



The contribution of the Mentoring Program for High School in Nuclear Technology to Scientific Literacy in Brazil

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[2]Mentoring Program for High School (ICJ – Iniciação Científica Júnior – in Portuguese) is an internship in which high school students can conduct scientific research in higher education institutions or institutes that carry out such intended studies, similar to what occurs in Undergraduate and Graduate Mentoring Programs. This experience has offered valuable contributions to students regarding Scientific Literacy, a concept that has been the subject of much attention on the part of thinkers of education and science especially nowadays, when we see an accelerated advance of the mass media and access to information becoming increasingly bringing the need for a critical analysis on the undertakings made to improve the quality of life of people. In PISA (Programme for International Student Assessment) documents, there is a proposal that we care about the advancement of scientific knowledge in the informative, procedural and epistemic aspects, so that the construction of knowledge actually offers an effective direction of the actions of every citizen in the world. Never has it been so necessary to learn about the interaction between humans and microorganisms, between us and chemicals and the relationship with the technology used for the desired purposes of population well-being. Discussions on nuclear technology are fundamental to the direction of public policies of scientific literacy, and the ICJ in institutions working with nuclear energy may bring significant contributions to the understanding of the conceptions of clean and renewable energy, which in our view has formed misrepresented opinions in the public debate. The use of nuclear energy for war purposes, accidents in nuclear power plants, the formation of radioactive waste and its difficulty in deposition in places where they should remain sometimes for many centuries, bring a conception that the use of this type of energy should be progressively abandoned, to give way to other forms of obtaining.

This article presents the research being carried out at IPEN on the educational context in which we live, with the general objective of proposing improvements in what has been done for scientific literacy in the school environment. Specifically, it investigates how the ICJ can contribute so that the student observes how scientific knowledge is built-in scientific research and can participate in the process, looking at the world around them in a different way. It is based on the idea that, knowing the applications of nuclear technology, talented students interested in science and technology have the opportunity, from high school onwards, to participate in research and scientific development projects.[1]The problem of Scientific Literacy is not something worrisome only in developing countries, even in developed countries we find the difficulty of people defining the concepts of molecule, DNA, location on map without subtitles and even the notion of time count by analyzing the annual movement of the Earth around the Sun. The ICJ seeks to awaken in students the investigative sense and the stimulus for the process of scientific literacy, using research as an instrument of autonomy in the construction of scientific knowledge, which continues to be a target of the scientific-nuclear community to expand the reach and demystify themes and forms of use of nuclear technology.

References

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