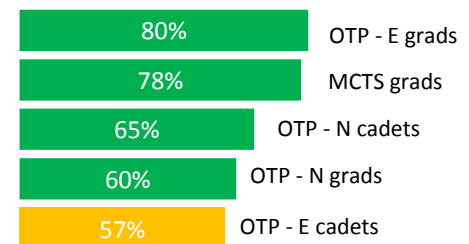
Strengthened CCG focus

As mentioned earlier, the College is the only institution in Canada, which provides marine training specific to the needs and the operations of the CCG. Interviewees stated that the CCG-specific expertise is one of the advantages of hiring a College graduate, and argued that this area is the one where the College adds most value. On the other hand, interviewees and survey

Overall, 69% of graduates and cadets are very satisfied with the training equipment and technology



Overall, 67% of survey respondents are satisfied with the development of technical knowledge and expertise needed for the job



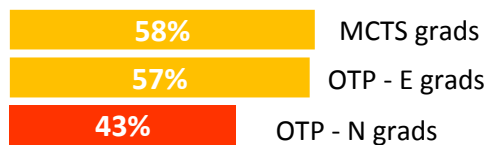
¹⁸ The figure of 46% for MCTS reflects the average of the data from 2010 to 2016, and does not reflect the current situation. The MCTS marine safety simulator was replaced in 2016 and for this year only the level of satisfaction is 100%.

respondents are in agreement that there is a need and benefit to strengthen the CCG focus of the training. Potential areas to allow for more CCG-specific focus are: adding basic knowledge of all CCG operations; integrating CCG-specific systems and tools into the courses and practical exercises; and, increased exposure of cadets to the history, the mission and the values of the CCG, thus, creating sense of pride and belonging. Instructors and guest-speakers with CCG-experience sharing success stories where CCG officers are the real heroes of the success would contribute to this goal. There is a strong desire expressed by interviewees and survey respondents of acquiring a training vessel, where some of the practical marine training could be provided in a low-risk environment. The availability of such vessel may contribute to the overall enhancement of the CCG-specific aspect by running integrated simulation exercises with all groups at the College (navigation, engineers, MCTS, SAR, ER), which is also in line with the desire expressed by MCTS respondents to add some cross training/navigation awareness components to the MCTS training experience.

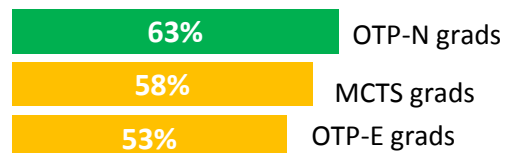
Leadership component of the College programs

The College, being the CCG’s national, bilingual, degree-conferring training institution, is expected to educate the marine professionals necessary to deliver all programs in support of CCG’s mission and mandate, including officers who are able to progress to leadership and senior management roles. According to about 48% of the interviewees, the opportunities for officer-cadets to acquire skills in the areas of leadership and effective communication are insufficient. Survey respondents corroborated this opinion and identified specific gaps, such as leadership in maintaining a watch, bridge resource management, soft and people management skills, and administrative aspects of the CCG. They expressed a desire that these components be incorporated within their curriculum.

The level of satisfaction of graduates with the contribution of the College to developing leadership competency is less than 60%.



The level of satisfaction of graduates with the contribution of the College to developing effective communication competency is less than 65%.



In addition, interviewees noted that leadership skills should be acquired not only from courses but also through practical/scenario-based learning, coaching from experienced CCG managers, as well as by observing and participating in management meetings, committees, etc.

Program design and structure

Key Finding: The lack of flexibility in the execution of the programs offered at the College is a barrier for achieving its full potential. In particular, the MCTS program may need to be revised to meet the growing demand for trained MCTS officers in the CCG.

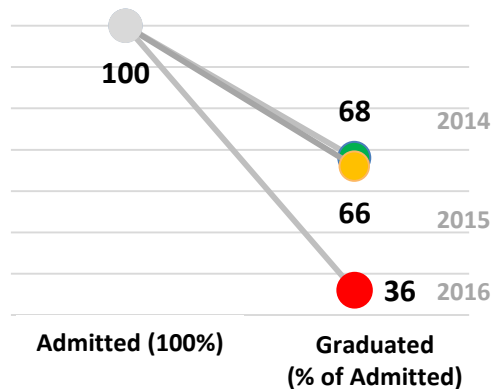
Evidence from the evaluation indicates that the current design and structure of the College programs may not support maximum recruitment and retention of trainees and the most efficient use of College resources. The College may optimize training opportunities by introducing alternate service delivery options for courses such as online or distance learning, or more course delivery by regions and partners overseen by the College. Data indicate that a modular approach to training delivery may help mitigate instructor shortages, scheduling conflicts of facilities and simulators, as well as facilitating opportunities for professional development for employees during off-ship periods (i.e., lay-days).

