1014-Z1-1356   **Agata Dean*** (`amiodons@mines.edu`), **Barbara Moskal**, **Steven Cooper** and **Wanda Dann**.
Using Alice Software in Middle Schools.

Traditional programming courses introduce both syntax and logic simultaneously. Because this approach can be overwhelming, many students avoid it. Alice programming software, developed at Carnegie Mellon University under the direction of Dr. Randy Pausch, provides an easier method of introducing the logic of object-oriented programming without the frustration of syntax. Alice presents a 3D approach to teaching programming that builds on students' attraction to movies by allowing them to create their own animated stories. Alice has been used to introduce students as young as middle school to programming. Various mathematical concepts can be taught with Alice. The logic of programming can be linked to algorithmic thinking, teaching the importance of a logical process. Trouble-shooting programs involves important problem solving skills. Three-dimensional reasoning, the ability to judge distances and number sense can also be taught with Alice. This presentation will discuss two interventions. The first was an after school technology club and the second was a week long technology camp at the Colorado School of Mines. In both cases, students learned the software and were able to begin using it quickly. During this presentation, several examples Alice worlds will be shared. (Received September 28, 2005)