

HUMAN BEHAVIOUR ABCs A NEW APPROACH TO TEACHING RECREATIONAL BACKCOUNTRY USERS

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ABSTRACT: Avalanche Canada's recreational training program has long recognized the importance of teaching how human behaviours can affect sound decision-making in avalanche terrain. Much is owed to the work of Dr. Ian McCammon, who first introduced the concept of human factors and their effects on recreational avalanche accidents in the early 2000s (2002). Through this innovative work, McCammon developed a list of mental shortcuts known as FACETS. While FACETS served to highlight the effect of biases, its focus on negative outcomes, as well as the complexity of the acronym, were impediments to its effective implementation in recreational training.

In 2018, Avalanche Canada published a student handbook for its introductory Avalanche Skills Training course (AST 1) in which we highlighted positive behaviours as well as negative. We explicitly chose to move away from using FACETS in this handbook but did not provide an easy method for instructors to teach these concepts of human behaviour. As a result, the acronym continued to appear in the instructor materials and some instructors continued to use it.

In the fall of 2024, I developed the Human Behaviour ABCs: Attitude, Biases, Communication. This mnemonic comprises clear, easily understood language that points students toward an increased level of self-awareness while emphasizing the vital need for structured decision-making tools, such as the Avaluator. I also wanted to provide instructors with concepts that could be easily referred to and integrated throughout the course.

KEYWORDS: Human behaviours, attitude, biases, communication

1. BACKGROUND

Avalanche Canada's Avalanche Skills Training course (AST 1) provides students with tools and techniques to help them make good choices in the winter backcountry. The Avaluator 3.0, comprising the Slope Evaluator card and the Trip Planner, and the Daily Process form the backbone of the curriculum. Through these materials, students have a structured approach that allows them to integrate relevant information to yield consistently rational decisions.

The AST 1 student handbook also speaks frankly about the challenge of making consistently rational decisions. While the concept of human behaviour and its effects on decision making have long been included in the curriculum, the pedagogy had not evolved significantly past the FACETS approach.

While the FACETS acronym was indeed ground-breaking for its time, its application for recreational courses was problematic. Primarily, the sole focus on the negative effects of biases did not provide an easy structure for instructors to build useful strategies for their students. And while FACETS was a catchy name, the words behind the acronym were challenging to remember.

While working on an update to the AST 1 instructors' material, I came up with this new approach to teaching this critical element of managing avalanche risk. With the Human Behaviour ABCs, instructors have a method to help students understand how decision making can be affected by human behaviours and recognize the primacy of the tools the course provides.

2. PROGRAM DESCRIPTION

2.1 Attitude

This first step of the ABCs is foundational to the process. As the instructor introduces this concept, the students are asked to examine their motivations and their approach to the backcountry. Attitude is not confined to the individual; this step also asks the students to consider their group's mindset and approach to risk.

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This discussion allows the instructor to provide guidance that complements the curriculum. As an example, Step 4 of the Daily Process is “verify conditions”, in which the students are instructed to gather relevant information to verify the forecast, or identify when the forecast may be wrong. In this way, the students are also encouraged to examine their attitudes throughout the day. As they gather information to verify, they can then judge whether this new knowledge affects their attitude and if so, how.

2.2 Biases

This term will be familiar to most students. Biases are a type of mental shortcut that can help with quick decisions but can also lead to errors in judgment. Students are encouraged to keep an open mind and maintain their self-awareness, in an effort to recognize their biases.

However, it’s important to realize that our understanding of biases has evolved. As Nobel laureate Daniel Kahneman explains in his latest book *Noise*, “educating people to overcome their biases is an honorable enterprise, but it is more challenging than it seems.” (2021). Kahneman goes on to say that simply being aware of cognitive biases is not enough to reliably prevent their effects on decision making. He distinguishes between learning about a bias, and actually developing an ability to recognize that bias while making a real decision, which he shows is a skill that requires practice-based training.

While an AST 1 does not provide the active training required to overcome biases, this step remains a good starting point for discussion. Students are asked to list some biases they may be aware of, and the instructor can cite examples of where biases played a clear role in poor decision making. By encouraging awareness of how biases can lead to errors in judgment, the instructor can point again to the need for tools that provide a rational and sound decision-making process.

2.3 Communication

The importance of this element of the ABCs cannot be overstated. Avalanche fatality records are full of incidents where communication broke down. Often, a group member had doubts but didn’t speak up. Other times, unclear communication within the group led to errors in terrain selection and increased exposure and risk for some or all the members. Learning how to effectively communicate is one of the key human behaviours for AST 1 students, as they observe how central it is to the decision-making process.

This step provides the instructor with a meaningful method of describing and emphasizing communication skills—asking questions, engaging with respect and sincerity, and practicing active listening. By clearly defining this step and setting expectations throughout the day for constant check-ins and discussions, the instructor is demonstrating a vital skill to their students.

3. CONCLUSION

Human Behaviour ABCs is a simple approach to a complex topic. My aim was to provide instructors with something memorable, easy to understand, and simple to teach. The important goal in teaching these concepts is to identify the dangerous effect that human behaviours can have on decision making in risky environments. The concurrent benefit is to give students an appreciation for the value and efficacy of the AST 1 tools and techniques, which provide a consistent and rational decision-support structure for travelling in avalanche terrain.

This work has now been adopted in the second edition of Avalanche Canada’s *AST Handbook*, published in 2025, and is referenced throughout the curriculum.

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