OTP graduates suggested that the program's linear structure does not provide flexibility for different entry and exit options for candidates. For example, credentials from other institutions are not recognized for OTP admissions, such that candidates with existing qualifications and relevant experience are not eligible for credit against OTP program requirements. The evaluation did not assess the extent, to which Transport Canada's certification requirements restrict the options for credit equivalency for training or experience gained outside the CCG College. On the other hand, OTP trainees, who leave the program before graduation, do not have options to pursue alternative qualifications outside the officer cadre that would leverage the training that they have completed. This represents a loss of significant potential return on investment by the organization, which could be mitigated by alternate academic options such as offering certificates with an option to complete a marine science degree or not, or offering CCG-specific training components for people who have trained and certified elsewhere.

The evaluation found that some adjustments to the timing of the at-sea phase of the OTP program may improve the learning experience it provides. Survey responses indicate that current at-sea phases are long and that multiple shorter segments may allow for assignments to broader diversity of ships and regions and mitigate some stress and hardship of long bouts at sea. Graduates expressed a desire to work at least one full 28-day period of a regular crew schedule, alternating 12-hours working with 12-hours of rest, instead of the 40-hour work week standard in the College. This would allow trainees to experience the workload and sleeping schedule they will live upon graduation. Graduates also suggested that the final sea phase (or part of it) should take place immediately prior to graduation to ensure the practical knowledge gained is fresh to start their future positions.

Qualitative data indicates that the structure of the MCTS program may need to be reviewed. The *ab-initio* component of the program could be compressed into a shorter timeframe and parts of

The College loses one-third of the admitted cadets over the course of the Officer Training Program



this component could be alternated with *on-the-job* training periods. Evidence suggests that graduates would benefit from tailoring some of the College training to the specifics of the centres where trainees will be employed, such as region-relevant geography and bilingual instruction for trainees posted to bilingual centres. A recent evaluation of the MCTS program highlighted the increasing staffing requirement for trained MCTS officers in the CCG and the need for a staffing strategy to address those personnel challenges¹⁹. The ability to produce a higher volume of trained MCTS graduates would be a significant mitigating factor for staffing shortages. Therefore, the College may need to reassess the current design of the MCTS program and examine what alternative models could be implemented to expedite training output in order to meet current and growing operational requirements for MCTS officers in the CCG.

4.4 Other Findings

Key Finding: There is a need for an increased focus on the trainees and the trainee experience at the College. Areas such as the health and wellness, administration and communication were identified as key sources of dissatisfaction by current and former OTP officer-cadets.

Approximately 66 percent of all survey respondents indicate that they would choose to attend the College again²⁰. However, there is significant variability between MCTS respondents and OTP respondents. When aggregated, 27 percent of all survey respondents would not choose to attend the College again. When MCTS respondents are excluded, 33 percent of the OTP respondents would not choose the College again. Qualitative data supporting these responses revealed that dissatisfaction was most frequently related to issues of communication with administration, and issues related to health and wellness.

Health and Wellness

Issues related to mental health consistently emerged in qualitative data, mainly from OTP graduates and current officer-cadets. The most frequently reported aspects of mental health include burnout from the intense workload, acute stress escalating to chronic stress, anxiety, depression, and the perception of being disregarded or treated unfairly. When asked about the satisfaction with the support resources and assistance currently in place at the College, 65 percent of all survey respondents combined responded they were satisfied with those resources. However, qualitative data suggests there may be gaps in the awareness of which resources are available and access to those available resources. Evidence also indicates a lack of meaningful opportunities for officer-cadets to de-stress and recharge within a very intense program.

Communication with Administration

Officer-cadets and graduates frequently raised concerns related to the consistency, communication and transparency of the College administration. There was a low level of satisfaction with the administration indicated through survey results, among OTP graduates and officer-cadets, for whom at least two-thirds of survey respondents indicated dissatisfaction. Comments related to a lack of consistency linked most frequently to discipline and the application of policies, perceived differences in how administration interacts with MCTS trainees versus OTP officer-cadets, and frequent changes in key positions that interface directly with

¹⁹ Evaluation of the Canadian Coast Guard Marine Communications and Traffic Services Program. February 2017.

²⁰ This includes responses of “probably would” or “definitely would” attend the College again.

officer-cadets. Poor communication was noted most frequently relating the lack of clarity or explanation behind decision-making, a perceived lack of openness and transparency, and no effective means for officer-cadets to raise their concerns and suggestions for improvements. This evidence supports the need to improve and expand current communication efforts between the administration and the officer-cadet body.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Relevance

There is a continued and strong need for the College. The institution is the unique provider of CCG-specific marine training in Canada. The role of the College to support CCG operations is important and will remain important given the increasing demand for trained marine personnel and the expectations to ensure that training is nationally consistent and in compliance with national and international standards, conventions and legislation. In 2012, the previous evaluation of the College concluded that the relevance of the College is high, and there is no new evidence from this evaluation to suggest otherwise.

