

Abstract Submitted  
for the MAR14 Meeting of  
The American Physical Society

**Adapting diagrams from physics textbooks: improving the autonomy of blind students**<sup>1</sup> ADRIANA DICKMAN, ALEXANDRE MARTINS, AMAURI FERREIRA, Pontifícia Universidade Católica de Minas Gerais — In this work we elaborate and test a glossary consisting of a set of objects and their symbols. The symbols are designed to represent objects frequently used in mechanics diagrams, such as vectors, ropes, pulleys, blocks and surfaces, and can be used to adapt drawings of physics situations in textbooks for blind high school students. The educational product was tested at a specialized school for the blind. The results indicate that adequate training can help blind students to become familiar with the symbols, and to identify them in a problem without the need of a description. This educational product can help blind students to achieve the same conditions of autonomy as sighted ones, when studying physics.

<sup>1</sup>Research supported by CNPq, Capes, Fapemig and FIP/PUC-MG (Brazil)

Adriana Dickman  
Pontifícia Universidade Católica de Minas Gerais

Date submitted: 15 Nov 2013

Electronic form version 1.4