

Phundamentally Physics
Elementary Educational Outreach Program
Final Report

South Dakota State University
Society of Physics Students

Officers

James Galipeau, President

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Total Monies Recived \$300

June 14, 2007

Original Abstract:

We, the members of the Society of Physics Students, South Dakota State University chapter, are currently developing a Physics-based curriculum designed to promote Physics appreciation while educating the greater Brookings community, specifically the students in the Brookings Public Schools through interactive lectures and participatory demonstrations.

Final Comments:

The members of the Society of Physics Students, South Dakota State University Chapter, created a Physical Science Curriculum for the students of the Brookings Public Schools during the 2006-2007 academic year. Four lessons were presented to each of five first grade classes during the period from October through April. Concepts that were covered were as mundane and practical as elementary properties of matter, i.e. mass, density, etc. and as complex as properties of light and the manipulations thereof via optics. At the beginning of each new lesson, a demonstration which incorporated the primary focus of the prior lesson was used as a review tool, the responses that were expressed by the children reinforced the belief that the retention of knowledge was occurring.

The lessons were typically taught by two or three SPS members with eight chapter members participating in the program. Each lesson was given to approximately ninety first graders. This is also our final report as our outreach program ran during the school year from September to May.

Phundamentally Physics:
Elementary Educational Outreach Program Budget

October

Vegetable Oil, Corn Syrup, Maple Syrup, Molasses, and Vinegar	\$ 13.20	\$ 13.20
M&M's and Marshmallows	\$ 10.12	\$ 23.32
500 ml Graduated Cylinder	\$ 32.37	\$ 55.69

November

Balloons, Flowers, Pyrex beaker	\$ 18.65	\$ 74.34
Liquid nitrogen	\$20.00	\$94.34
Cream, Vanilla, sugar, cups, spoons	\$ 20.24	\$ 114.58
Hotplate, Dewar, and gloves	Departmental Loans	

March

Magnet wire, batteries, and miscellaneous electrical components	\$ 44.99	\$159.57
Science with Magnets Kit and Ferro Fluid	\$ 53.95	\$ 213.52
Levetron Platinum Pro	\$ 37.95	\$ 251.47
Hand Held Generator and Light bulb	\$ 15.95	\$ 267.42
Static Electricity Tubes	\$9.90	\$ 277.32

April

Diffraction glasses	From SPS SOCK	
Magic Illusions Mirror Disk	\$ 21.95	298.27
Flashlights with red, green, and blue gels	Departmental Loans	