Overall Performance

The evaluation found that the College graduates were competent, knowledgeable, and well prepared for their job in the CCG. Their training is regarded in the marine field, because of their strong academic foundation, potential to develop leadership competency, and the possession of basic standardized knowledge of the CCG programs; the latter seen as a key advantage within the organization. High graduation rates and the satisfaction from trainees, graduates and current CCG staff further confirm that the College is developing marine officers that support the needs of the CCG.

Improving Performance – Looking Forward

The evaluation evidence indicates that there is a potential to further improve the performance of the College in several areas, by addressing some deficiencies, issues or gaps.

Centre of Expertise

There is a role for the College as the CoE for marine training for the CCG. The evaluation findings identified that the existing governance model of the College is limited in its ability to provide strategic perspective and guidance. The lack of external perspective and the insufficient communication and coordination between the College and the CCG regions is an impeding factor for the College to fulfill its role. To strengthen the College's governance model, the Academic Council should include senior regional representatives to provide a direct link between the College and the regions and the authority to action required changes to training in the organization. The College should be recognized as the holders of the training curriculum for the CCG, which have the responsibility for the stewardship and the controls needed to ensure that same course is being delivered to a national standard and consistency regardless the location, the cohort, or the instructors. In addition, the College is well positioned to address the existing gap in career management and counselling for CCG officers, by taking a greater role in the provision of support and guidance related to post-graduate career progression and certification. Furthermore, there is a need and potential to expand the scope of training offered at the College, allowing CCG officers and fleet personnel to obtain their post-graduate training within the organization. These changes should include support to upgrade the current teaching information and communication technology, which is lagging behind other learning institutions. To be credible as a CoE, the College needs to offer a competitive, interactive learning platform with the technology and infrastructure to support innovative and alternative modes of service delivery.

Quality Assurance

The College's current Quality Assurance Framework has been of benefit to the structure and rigour of the teaching framework where the program is currently in place. A broader implementation of quality assurance would help address some of the gaps in the quality, consistency and currency of instruction, course materials and assessment methods identified by the evaluation. The College has not yet implemented the post-training assessment tool that would provide a mechanism to gather performance feedback related to these aspects of the academic programs. Implementation of this feedback tool would also demonstrate to graduates and officer-cadets that the College acknowledges and values their feedback for its continuous improvement. While preliminary work has been done to develop the tool, the College should fully implement the post-training assessment tool and its supporting data management systems to expand the current quality assurance function.

Recruitment

The recruitment of cadets is a risk area, where there is a need for improvement. The evaluation confirmed gaps and issues related to this area that have been known for many years. Most notably, insufficient dedicated resources are available for promotion and recruitment activities, with fractional resource levels for recruitment at the College compared to other federal organizations with recruiting activities. Other limitations identified include a lack of visibility and exposure of the College and the CCG to potential target populations, and the usability and timing constraints of the current application process, which disadvantages College recruitment against other post-secondary institutions. The 2016 Recruitment Plan developed by the College, is taking into consideration some of the issues noted by the evaluation (e.g., some additional permanent resources for recruitment, and a number of short-term initiatives oriented to Francophones, indigenous groups, and young people from the age range 17 to 24). However, it is not fully funded as of the end of 2016-17. Challenges still exist and need to be addressed so that the College could realize all intended future opportunities and results outlined by the plan.

Program delivery and course content

The delivery and content of the College's current programs effectively prepare trainees and officer-cadets for their duties with the CCG after graduation. Graduates and trainees are largely satisfied overall with the practical and sea-phase components of the programs and expressed a desire to see more opportunities for simulation and practical experience. The addition of a training vessel may provide more practical opportunities for training and more consistency for sea-based experience. Additional leadership development and a greater CCG-specific focus (e.g., basic organizational knowledge, culture, systems, and tools) in training were identified to strengthen graduate proficiency. Evidence indicates that the sequencing of some content does not optimally prepare trainees, and that variability in practical experience diminishes their satisfaction. The evaluation found that the College needs to provide clearer guidance to fleet staff and trainees for completing and assessing the sea manual. Formalizing feedback from operational staff on training content and updates may improve training rigour and strengthen the currency of training experience to a career with the CCG.

Program design and structure

The College currently loses approximately one-third of its officer-cadets prior to graduation. Evidence suggests that options to opt-out of the degree-portion of training, alternate delivery

models (e.g., online/ distance learning) or a modular structure to program content, where possible, may retain a wider training audience and alleviate some current resource challenges. OTP respondents suggested revising the length, work-hours structure and sequencing of the at-sea phase to provide further training value. Similar program structure and design changes may benefit the MCTS program and may increase training output in response to current and anticipated staffing shortages in this domain of the CCG.

