PROS AND CONS OF SNOWPACK TESTS IN A RECREATIONAL AVALANCHE EDUCATION CURRICULUM

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ABSTRACT: The goal of this presentation is to discuss the benefits and drawbacks of teaching snowpack tests[1] in recreational avalanche education. While traditional teaching emphasizes passing snow science knowledge from instructors to students, many avalanche accidents result from communication breakdowns and decision-making errors. Teaching human factors and terrain recognition might be more crucial than focusing solely on snowpack tests. However, these tests can impress students and create memorable experiences as well as helping them gain more information when it is not readily available. Challenges arise, such as beginner students struggling to interpret results and the question of teaching tests without specific problems. Dramatic results from tests can enhance learning, but we need to ensure concise, accurate and repeatable instruction. Analyzing the pros and cons of teaching snowpack tests can improve learning outcomes and encourage further discussion on effective teaching methods and desired results.

KEYWORDS: avalanche education, standardized tests, curriculum

1. INTRODUCTION

The instruction of standardized snowpack tests has been a staple across various providers of recreational avalanche education in the United States. Historically, avalanche education has emphasized snow science and hazard comprehension. However, a considerable number of avalanche incidents have revealed that accidents often stem from communication breakdowns and poor decision-making rather than a lack of snow science knowledge (McCammon, 2002). This prompts a reconsideration of the pedagogical approach and the role of snowpack tests in enhancing student understanding and preparedness.

The aim of this paper is not to decide on the necessity of incorporating snowpack tests into the recreational curriculum. Instead, the objective is to explore the complexities surrounding the process of snowpack tests and the underlying reasons for conducting them. Furthermore, the intention is to look deeper into this subject by utilizing surveys to examine trends related to the individuals involved in these activities, their motivations, and the specific locations where these tests are carried out. This investigative process will be facilitated through the implementation of additional surveys in the future.

2. PROS OF SNOWPACK TESTS IN RECREATIONAL AVALANCHE EDUCATION

2.1 Professional Instruction

Learning from experienced instructors provides students with accurate and reliable information, reducing the risk of misinformation dissemination through untrained channels.

2.2 Preparation for Pro Education

Given that Rec 1 serves as a prerequisite for Pro 1, teaching snowpack tests in the recreational program serves as a logical foundation for more advanced learning.

2.3 Visual Representation of Hazards

Snowpack test results that show reactivity can vividly demonstrate the potential of slab avalanches, reinforcing hazard awareness.

2.4 Resourcefulness in Forecast Absence

Snowpack tests equip students with skills for assessing snow stability when no official avalanche forecast is available.

2.5 Illustration of Spatial Variability

Through standardized tests, students can grasp the concept of spatial variability by comparing different test points.

[1] Snowpack tests refers to standardized tests such as the CT, ECT and PST

2.6 Student Expectations and Engagement

Students often anticipate learning about snowpack tests and find the hands-on experience engaging.

3. CONS OF SNOWPACK TESTS IN RECREATIONAL AVALANCHE EDUCATION

3.1 Risk of Misapplication

Students might misinterpret or incorrectly apply test results, as human cognitive biases can lead to drawing unsubstantiated conclusions.

3.2 Guidance Dependency

Beginners often require substantial guidance to execute standardized tests accurately, raising concerns about self-sufficiency.

3.3 Relevance to Actual Conditions

In some contexts, the snowpack might not necessitate digging or testing due to the absence of specific problems, making the tests redundant.

3.4 Safety Concerns

Instances of professionals being caught in avalanches after conducting pit tests highlight potential safety risks associated with snowpack testing.

3.5 Questionable Pedagogical Value

Teaching tests solely for the sake of teaching may overlook the fundamental purpose of hazard evaluation and decision-making.

4. CONCLUSION

The inclusion of standardized snowpack tests in recreational avalanche education presents both advantages and disadvantages. While snowpack tests can offer visual impact, skill development, and tools for assessing stability, their efficacy depends on proper execution, accurate interpretation, and the presence of relevant conditions. This paper emphasizes the need for a nuanced approach to avalanche education that acknowledges the interplay between snow science, decision-making, and human factors. As the avalanche education landscape evolves, ongoing discussions about the content and outcomes of recreational courses remain essential for enhancing user safety and preparedness.