
Marine Transportation Careers: An Overview

The marine transportation sector of Newfoundland and Labrador's economy offers huge promise and delivers immense returns. For today's high school students, the promise lies in marine transportation's high-end employment opportunities for appropriately trained recruits. Over the next several decades, work in the province's marine and offshore ventures will offer participants attractive lifestyles, solid incomes, and challenging careers. The marine transportation sector will also provide a significant and ongoing economic boost to this province.

In addition, there will be unprecedented opportunities to work internationally. Marine transportation employers worldwide have identified serious labour market shortages that are projected to become even larger. Major shipping companies are offering extremely attractive salaries, benefits, and incentives to personnel with the skills to work on ships and offshore platforms, as well as onshore in support roles.

There is particularly strong demand for ships' officers (especially engineering officers); marine electrical, electronics, and instrumentation technicians; marine superintendents and safety officers; naval architects; and marine systems designers.

As a result of the strong demand for and limited supply of trained personnel, marine transportation employees receive high salaries, an attractive leave system, and unparalleled advancement opportunities. Current sea-based employees note that shipboard accommodation is excellent, and employment is characterized by a "safety first" culture.

Interestingly, female participation in marine transportation occupations has begun to increase significantly as women become more aware of the unique opportunities and benefits of working in this historically male-dominated sector.

While the most critical shortages are for sea-going personnel, marine transportation offers numerous shore-based opportunities as well, from clerks to naval architects. Moreover, career paths for mariners often lead back to shore as they build on their ocean-going experience to qualify for the growing number of senior positions "on the beach" created by the expanding marine and offshore sectors in this province.

A very attractive aspect of marine transportation sector employment, and one that differentiates it from employment in many other fields, is that participants can live in the province while working anywhere in the world. In contrast to the consistent outmigration of skilled labourers from Newfoundland and Labrador, employees in this sector generally build and maintain homes in the very communities in which they were raised. While they must hop a plane or drive a car to meet their ships for crew changes, the equal time on/time off leave provisions of major shipping companies allow mariners to enjoy long periods of paid leave at home, wherever they choose home to be.

COMPASS Points: Notes to Teachers

The *Sea for Yourself* Kit is designed to help teachers and students see for themselves what marine transportation careers are all about – and learn about the tremendous opportunities and benefits associated with these careers. The kit provides support for the *Unit 3: Career Exploration – Learning and Work* objectives of *Career Development 2201*; and the lesson plans, activities, and other resources have been developed with both teachers and students in mind.

We recognize that teachers need background information as well as teaching materials to deliver marine transportation career information to students; as a result, this kit provides a PowerPoint Presentation with Teacher Notes for each lesson, together with a list of resources that teachers can access easily to provide further elaboration on topics. (Many of the resources listed are included in the kit.) In addition, we understand that teachers want and need well-organized materials that are flexible. The *Sea for Yourself* lesson plans are user friendly and logically organized, and the activities suggested to reinforce messages presented in the lessons can be used in different ways from those recommended in the lesson plans. Teachers can use the lesson plans exactly as presented, or they can use components of them to create their own units on marine transportation careers.

In addition to meeting teacher needs, meeting student needs has been a priority in the development of this instructional package. The lessons and the suggested activities have been developed with varying student learning styles, abilities, interests, and talents in mind. As the *Sea at a Glance* summary shows, the student activities range from pencil/paper individual exercises to creative group projects. To provide even greater diversity and flexibility, the lesson plans have an added feature: suggestions for Alternate/Additional Student Activities. The goal is to engage students by making the material interesting and fun – and to afford students opportunities to use their talents in their learning and thus make the learning memorable.

The *Sea for Yourself* Kit includes another major component and significant teaching/learning resource: Marine Transportation Career Profiles. These profiles add human interest; they put faces – young, dynamic faces – on marine transportation careers. The profiles highlight young people in marine transportation careers, focusing on reasons for choosing particular careers, educational backgrounds, job details/descriptions, working conditions, benefits, and interesting aspects of marine transportation careers. In addition, these profiles provide advice to young people considering marine transportation careers, and they include pictures that depict various aspects of the careers and lives of the individuals profiled. Suggestions for use of these profiles are incorporated into the lesson plans (Lesson Two: Part II in particular).

Finally, the *Sea for Yourself* Kit has a number of appendices which provide additional resources to enhance teaching and learning about marine transportation careers. The DVDs are especially interesting and will likely capture student attention. Suggestions for use of these resources are incorporated into the lesson plans.

Future Teacher and Student Resources

The COMPASS website (www.compasscanada.info) will provide updated and/or additional materials.

Feedback - Please!