Increased focus on trainees and the training experience at the College

While two-thirds of survey respondents indicated that they would choose to attend the College again, concerns related to communication with administration and health and wellness at the College were raised. Perceptions of inconsistency in discipline, policies and procedures and a perceived lack of transparency in decision-making were of concern to officer-cadets and contributed to their significant dissatisfaction with College administration. More consistent and collaborative formal communication with officer-cadets by the College administration may mitigate these concerns. Mental health issues related to depression, anxiety, harmful behavior and chronic stress were raised by graduates and officer-trainees. While support resources and services currently in place were deemed satisfactory, evidence indicates that awareness and access to these resources needs to be improved to ensure that trainees have the support they need to be successful.

5.2 Recommendations

Based on the findings of the evaluation, the following recommendations are being made:

Recommendation 1:

Rationale: There is a need for the College to take on a more prominent role as the centre of expertise in CCG training. To accomplish this, the College requires representation at the highest level of the CCG. The evaluation also found a lack of coordination between the College and CCG regions, particularly related to recruitment and regional fleet input for teaching and evaluation support. The College's governance committees currently have no regional representatives. By including senior-level regional leaders, the College's Academic Council will gain a regional perspective on training matters and the needs of the College can be elevated and championed at the senior decision-making level. Currently, the information and communication technology supporting the learning at the College does not allow implementation of education practices that are available in most Canadian post-secondary institutions and that are expected by learners. The College needs to modernize its learning platform and technology in order to be able to implement alternative course delivery models, and to be attractive to the current younger generation of learners.

Recommendation 1: It is recommended that the Deputy Commissioner, Operations ensure that the role of the College be strengthened to allow its recognition as the Centre of Expertise for marine training for the CCG. This requires the governance model of the College to be strengthened to ensure that the College has appropriate strategic direction and guidance, including senior-level regional representation. This would allow the College to explore various learning platforms and service delivery models to be utilized for training for the CCG.

Recommendation 2:

Rationale: While the College now has a quality assurance program in place, evidence shows that gaps in the consistency and quality of instruction, assessment and course material still exist. The College still has yet to implement the post-training assessment tool recommended in previous evaluations. By implementing the post-training assessment tool, the College will have a means to validate the consistency and quality of instructional components and to collect graduate feedback for continuous improvement

Recommendation 2: It is recommended that the Deputy Commissioner, Operations ensure the College puts in place the post-training assessment tool and its data repository, to regularly collect performance feedback from trainees and CCG operations' officers/managers, and to utilize the feedback for continuous improvement of the quality of the training.

Recommendation 3:

Rationale: The recruitment of trainees for both the OTP and MCTS programs represents a significant risk to CCG program delivery as it is linked to the broader organization's challenges of maintaining human resource capacity and succession planning. The College has very limited capacity to handle the intensive and heavy workload related to recruiting and selecting OTP candidates. In addition, the limited collaboration between the College and the regions with regards to recruitment and outreach impedes the implementation of steps to address the situation adequately.

Recommendation 3: It is recommended that the Deputy Commissioner, Operations strengthen the recruitment of both Officer Training Program cadets and MCTS trainees at the College, and ensure appropriate links of collaboration between the College and the CCG regions with regards to recruitment and associated activities.

Recommendation 4:

Rationale: A recent evaluation of the MCTS program recommends that the program develop and implement a sustainable staffing strategy. As identified in the MCTS Management Action Plan, this would require consultations with MCTS regions and the College to determine the best means to train and certify necessary staff to fill current and future vacancies. The current evaluation of the College found that there may be feasible alternative delivery models for the MCTS training (e.g., compressing the ab-initio component, distance learning delivery, alternating parts of ab-initio with on-the-job training). In addition, issues with the quality of the MCTS course material have been identified. The upcoming consultations between the MCTS program and the College may provide an opportunity to revise and improve the MCTS training to better meet operational needs.

Recommendation 4: It is recommended that the Deputy Commissioner, Operations review the ab-initio and the on-the-job training and course material for MCTS to determine if changes of the content and/or alternative delivery of the training are feasible and beneficial. The review and the

potential implementation of the alternatives should contribute to a shorter certification time period.

Recommendation 5:

Rationale: A need for consistent and transparent communication by College administration was identified. The evaluation identified gaps in communication related to: transparency of expectations for officer-cadets (e.g., sea phase, TC requirements) and decision-making (e.g., discipline); a means for officer-cadets to raise concerns and suggestions to administration; and, fleet expectations to support and assess officer-cadets during training (e.g., sea manual, providing feedback on training content). The College needs to improve the effectiveness of its current communication practices to ensure that these gaps are addressed.

