

## The Steps for Preventing the Fishing Vessel Accidents

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### Abstract

Accidents on fishing vessels happen as a result of intricate interactions between environmental, technical, and human variables. Investigators and preventative educators are focused with technological issues and equipment, despite the fact that they typically result from human acts, attitudes, or behaviour. Though these viewpoints must be expanded, equipment, machinery, weather, and other factual factors are vital. Accident investigators and educators who focus on accident prevention should base their techniques on interpretivist, radical structuralist, radical humanism, and functionalist theories. These several viewpoints were used to examine what transpired during the sinking of the Canadian fishing boat Scotia Cape. The “free surface effect,” which is significant as a consequence, not a cause, of the accident, is what caused it to likely roll over and sink, according to the transportation safety board report. The root of the problem is found in the imbalance of power between the firm and the crew as well as between the captain and the crew, in their “false awareness,” and in their individualised perceptions of risk and safety. Utilise of strategies that elicit and use the learner’s background and experience would be a part of prevention programmes influenced by interpretivist, radical humanism, radical structuralist, and radical functionalist viewpoints. Since the fishing fleet is so diverse, material would be adjusted to the local environment. Less lecturing and more active student participation would characterise participatory prevention education procedures.

### Introduction

Education rather than training would be the focus of prevention education programmes guided by interpretivist, radical humanism, radical structuralist, and functionalist approaches [1, 2]. The term “training” implies a set subject matter and the idea that there is agreement on the “proper” methods. The emphasis is on the course material, which is typically kept in ring binders and used year after year. Participatory methods, a lot of group work, and the effective application of case studies are all components of an educational strategy that takes into account the socio-cultural backgrounds of the students and prioritises power relations [3, 4]. We wouldn’t give up on the metanarratives. Instead, they would be added to more interactive formats that respect students and value their experience. Marine “training” institutions’ “instructors” would have to give up part of their control, resists the impulse to continually “teach,” and devise strategies for extracting and validating the cognitive constructs that students bring to the classroom [5, 6]. Participatory methods would go hand in hand with the expanded material. The existence of one without the other is impossible. Terminology and language would be crucial. The alternative to training would be education. We would have programmes instead of a curriculum.

### Program Content

Examining challenges resulting from learners’ socio-cultural backgrounds and cognitive views is a key component of programmes nesting in the three alternative perspectives. Power dynamics and fishery sociology would take centre stage. The focus would be on “macho-male” behaviour and gender politics [7, 8]. The notion that there is only “one way” to ensure safety would be abandoned by instructors. Instead, due consideration would be given to the highly specialised character of the fishery and the reality that a modest two-man crabbing operation cannot be compared to an offshore dragger with 14 crew members. In postmodernist lingo, educators would forgo metanarratives in favour of more flexible and differentiated techniques designed to satisfy the needs of students from various racial and cultural backgrounds, as well as those in various positions of power and weakness [9, 10]. The “distribution of information” or “facts” concerning piloting, fishing techniques, or equipment is typically a component of prevention

programmes based on functionalist analyses of fishing vessel accidents. They also have a propensity to be Eurocentric and to prioritise white, English-speaking people. People who speak Asian languages are the “other” who receive lectures on learning English and following “Canadian” customs. Ideally, a large portion of the program’s material will be based on the knowledge of ethnically distinct fishermen using various types of gear [11, 12]. By or in collaboration with vessel owners, unions, ethnic fishing associations, community groups, and other interests, more programmes should be offered. In British Columbia, fishermen who wish to enrol in maritime training programmes run by institutes of technology and comparable organisations must follow a curriculum created by professionals, many of whom have never set foot on a fishing boat. The power relations in these institutes are profoundly unequal, and in some courses, like those on marine emergency duties, questions are discouraged and the instructor brooks no challenge to the “correctness” of his lecture [13, 14]. Significantly, few ethnically defined fishers report for such “training,” most don’t “take it,” and many who start soon “leave it.” Children are the ones who construct learners. Their past is unimportant. If educators adopted an ideology of adult education, 42 42 fishing vessel incidents would be more likely to be avoided (instead of training). Education programmes based on the theoretical viewpoints outlined here would be heavily flavoured with material from the social sciences, such as psychology, anthropology, sociology, and others. Researchers and instructors would go much beyond “human factors” or ergonomics, let alone crash laws and emergency responsibilities. Alternate strategies might

