

# ***USABILITY EVALUATION OF SIMULATORS FOR TEACHING PHYSICS: APPLICATION OF COGNITIVE WALKTHROUGH METHOD***

## ***Abstract***

*The use of simulators and customized applications for educational use opens new possibilities in the teaching and learning process of the most varied disciplines through computer-mediated interactions (Buzato, 2006). In this context, teachers are developing digital material considering this powerful tool. And the use of educational apps and simulators has increased significantly with the spread of the internet in schools. However, the evaluation of the effectiveness of these applications is complex and incipient (Barroso, Felipe e Silva, 2006). This paper presents a proposed interface usability assessment for the use of simulators with elementary school students using a customized version of the PSSUQ, along with an evaluation by the cognitive walkthrough method (Wharton, Rieman, Lewis and Polson, 1990). The interface chosen was the simple pendulum simulator - part of the PhET simulations package. The results indicated satisfactory usability of the application, although some limitations and usability difficulties were found. Suggestions for applications, future research and recommendations are presented.*

***Keywords:*** *Cognitive walkthrough. Evaluation of educational tools. Simulators.*