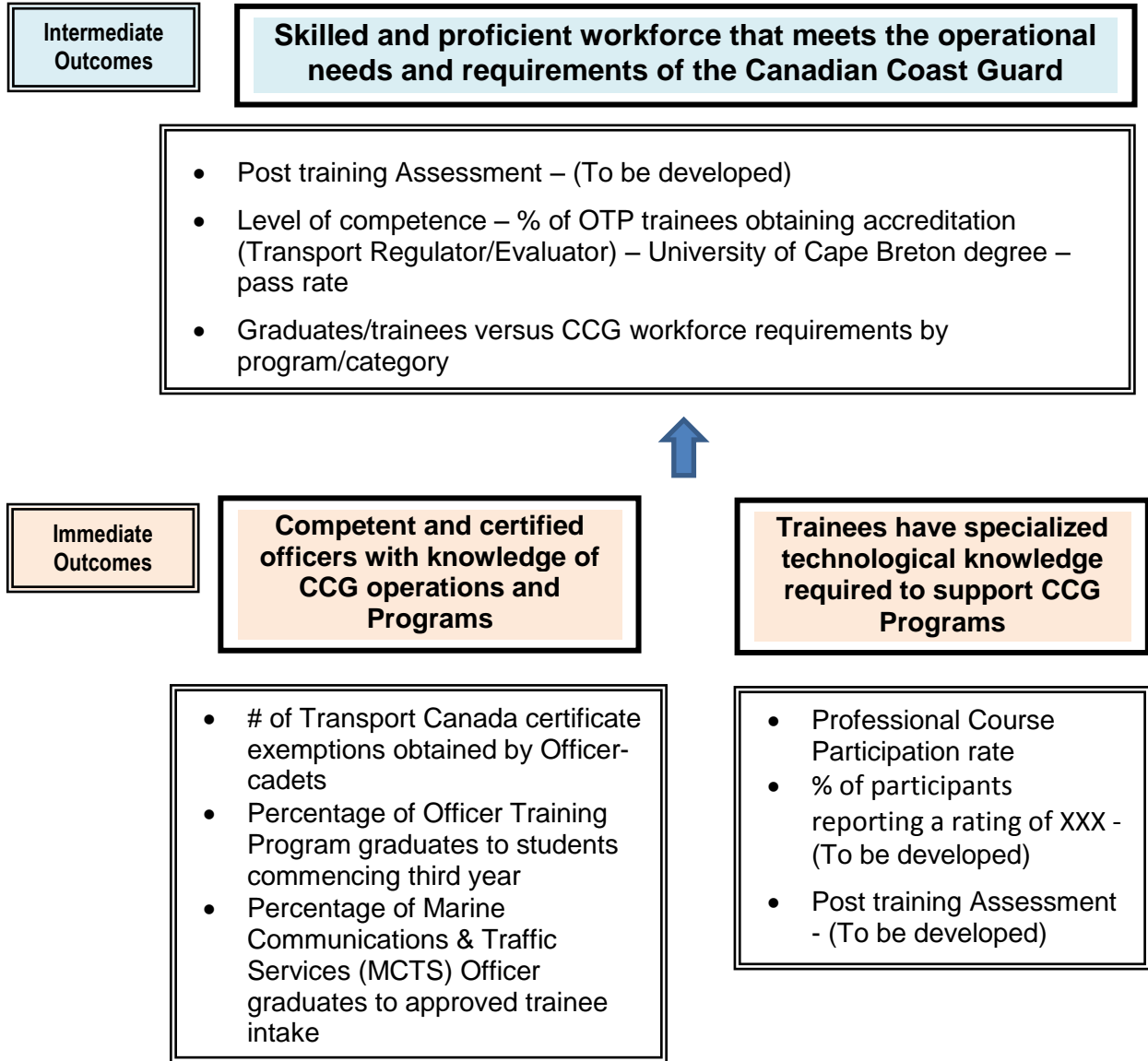
Recommendation 5: It is recommended that the Deputy Commissioner, Operations ensure the College establishes reliable communication practice with officer-cadets/trainees and internal staff so that all internal policies and procedures are understood and that information related to training and campus life is shared in an effective, transparent and timely manner.

Recommendation 6:

Rationale: Due to the challenging nature of the College programs, mental health concerns (such as burnout, depression and chronic stress) were identified by some officer-cadets. Yet, the evaluation found that there is a lack of awareness of, and access to, mental health support resources. There is a need to ensure that mental health support resources are available to all trainees and that the College population is aware of how to access these supports.

Recommendation 6: It is recommended that the Deputy Commissioner, Operations ensure that (i) all officer-cadets/trainees at the College have access to consulting and support resources related to mental health; (ii) the College initiates a promotion and outreach campaign to draw awareness to mental health support resources currently available at the College.

