Snow Science as Curriculum in a 5th Grade Classroom

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A science curriculum centered on snow and avalanches was implemented in a 5th grade classroom at Ophir School in Big Sky, MT. The curriculum content was developed by a PhD student as a part of the Graduate Teaching Fellows in K-12 Education Program (GK-12) of the National Science Foundation. The purpose of the curriculum was foremost to provide inquiry-based scientific content that both stimulated and motivated the students. Throughout the academic year, lessons, exercises, and field trips were conducted with particular focus on the “decision-making triangle” of snow, weather, and terrain. Various resources were utilized including assistance from the Gallatin National Forest Avalanche Center and the Big Sky Ski Patrol. One of the most important aspects of the curriculum is that the 5th grade students were able to participate in the education processes themselves which culminated in their development of a professional quality poster. The poster was constructed for use as an educational tool for other grade school students and was presented, by the students, at the 2008 International Snow Science Workshop. Overall, the curriculum succeeded in exciting the students about science, with particular emphasis on snow science, and it is slated for further refinement during 2008/2009 academic year.