Campus Recreation
Assessment of Outdoor Programs and Avalanche Education

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ABSTRACT

Campus Recreation has offered avalanche education targeted toward backcountry users for several decades, working closely with the Lolo National Forest to provide the University of Montana and Missoula communities with avalanche advisories and educational classes. The Montana Avalanche Foundation provides avalanche advisories for the west central Montana region through its Web site, www.missoulaavalanche.org. In an effort to acquire information about the popularity and usefulness of the site, Campus Recreation and the Montana Avalanche Foundation contracted with faculty from the University of Montana School of Business as well as the Management Information Student Association to conduct a survey of the site’s users.

BACKGROUND INFORMATION

As part of its mission to provide an active environment for social interaction, Campus Recreation seeks to inform the University and Missoula communities of safety guidelines regarding various recreation activities. The Montana Avalanche Foundation is a useful resource through which to provide this information. The goal of this assessment was to learn more about the users of the www.missoulaavalanche.org Web site. Specifically, Campus Recreation sought the following information: the demographics of the site’s users; users’ opinions on avalanche advisory delivery; whether users had been caught in an avalanche, and if so, whether the avalanche was reported; the type of avalanche equipment users carry into the backcountry; the winter businesses users work in; how users travel into the backcountry; users’ level of satisfaction with the frequency of avalanche advisories; the different types of communication methods that could be used to deliver the advisories; and general information about the site’s usability and helpfulness.

ASSESSMENT PROCEDURE

The survey primarily consisted of descriptive research, with the exception of the questions regarding Web site satisfaction and usability, in which users were asked to test several Web site usability models. The survey was distributed using Survey Monkey from January 15, 2010 through March 9, 2010. Participants were solicited via emails sent to users of the Web site, through a link to the survey on the site, and through multiple requests included in avalanche advisories. To encourage participation, survey respondents were eligible to win t-shirts and an avalanche transceiver. The survey comprised two questionnaires: the first included the research questions, while the second gathered names, phone numbers, and email addresses for the prize drawing. This two-step process was used to ensure that all survey submissions remained anonymous.

FINDINGS

Key findings from the survey are listed below:

- Demographics: Survey respondents were highly educated; 81% had college degrees. Respondents had an average age of 36, and 82% were male. Their income level was slightly below the 2006-2008 Montana Median Household income average of $44,043.
- Web site visitation: Respondents reportedly visit the site frequently, with 74.9% reporting one to two visits per week and 82.1% reporting at least one visit per month.
- Requests for Web site additions: Respondents would like to see more videos, a discussion board, a blog, and a Web interface suitable for smart phones.
- Backcountry use: At least once per month, 67.4% of respondents recreate in the winter backcountry.
- Avalanche experience: Although 26.3%, or 85 respondents, reported direct experience with an avalanche, only 41% said the avalanche was reported; 98.8% of those respondents said they carry some type of avalanche rescue equipment such as transceivers, shovels, probes, or cell phones.
Avalanche advisories: Respondents would like more frequent advisory reports, but they also reported that the current frequency of two advisories per week is working well. Respondents reportedly find the advisories very helpful, giving them a 6.25 rating on a 7-point scale. However, respondents did request more media and less text in the advisories.

YouTube: The YouTube videos available on the site have been watched by 85% of the respondents, who felt that the videos were very valuable, giving them a 6.02 rating on a 7-point scale.

Avalanche communication: Respondents requested text messages, Facebook/Twitter integration, and roadside signs showing avalanche danger warnings, similar to fire danger warning signs.

Avalanche Education Program: Almost 93% of respondents supported a standardized avalanche education program in local schools.

Open-ended responses: Respondents submitted about 30 pages of responses to open-ended questions.

Web site usability models: Respondents indicated that there is a low risk associated with using the Web site, and users have a high degree of trust in the information provided.

RECOMMENDATIONS

Generally, the users of the Web site seem satisfied with the product. However, based on survey results and comments, the Missoula Avalanche Foundation and Campus Recreation have taken the following actions:

1) Comments from users regarding Western Montana Avalanche Center’s major fundraising event, the Pray for Snow party, were forwarded to the event’s planning committee.
2) Additional education events, such as a Level II course, are being planned in response to an increasing need for avalanche education.

The Missoula Avalanche Foundation and Campus Recreation are considering taking the following actions in response to survey results:

1) Using alternative communication methods (such as Twitter and National Public Radio) to broadcast avalanche advisories.
2) Changing the wording or format of the avalanche advisories to ensure the public understands that data is collected from the entire region.
3) Changing the presentation of the YouTube clips to ensure the public understands that the YouTube clip is not the advisory.
4) Scheduling frequent visits by forecasters to diverse areas within the West Central Montana region.
5) Increasing the clarity and accessibility of information on the Web site.
6) Developing new funding sources.
7) Increasing the frequency of advisories from two to three per week.