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Obtaining the Thermal Efficiency of a Steam Railroad Machine Toy According Dale's Cone of Learning OMAR TOMAS BAUTISTA-HERNANDEZ, GREGORIO RUIZ-CHAVARRIA, Universidad Autonoma Chapingo — Physics is crucial to understanding the world around us, the world inside us, and the world beyond us. It is the most basic and fundamental science, hence, our interest in developing innovative strategies supported by the imagination and knowledge to make the learning process funny, attractive and interesting to people, so, we can help to change the general idea that Physics is an abstract and complicated science. We all know this instinctively, however, turn-of-the-century educationist Edgar Dale illustrated this with research when he developed the Cone of Learning - which states that after two weeks we remember only 10% of what we read, but we remember 90% of what we do. Based on that theory, we obtain the thermal efficiency of a steam railroad machine -this is a toy train that could be bought at any department store-, and show you the great percentage of energy lost when moving this railroad machine, just as the real life is. While doing this practice we don't focus on the results itself, instead, we try to demonstrate that physics is funny and it is not difficult to learn. We must stress that this practice was done with pre-universitary and univesitary students, however, can be shown to the community in general.

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