Perception of high school students about nuclear energy: a case study in public schools in Manaus – AM

10.56238/homeinternationalanais-017

Jaqueline Sales da Mata
Federal Institute of Education, Science and Technology of Amazonas

Miguel Bonafe Barbosa
Federal Institute of Education, Science and Technology of Amazonas

ABSTRACT
This paper presents the perception of students in the 3rd year of high school on the subject of nuclear energy, applied in the metropolitan region of Manaus, Amazonas. In high school, especially in physics, many contents need greater clarity, and sometimes until it is demystified, the theme of nuclear energy is one of them. The study of this subject is fundamental for a country that aims at development in science and technology. Thus, the objective of this work was to investigate the students' perception of the theme. Therefore, descriptive research is proposed, based on the qualitative approach. The study was carried out in four public schools, from April to August 2022, with 173 students in the 3rd year of regular high school, in the afternoon shift. This target audience was chosen based on the intentional selection criterion, due to having already had contact with this theme in the previous series, according to the National Common Curriculum Base (BNCC). As a data collection instrument, the questionnaire was used, which allowed the investigative process with the interest in knowing some points about nuclear energy, such as: whether they have already had classes in formal education on the subject; media use; recognition of the trefoil the first association when they hear about this topic; if the energy is safe; operation of a nuclear power plant; sustainable energies; the number of nuclear power plants in Brazil; are in favor and rely on the production of this energy by Brazil. The control of the answers was made from a spreadsheet in excel software (spreadsheet editor), produced by Microsoft company. After the data was organized, each question was tabulated using a sector chart (pie chart) for each question of the questionnaire. Based on the results obtained through the questionnaires, the study demonstrates relevance for the study of the theme. The contributions of this work are added to the data of studies done in the rest of the country, where they confirm that the majority of students are not presented with this subject in basic education, that is, the teaching of nuclear energy is ignored.

Keywords: Nuclear Energy, Physics teaching, Radiation.