ANNEX A: PROGRAM LOGIC MODEL



ANNEX B: EVALUATION MATRIX

ISSUE / QUESTION	INDICATOR(S)	LINE OF EVIDENCE				
		Interviews	Survey	Admin Data	Documents	Comparative Analysis
1.0 Relevance²¹ & Effectiveness²²						
1.1 To what extent does the College support a skilled and proficient workforce that meets the operational needs and requirements of the CCG?	<ul style="list-style-type: none"> Evidence / views the College is serving the anticipated workforce needs of the Canadian Coast Guard (graduates / trainees v. CCG workforce requirements by program / category) 	√		√	√	
	<ul style="list-style-type: none"> Evidence to support the continued need for the College 	√				
1.2 To what extent does the College support the development of competent officers and trainees with knowledge of CCG operations and programs?	<ul style="list-style-type: none"> % of Officer Training Program graduates to students commencing third year (v. # of OTP applicants) 			√		
	<ul style="list-style-type: none"> % of MCTS Officer graduates to approved trainee intake 			√		
	<ul style="list-style-type: none"> Graduate survey / satisfaction 	√	√			
	<ul style="list-style-type: none"> Employer opinion /satisfaction 	√				
	<ul style="list-style-type: none"> Trainees have specialized technological knowledge to support CCG programs? 			√		
2.0 Efficiency²³						
2.1 What has been done in the past five years to improve the	<ul style="list-style-type: none"> Evidence the College has / is exploring 	√	√		√	√

²¹ The extent to which a program, policy or other entity addresses and is responsive to a demonstrable need. Relevance may also consider if a program, policy, or other entity is a government priority.

²² The impacts of a program, policy, or other entity, or the extent to which it is achieving its expected outcomes.

²³ The extent to which resources are used such that a greater level of output / outcome is produced with the same level of input or, a lower level of input is used to produce the same level of output / outcome. The level of input and output / outcome could be increases or decreases in quantity, quality, or both.

ISSUE / QUESTION	INDICATOR(S)	LINE OF EVIDENCE				
		Interviews	Survey	Admin Data	Documents	Comparative Analysis
efficiency of the College?	innovations in recruitment and course delivery					
	<ul style="list-style-type: none"> Evidence of the efficient use of the physical capacity of the College 	√			√	
2.2 Could the efficiency of the College be improved in the coming years?	<ul style="list-style-type: none"> Views / evidence of changes that could be made to improve efficiency of the College 	√				√
3.0 Other						
3.1 What are the key barriers to success?	<ul style="list-style-type: none"> Views / evidence of barriers to successful outcomes 	√	√		√	√
3.2 What are the key success factors?	<ul style="list-style-type: none"> Views / evidence of key success factors contributing to successful outcomes 	√	√		√	
3.3 Overall student experience	<ul style="list-style-type: none"> Opinions of students/graduates on various aspects of the College 		√			

ANNEX C: MANAGEMENT ACTION PLAN

RECOMMENDATION 1

Recommendation 1: It is recommended that the Deputy Commissioner, Operations ensure that the role of the College be strengthened to allow its recognition as the Centre of Expertise for marine training for the CCG. This requires the governance model of the College to be strengthened to ensure that the College has appropriate strategic direction and guidance, including senior-level regional representation. This would allow the College to explore various learning platforms and service delivery models to be utilized for training for the CCG.

Rationale: There is a need for the College to take on a more prominent role as the centre of expertise in CCG training. To accomplish this, the College requires representation at the highest level of the CCG. The evaluation found a lack of coordination between the College and CCG regions, particularly related to recruitment and regional fleet input for teaching and evaluation support. The College's governance committees currently have no regional representatives. By including senior-level regional leaders, the governance of the College will gain a regional perspective on training matters and the needs of the College can be elevated and championed at the senior decision-making level.

Currently, the information and communication technology supporting learning at the College does not allow implementation of education practices that are available in most Canadian post-secondary institutions and that are expected by learners. The College needs to modernize its learning platform and technology in order to be able to implement alternative course delivery models, and to be attractive to the current younger generation of learners.

STRATEGY

There is a recognized need to strengthen governance of not only training delivered by the College but for all operational training in the Coast Guard. A Board of Governors, with senior level regional representation, is to be established to provide advice and recommendations to the Commissioner and Management Board on matters relating to the College and Operational Training. The Board shall also review and assist in the development of the strategic direction of College.

A principal task of the Board will be to inform the College's strategic direction and provide direction in the use and development of modern learning platforms and technology.

MANAGEMENT ACTIONS	DUE DATE (BY END OF MONTH)	STATUS UPDATE: COMPLETED / ON TARGET / REASON FOR CHANGE IN DUE DATE	OUTPUT
Establishment of the Board of Governors	Sept 2017		Establishment of TOR
Acceptance of Board Terms of Reference	Dec 2017		Terms of Reference
Finalize College Strategic Plan, including direction on the use of modern learning platforms and technology.	Sept 2018		College Strategic Plan and Implementation Plan

