

Avalanche Location Study

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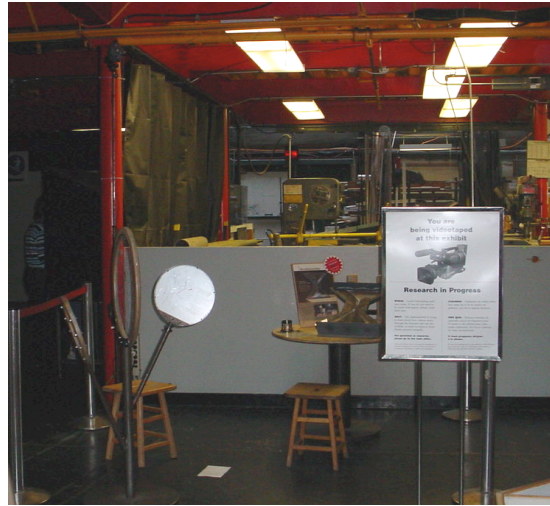
Avalanche Location Study Front-end Evaluation

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Avalanche in sound abatement area



Avalanche in prototype area

Goals

Between the prior two iterations of Avalanche, there was a substantial decrease in holding time of visitors. The first version had been videotaped in the prototype area, in November 2001, and the second version in the sound abatement area in November 2002. This evaluation was conducted to determine if the change in location contributed to the difference in holding time.

Methods

Avalanche was moved between the sound abatement area and the prototype area every 30 minutes on Saturday, January 25, 2003. One hour and 35 minutes of videotape were recorded in each location and analyzed. Ninety-three (93) groups used the exhibit while taping; fifty-three (53) visited the exhibit in the sound abatement area, thirty-six (36) groups visited the exhibit while in the prototype area.

Findings

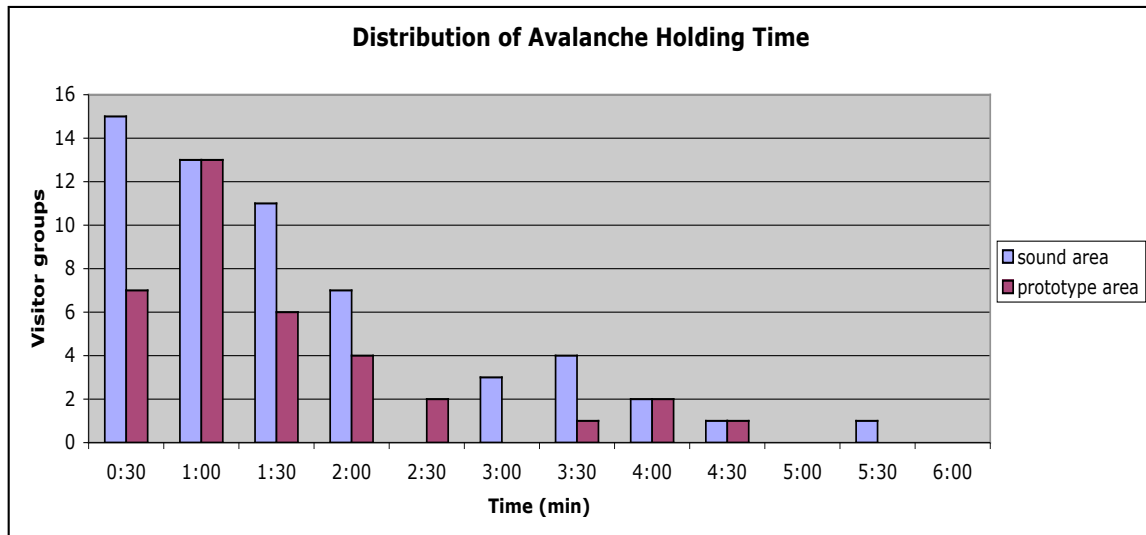
How long did visitors use the exhibit?

Holding time

	Median time	Mean time
Sound abatement area	1:01:00	1:19:57
Prototype area	0:51:30	1:16:20

The difference in holding times is not statistically significant ($p=0.34$).

Distribution of holding time:



Did visitors talk about what is going on with this exhibit?

Only visitor groups with two or more English-speaking visitors were considered. Conversations included topics such as observations (“look it makes stripes”), discussion of why (weight, size, shape).

The number of visitors who talked in the two different locations is not statistically significant ($p=0.793$).

	Talk about what is going on	% of visitors in that area
Sound abatement area	23	59%
Prototype area	11	55%

Did visitors interact with the exhibit more or less in the different locations?

Visitor interaction was determined by the number of flips and adjustments to the angle of the hourglass groups made while using the exhibit.

The number of groups flipping the hourglass or changing the angle once or more in each location shows no significant difference (flipping $p=0.48$, change angle $p=0.07$)

Count	# of groups Flip to any angle (turn over)		# of groups Change angle (no turn)	
	sound	proto	sound	proto
1	30	23	12	4
2	6	6	10	3
3+	4	5	1	1

	# of groups who move it at all	% of groups in that area
Sound abatement area	43	75.4%
Prototype area	34	94.4%

Conclusion

In each location, the holding time, the number of visitors talking about the exhibit, and visitor interaction with Avalanche are not significantly different. The change in location from the prototype area to the sound abatement area does not seem to affect these visitor behaviors.

Since we did see a difference between the first two versions of the exhibit in holding times, other factors may be considered in the change of holding time and visitor conversation and behavior. The variance may be attributable to different visitors in different years and/or days, or changes to the exhibit, including the addition of the “angle of repose” label.

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