Marine Learning Systems



BC Ferries

Fostering a culture of safety and improving crew performance with effective training

British Columbia Ferry Services Inc. (BC Ferries) is one of the largest passenger ferry systems in the world. BC Ferries services 49 locations with over 36 vessels, linking mainland British Columbia with various islands off the west coast of Canada.

Training at BC Ferries is more involved than first imagined. With over 900 potential combinations of route and vessels, either crew members had to be trained separately for a route and then for the specific vessel, or an immense number of training resources was needed. BC previously relied on job shadowing as their solution. It was effective in providing role- and vessel-specific knowledge, however, it produced variable results and was only as good as the mentor being shadowed.

≈BCFerries

Industry Passenger Ferries

Location Canada

Employees 4,700

Product MarineLMS

Results

Introduced standardization, increased training effectiveness and retention, impoved employee engagement, created a community for trainers and trainees, improved crew performance and vessel safety

Challenges:

- Standardize training and familiarization methods for all crew members, as job shadowing gave highly variable results
- Employ blended learning to effectively train employees
- Organize and easily display the immense catalog of learning materials and courses
- Document and capture company best practices and other content

- Keep information and learning content consistent and easily updated
- Standardize the clearance process with randomized and automatically graded assessments
- Maintain and issue certifications automatically based on templates
- Deliver on-demand reports that provide analytics and insight to management

MarineLMS at BC Ferries

BC Ferries began the Standardized Education and Assessment (SEA) program to overhaul their training process and address these challenges. The program is part of SailSafe, a larger initiative to transform BC Ferries into a world class safety organization.

For the trainee, their learning materials are custom constructed for their particular training objectives. Their learning is consistent, rather than dependant on the mentor they job shadow. For BC Ferries, all learning materials are created and easily maintained in one central location.

"MarineLMS is proving to be a game changer in terms of our learning culture - students are excited about the training, trainers are feeling well-supported, and supervisors have much greater confidence in the graduates...win-win-win!"

- Jeff Joyce, Director of Fleet Operations, BC Ferries

Unable to find an off-the-shelf learning management system that met their needs for the SEA program, BC Ferries approached Marine Learning Systems to develop a system from the ground up. Chosen for the team's depth of experience in deploying systems for thousands of organizations, Marine Learning Systems worked with BC Ferries to develop MarineLMS.

Overall, MarineLMS acts as a centralized resource for all standardized learning materials and assessments at BC Ferries that support the SEA program. It dynamically generates learning materials and assessments based on chosen parameters, it maintains a comprehensive set of learning metrics for continuous improvement, it simplifies and centralizes content maintenance greatly reducing the cost of maintaining the learning materials, and provides a place for the BC Ferries trainer community to gather and share knowledge.

Results

The reaction to MarineLMS has been extremely positive. BC Ferries now have dedicated trainers, easy access to customized learning materials in one central location, and a standardized approach via MarineLMS. Trainers and administrators appreciate the structured approach, the support materials, and the various reports and analytics generated by the system.

Simplified and standardized learning

With MarineLMS's adaptive training module, BC Ferries is able to effectively organize and present their immense catalog of company and equipment specific learning materials. MarineLMS asks the trainee which vessel and route they are training for and then dynamically assembles all company-, job-, vessel- and route-specific materials into one seamless learning resource.

Understanding trainee knowledge and capabilities

MarineLMS dynamically creates randomized examinations where a selection of questions are chosen for the selected route, terminal, vessel and job being examined. The questions are randomized to reduce the possibility of trainees sharing answers. The mix of questions are also chosen to ensure that they cover the needed materials and every test is of equal difficulty. The assessments provide confidence that trainee abilities, both individually and collectively, are well understood.

Introducing continuous improvement and identifying problems before they occur

To ensure the quality of training outcomes and to facilitiate continous improvement of the learning process at BC Ferries, MarineLMS provides a series of measurements to enable auditing. These reports and audits help ensure and demonstrate that specific areas of knowledge are being successfully learned by the trainees. Areas which are not successfully learned can now be identified and addressed before an accident happens, not after.

Improving employee engagement

The online community established in MarineLMS has become very effective at facilitating trainer buy-in, improving the quality of mentorship and engaging trainees and trainers. The community gives a place for crew members at BC Ferries to communicate, learn and exchange best practices with each other. With its support, trainers are willing participants and actively engaged.

MarineLMS ensures that every trainee is successfully trained on best practices. Along with the use of self-study, MarineLMS helped BC Ferries save on training costs and reduced the cost of maintaining and delivering learning materials. This is important, but secondary to the overall improvement in safety and performance.