RECOMMENDATION 2			
<p>Recommendation 2: It is recommended that the Deputy Commissioner, Operations ensure the College puts in place the post-training assessment tool and its data repository, to regularly collect performance feedback from trainees and CCG operations’ officers/managers, and to utilize the feedback for continuous improvement of the quality of the training.</p> <p>Rationale: While the College now has a quality assurance program in place, evidence shows that gaps in the consistency and quality of instruction, assessment and course material still exist. The College still has yet to implement the post-training assessment tool recommended in previous evaluations. By implementing the post-training assessment tool, the College will have a means to validate the consistency and quality of instructional components and to collect graduate feedback for continuous improvement.</p>			
STRATEGY			
<p>The College has developed and established a post-training assessment methodology, however wide implementation has not yet occurred. With the goal to regularly collect performance feedback from trainees and Coast Guard operations’ officers/managers, and to utilize the feedback for continuous improvement of the quality of the training, the post-training assessment program will be expanded to include all operational training delivered by the College and then expand to other operational training in Coast Guard. This will also assist programs during the identification and development of Coast Guard operational competencies.</p>			
MANAGEMENT ACTIONS	DUE DATE (BY END OF MONTH)	STATUS UPDATE: COMPLETED / ON TARGET / REASON FOR CHANGE IN DUE DATE	OUTPUT
Establish an action plan for full implementation of a post-training assessment program for all training delivered by the College.	Dec 2018		Action plan
Establish an action plan for implementation of a post-training assessment program for other operational training courses (not delivered by the College).	Sept 2019		Action plan

RECOMMENDATION 3			
<p>Recommendation 3: It is recommended that the Deputy Commissioner, Operations strengthen the recruitment of both OTP cadets and MCTS trainees at the College, and ensure appropriate links of collaboration between the College and the CCG regions with regards to recruitment and associated activities.</p> <p>Rationale: The recruitment of trainees for both the OTP and MCTS programs represents a significant risk to CCG program delivery as it is linked to the broader organization’s challenges of maintaining human resource capacity and succession planning. The College has very limited capacity to handle the intensive and heavy workload related to recruiting and selecting OTP candidates. In addition, the limited collaboration between the College and the regions with regards to recruitment and outreach impedes the implementation of steps to address the situation adequately.</p>			
STRATEGY			
<p>The College has identified resource requirements to support a robust recruitment campaign with the objective of supporting the future staffing needs of the Canadian Coast Guard. In addition to supporting a broader, strategic recruitment campaign additional recruitment resources will support opportunities to engage in activities to improve recruitment of women, visible minorities, francophone and Indigenous Peoples. The College recognizes the need for coordination of recruitment activities for Coast Guard jobs and programs, specifically the MCTS program.</p> <p>As noted in Recommendation #1, the College Board of Governors will be established in the Fall of 2017 to provide strategic direction to the College and for Coast Guard operational training. The Board of Governors will be a resource for the College in identifying Coast Guard staffing needs and identifying strategies to ensure the College’s recruitment activities support the anticipated needs.</p>			
MANAGEMENT ACTIONS	DUE DATE (BY END OF MONTH)	STATUS UPDATE: COMPLETED / ON TARGET / REASON FOR CHANGE IN DUE DATE	OUTPUT
Establish forums for input and coordination in meeting the recruitment needs of the CCG including the MCTS program. This will be accomplished via the Board of Governors (Recommendation 1).	Dec 2017		Record of Decision from Board of Governors meeting
Development of a strategic recruitment plan that recognizes the needs of the Coast Guard	March 2018		Strategic Recruitment Plan

<p>and identifies strategies for recruitment of women, francophone, visible minorities and Indigenous Peoples.</p>			
<p>Fully staff the positions allocated to the College for recruitment.</p>	<p>March 2018</p>		<p>The positions allocated to the College for recruitment are fully staffed</p>

RECOMMENDATION 4

Recommendation 4: It is recommended that the Deputy Commissioner, Operations review the ab-initio and the on-the-job training and course material for MCTS to determine if changes of the content and/or alternative delivery of the training are feasible and beneficial. The review and the potential implementation of the alternatives should contribute to a shorter certification time period.

Rationale: A recent evaluation of the MCTS program recommends that the program develop and implement a sustainable staffing strategy (OPP). As identified in the MCTS Management Action Plan, this would require consultations with MCTS Program and NHQ Certification and Professional Development group, CCG Regions and the College to determine the best means to train and certify necessary staff to fill current and future vacancies. The current evaluation of the College found that there may be feasible alternative delivery models for the MCTS training (e.g., compressing the ab-initio component, distance learning delivery, alternating parts of ab-initio with on-the-job training). In addition, issues with the quality of the MCTS course material have been identified. The upcoming consultations between the MCTS program and the College may provide an opportunity to revise and improve the MCTS training to better meet operational needs.

STRATEGY

The training objectives and outcomes for the MCTS Ab-initio Program are the responsibility of the MCTS Program through the established MCTS Training Advisory Group (TAG). MCTS training and certification program is based on the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) Standards and model courses. The training objectives and program are continually updated to reflect any changes in technology and standards, however, an overall review will be forthcoming with future significant changes to MCTS delivery of its services, including Smart VTS. The College, as a centre of expertise, can assist the TAG in reviewing objectives and outcomes leading to a full review of the MCTS Training Program.