COMPASS would like to hear from you. After teaching this unit or sections of it, please share your impressions with us via email at info@compasscanada.info

Sea at a Glance: A Summary of Student Activities, Lesson Objectives, and Resources

Student Activities	Lesson Objectives	Resources
<p>Lesson One</p> <p>Welcome Aboard: An Introduction to Marine Transportation Careers</p> <p>Pencil/Paper + Discussion</p> <p>Activities: <i>Sea for Yourself</i> + <i>Sea Search</i></p> <ol style="list-style-type: none"> 1. Complete the <i>Sea for Yourself</i> Pre-test. 2. Complete the <i>Sea for Yourself</i> Post-test. 3. Discuss test results. 4. Complete the <i>Sea Search</i> Marine Transportation Careers Puzzle. <p>Alternate/Additional Activity: <i>Search a Sea Word</i> or <i>Look and Sea</i></p> <ul style="list-style-type: none"> ▪ Create a search-a-word puzzle for other students. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ▪ assess knowledge and understanding of marine transportation careers ▪ identify a number of marine transportation careers 	<p>COMPASS <i>Sea for Yourself</i> Kit:</p> <ul style="list-style-type: none"> ▪ PowerPoint Presentation (with Teacher Notes) ▪ <i>Sea for Yourself</i> DVD ▪ Handouts: <ul style="list-style-type: none"> ○ <i>Sea for Yourself</i> Pre-test ○ <i>Sea for Yourself</i> Post-test (with Answer Key) ○ <i>Sea Search</i> Marine Transportation Careers Puzzle (with Answer Key)
<p>Lesson Two (Parts I + II)</p> <p>Oceans of Opportunity: Exploring Specific Marine Transportation Occupations</p> <p>Lesson Two: Part I</p> <p>Discussion + Pencil/Paper</p> <p>Activities: Discussion + <i>Sea Jumble</i></p> <ol style="list-style-type: none"> 1. Discuss questions provided regarding marine 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ▪ Identify general marine transportation career categories and discuss specific occupations within those clusters. 	<p>COMPASS <i>Sea for Yourself</i> Kit:</p> <ul style="list-style-type: none"> ▪ PowerPoint Presentation (with Teacher Notes) ▪ COMPASS Website ▪ <i>Sea for Yourself</i> Career Profiles ▪ Handout: <ul style="list-style-type: none"> ○ <i>Sea Jumble</i> Puzzle (with Answer Key)

<p>transportation careers/ occupations.</p> <p>2. Complete the <i>Sea Jumble</i> Puzzle.</p> <p>Lesson Two: Part II Discussion + Journal Writing</p> <p>Activities: <i>Sea for Yourself</i> + <i>Sea for Me?</i></p> <p>1. Read <i>Sea for Yourself</i> Career Profiles and discuss questions provided.</p> <p>2. Write a <i>Sea for Me?</i> journal entry.</p> <p>Alternate/Additional Activity: <i>Produce a Profile</i></p> <ul style="list-style-type: none"> ▪ Write a profile of a local person working in a marine transportation career. 		<p>Other Resources:</p> <ul style="list-style-type: none"> ▪ <i>A Seafull of Opportunity</i> DVDs
<p>Lesson Three</p> <p>Charting a Career: Exploring Marine Transportation Programs</p> <p>Research + Pencil/Paper</p> <p>Activities: <i>Planning for a Program</i></p> <p>1. Create a timeline to represent a marine transportation program.</p> <p>2. Create a table to identify personal qualities required for a particular program/ career and compare to students' qualities.</p> <p>Alternate/Additional Activity: <i>Sea Speak</i></p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> ▪ identify entry requirements for marine transportation careers ▪ describe structures of marine transportation programs ▪ identify personal qualities required for marine transportation programs/careers ▪ compare students' qualities with those required for success in marine transportation programs/careers 	<p>COMPASS <i>Sea for Yourself</i> Kit:</p> <ul style="list-style-type: none"> ▪ PowerPoint Presentation (with Teacher Notes) ▪ <i>where you want to be</i> Marine Institute DVD ▪ <i>Sea for Yourself</i> Career Profiles ▪ COMPASS Website ▪ Marine Institute Program Information Sheets <p>Other Resources:</p> <ul style="list-style-type: none"> ▪ Marine Institute Website ▪ Memorial University Website ▪ Canadian Coast Guard College Website

