## Abstract Submitted for the PHYSTC16 Meeting of The American Physical Society

Letteces Physics<sup>1</sup> SUBENIA MEDEIROS, SAMMYA FREITAS, LAZARO SOUSA, UNIVERSIDADE FEDERAL RURAL DO SEMI-ÁRIDO -UFERSA — This work has as purpose to contribute effectively with the learning of the discipline of Physics through an interdisciplinary approach, which aims to add theoretical knowledge to practical experiences in a regular and vocational high school. The public involved in the project was composed by students of the Technical Course in Fruit Culture and of the Technical Course in Computing from the State School of Professional Education Osmira Eduardo de Castro, located in Morada Nova - Ceará, Brazil. In the first phase, the students received theoretical and practical substantiation on thermometry and calorimetry, through workshops with low cost materials. In the second phase of the work, students developed their autonomy by associating the theory studied in the first stage of workshops, with its applications within their respective technical courses. The students used luminosity sensors, temperature and soil moisture, connected to an Arduino board to monitor lettuce seedlings of curly type for summer, in five distinct areas of the school. The importance of interdisciplinary projects was evidenced within the school environment and was observed one improvement quantitatively and qualitatively the incomes of the students in the discipline of Physics.

<sup>1</sup>Acknowledge the UFERSA and MNPEF

SUBENIA MEDEIROS UNIVERSIDADE FEDERAL RURAL DO SEMI-ÁRIDO - UFERSA

Date submitted: 05 Feb 2016

Electronic form version 1.4