MANAGEMENT ACTIONS	DUE DATE (BY END OF MONTH)	STATUS UPDATE: COMPLETED / ON TARGET / REASON FOR CHANGE IN DUE DATE	OUTPUT
In collaboration with the implementation of the MCTS Quality Management System, align the MCTS ab initio training with the College’s Quality Assurance Program.	Sept 2018		Quality Assurance Program and MCTS ab initio training are aligned.

MCTS TAG to establish national OJT guidelines and objectives	March 2018		Approved national OJT and training objectives.
Implement the national guidelines and objectives at all MCTS centres.	March 2019		Approved centre training packages.
Conduct review of the MCTS ab initio training objectives related to Vessel Traffic Services and the Safety services of the program.	March 2019		Approved training objectives.
Develop and implement the changes required to the MCTS Training Curriculum and Program reflecting updated objectives.	March 2020		Updated curriculum and training program.

RECOMMENDATION 5			
<p>Recommendation 5: It is recommended that the Deputy Commissioner, Operations ensure the College establishes reliable communication practice with officer-cadets/trainees and internal staff so that all internal policies and procedures are understood and that information related to training and campus life is shared in an effective, transparent and timely manner.</p>			
<p>Rationale: A need for consistent and transparent communication by College administration was identified. The evaluation identified gaps in communication related to: transparency of expectations for officer-cadets (e.g., sea phase, TC requirements) and decision-making (e.g., discipline); a means for officer-cadets to raise concerns and suggestions to administration; and, fleet expectations to support and assess officer-cadets during training (e.g., sea manual, providing feedback on training content). The College needs to improve the effectiveness of its current communication practices to ensure that these gaps are addressed.</p>			
STRATEGY			
<p>When communication is effective, both the officer cadets and management benefit. Communication makes learning easier, helps cadets achieve goals, increases opportunities for expanded learning, strengthens the connection between cadet and instructor, and creates an overall positive experience. In the context of the College, this has to be balanced with a defined Command and Control structure that is being instilled in officer cadets from day 1.</p> <p>Although expectations and requirements, such as standing orders, Transport Canada requirements, etc, are communicated extensively upon arrival and throughout the 4-year program, obviously more work has to be done to ensure a thorough understanding. Officer cadets currently have representation on Academic Council, OSH and other feedback forums as well.</p>			
MANAGEMENT ACTIONS	DUE DATE (BY END OF MONTH)	STATUS UPDATE: COMPLETED / ON TARGET / REASON FOR CHANGE IN DUE DATE	OUTPUT
Investigate social-media initiatives as a form of internal communication.	Dec 2017		Communications strategy
Develop communications outreach plan for staff and trainees.	Dec 2018		Communications outreach plan
Promote leadership development with officer cadets in the sense of them taking ownership of Officer Cadet Standing Orders through the development of an Officer Cadet Code of Conduct.	Aug 2018		Officer Cadet Code of Conduct

Implement leadership initiative to transfer responsibility of O/C Standing Orders to officer cadets.	Aug 2019		Updated O/C Standing Orders
Improve Officer Cadet On-Boarding, in conjunction with current Coast Guard and Departmental On-Boarding initiatives.	Aug 2018		Officer cadet specific appendix to onboarding program

RECOMMENDATION 6			
<p>Recommendation 6: It is recommended that the Deputy Commissioner, Operations ensure that (i) all officer-cadets/trainees at the College have access to consulting and support resources related to mental health; (ii) the College initiates a promotion and outreach campaign to draw awareness to mental health support resources currently available at the College.</p> <p>Rationale: Due to the challenging nature of the College programs, mental health concerns (such as burnout, depression and chronic stress) were identified by some officer-cadets. Yet, the evaluation found that there is a lack of awareness of, and access to, mental health support resources. There is a need to ensure that mental health support resources are available to all trainees and that the College population is aware of how to access these supports.</p>			
STRATEGY			
<p>Mental health and wellness requires continuous vigilance and action not only by the Officer Cadet body but for those that directly support their wellbeing. We have to ensure timely effective intervention by professionals when and where required in both official languages. Mental health and wellbeing initiatives need to be built into our regular business at the College.</p>			
MANAGEMENT ACTIONS	DUE DATE (BY END OF MONTH)	STATUS UPDATE: COMPLETED / ON TARGET / REASON FOR CHANGE IN DUE DATE	OUTPUT
Complete the trial of third party provider for counselling services specifically designed for students. (SAGE)	June 2017		Completed trial
Establish a long-term (multi-year) contract to maintain the counselling service	Sept 2017		Long-term contract is established
Partner with Nova Scotia Community College to deliver Pilot training on “Strategic Resilience for First Responders”	March 2018		Partnership with Nova Scotia Community College
Participate in the DFO Mandatory Mental Health Training Pilot to promote mental health, enhance resiliency, and prevent harm and to address incidents and concerns. Gulf Region and the College are pilot areas.	March 2018		Participation in the DFO Mandatory Mental Health Training Pilot by the College