<ul style="list-style-type: none"> ▪ Invite a local person working in the marine transportation industry as a guest speaker. 		<ul style="list-style-type: none"> ▪ <i>A Seaful of Opportunity</i> DVDs
<p>Lesson Four</p> <p>Getting on Board: Promoting Marine Transportation Careers</p> <p>Research + Creative Presentations</p> <p>Activity: <i>Selling the Sea</i></p> <ul style="list-style-type: none"> ▪ Individually or in small groups, create materials to promote marine transportation careers to other students. <p>Alternate/Additional Activity: <i>Getting on Board</i></p> <ul style="list-style-type: none"> ▪ Put off a Mini Marine Transportation Career Fair for other students. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ▪ identify key messages that can be used to promote marine transportation careers to students ▪ create promotional materials based on interests/talents (written, oral, various creative options) 	<p>COMPASS <i>Sea for Yourself</i> Kit:</p> <ul style="list-style-type: none"> ▪ PowerPoint Presentation (with Teacher Notes) ▪ <i>Sea for Yourself Rants</i> DVD ▪ COMPASS Website ▪ <i>Sea for Yourself</i> DVD ▪ <i>Sea for Yourself</i> Career Profiles ▪ Career Ladders: Deck and Engineering Officers ▪ <i>where you want to be</i> Marine Institute DVD ▪ Marine Institute Program Information Sheets <p>Other Resources:</p> <ul style="list-style-type: none"> ▪ Marine Institute Website ▪ Canadian Coast Guard College Website ▪ <i>A Seaful of Opportunity</i> DVDs ▪ <i>Career Search</i>, Department of Education
<p>Lesson Five</p> <p>Sea Changes: Yesterday, Today, and Tomorrow</p> <p>Journal Writing</p> <p>Activity: <i>Sea My Future</i></p> <ul style="list-style-type: none"> ▪ Project 10 to 15 years into the future and write your own profile. 	<p>Students will be able to:</p> <ul style="list-style-type: none"> ▪ compare aspects of marine transportation careers of the past to those of the present ▪ discuss aspects of the marine transportation 	<p>COMPASS <i>Sea for Yourself</i> Kit:</p> <ul style="list-style-type: none"> ▪ PowerPoint Presentation (with Teacher Notes)

<p>Alternate/Additional Activities: <i>Sea Changes</i></p> <ol style="list-style-type: none"> 1. Invite two mariners (one older/one younger) as guest speakers to compare work experiences. 2. Choose from a variety of journal entries: lifestyle/ work environment, gender issues, the future, and safety. 	<p>industry of the future</p>	
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Notes:

- Complete details and instructions for each student activity are provided in the lesson plans.
- All puzzles, journal entries, promotional materials, and so forth, produced in the student activities can be added to students' Course Content Portfolios (CCPs). (A *Sea Chest* section is suggested.)
- Some activities are designed to be completed individually while others are designed to be undertaken by a group; some can be done either way.
- Each lesson is accompanied by enrichment/extension activities that can be used as alternate or additional exercises, depending on teacher preference and student abilities, interests, talents, and so forth.

Acknowledgements

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The development of these resources was overseen by a Steering Committee comprising representatives of industry (Canadian Coast Guard, Canship Uglund, Great Circle Marine Services, Newfound Resources, Puddister Trading Company, and the Puglisevich Group of Companies), marine education and training institutions (the Fisheries and Marine Institute of Memorial University and the Nautical Institute/School of Fisheries of Nova Scotia Community College), the Government of Canada (Service Canada), and departments and agencies of the Government of Newfoundland and Labrador (Education; Human Resources, Employment and Labour; Natural Resources; Transportation and Works; and the Women's Policy Office). COMPASS acknowledges with gratitude their guidance and direction.

COMPASS also gratefully acknowledges use of materials from the following sources in this *Sea for Yourself* Marine Transportation Careers Kit: Algoma Central Corporation, Canadian Coast Guard, Canadian Coast Guard College, Canship Uglund, Clearwater Seafood, Fisheries and Marine Institute of Memorial University, Human Resources Sectorial Committee of the Maritime Industry, Nunavut Eastern Arctic Shipping, Petro-Canada, Puddister Trading Company, and Royal Caribbean Cruise Lines.

The marine transportation professionals and students profiled in this career exploration package and in the marine careers video and promotional materials were enthusiastic in their support for this project. They exemplify the extremely high level of professionalism and dedication that made this project possible, and COMPASS expresses its sincere gratitude for their generosity and cooperation.

COMPASS also expresses its gratitude to students and staff of O'Donel High School in Mount Pearl for the production of the male and female student rants included in these resources. These dynamic and entertaining rants demonstrate the creative spirit and imagination of the students involved and their school's support for the development of their creative potential.

Finally, COMPASS commends the creative energy and effort of educators Cherry Dalley and Heidi Janes in the development of the resources that make the *Sea for Yourself* Marine Transportation Careers Kit an exceptional teaching and learning tool that is both teacher and student friendly. We hope you find this kit to be useful and enlightening in your classroom instruction; *sea for yourself*.

John L Connors
Executive Manager, COMPASS