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include addressing issues of gender, race, and the various standards and viewpoints held by trollers, seiners, gillnetters, crabbers, and so on. A focused investigation of the socio-political elements that influence fishing operations and this safety would take place. Less time would be spent in lectures, when the instructor presents his or her point of view, and more time would be spent in group activities, discussions, role plays, and simulations, where students may share their knowledge and viewpoints. It was decided to discuss and study the fishermen's tales of near-misses and major hits in a methodical and conceptually oriented manner [15, 16]. The use of case studies by instructors would be increased, but rather than simply "telling" students about incidents, they would use interactive methodologies to reveal various interpretations of the data included in casualty investigation reports. Tsb investigators' reports will be much more helpful for training reasons if they can provide them a socio-psychological and socio-cultural viewpoint. The case study, a method long used by adult educators, is very effective with fishers because, in many cases, the students knew the deceased whose names appear in the report and most are familiar with the circumstances (such as rough weather, competitive pressure, taking a short cut) that immediately preceded the accident being studied [17]. The instructor should make sure that students examine the topic from several theoretical vantage points while employing case studies. They should not blindly accept the investigator's explanation because it frequently refers to a result or end point rather than the "cause" of the accident. The emphasis should be on causal relationships that, frequently, started before the vessel even departed the port. Where there is uncertainty on the cause of a vessel's loss, informed guess based on interviews with those who know the deceased and their routines, along with research into comparable fishermen and organisational culture, produces instructive and educationally suggestive hypothesis. For instance, it is plausible to presume that the loss of the Scotia Cape was caused by free surface effect, but it would also be beneficial to challenge the routines, motivations, and discourses that account for the skipper's decision to continue sailing during terrible weather [18]. The instructor would also need to inquire into other structural relationships involving BC Packers and ask the corporation why it hadn't bothered to place an epirb or auto alert on the vessel. Too frequently, instructors and casualty investigators concentrate on the individual and "blame the victim" rather than understanding the context in which fishing occurs. According to alternative perspectives, preventative education would be interactive, employ local resources, put power dynamics and the socioeconomic, political, and social circumstances in which fishing occurs at the forefront of discussions.

## Conclusion

Accidents on fishing vessels happen as a result of intricate interactions between environmental, technical, and human variables. They typically happen as a result of human deeds, beliefs, or behaviour. Human behaviour takes place inside a web of unequal and perhaps abusive power interactions. Accident investigators and educators focused on prevention are preoccupied with "technical" problems and equipment, despite the fact that people are at the centre of fishing vessel mishaps. Objectivist ontology serves as the foundation for a functionalist viewpoint. It's crucial to consider tools, machinery, the weather, and other "objective facts". The moment has come for accident investigators and prevention educators to anchor their techniques on interpretivist, radical humanism, radical structuralist, as well as functionalist approaches. However, these preoccupations must be widened. After outlining each strategy, we examined what transpired during the loss of Scotia Cape from several angles. Because of these and other findings, stability is heavily stressed at marine institutions and

other places. According to the tsb investigation, Scotia Cape probably turned over and sank due to "free surface effect." Free surface impact is significant, although the accident that afflicted Scotia Cape was not caused by it. The imbalance of power between the firm and the crew, the skipper and the crew, as well as their "false awareness" and subjectively derived conceptions of "safety" and "risk," are what led to the accident. We believe that these issues should be prioritised over collision legislation, righting arm curves, marine electronics, piloting, and marine emergency responsibilities, which are rarely addressed in prevention education programmes (meds). Programs for prevention education that are informed by functionalist, radical structuralist, radical humanism, and interpretivist viewpoints would include strategies that elicit and utilise the learner's history and experience. Content would be tailored to regional specificities because the fishing fleet is quite diverse. Fewer lectures would be given, and there would be more active student participation in the prevention education activities.

## Conflict of Interest

None

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