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# EDUCATION, SCIENCE AND TECHNOLOGY

Education represents the fundamental support for the progress of any society, including scientific and technological progress, as well as the level and well being of its economy. The progress of all of society implies education, good education, for all its members. When it is only received by elites, dominating and dominated classes are created, and an abyss forms between them; when it is at the reach of everybody it becomes a generalized progress.

The characteristics to which a major relevance is usually assigned as determinants of a nation belonging to the 'first world' or 'developed world' are its productive capacity and the consequent economic self-sufficiency. But these, in turn, are the result of an adequate training of their people, of their elites and, even better, of their masses, as there have always existed dominating or first order countries where the masses have been kept under conditions of ignorance.

We all, without exception, partake of a world where technological advances acquire a larger relevance every day. Advances that have allowed and will continue to allow to expand the possibilities of producing the food needed for our subsistence, to increase the ways and efficiency of the communications among ourselves, to avoid the disappearance of our species due to its own negligence... The latter is taking us at an ever increasing speed to a degree of global warming that, in a not too distant future, will transform our home, the planet Earth, into an uninhabitable place.

To raise the educational level of the population is an inescapable duty of society. However, this is not only necessary in the civic and moral realms, which are commonly

plagued of indoctrination and beliefs. It is equally or more necessary in the field of science, of all sciences.

In Venezuela, for several years now, a very serious crisis has been determined by the lack of science teaching personnel at all educational strata, although more pronounced at the level of primary education and high school. This situation becomes more evident in public schools than in private ones.

The classrooms of the teachers training institutions in the areas of mathematics, physics, chemistry and biology are virtually empty. The trainees, future teachers and professors who bring with them an already deficient preparation in science subjects, give ample preference to their orientation towards the area of 'general studies'. As a result, elementary schools and high schools of the country suffer an oppressive shortage of teachers in the sciences and the students do not complete the study programs established by the education authorities.

It thus becomes of an extreme urgency to establish measures that help revert the existing situation in an effective manner. Otherwise, the scientific culture of the population will very soon reach levels of scientific illiteracy. Its consequences at the medium and long range will be a larger deficit of high level professionals and technicians, and a more pronounced backwardness with respect to other countries, with an even smaller possibility of closing the existing gap between advanced societies and ours. It is the responsibility of the education authorities to implement without delay important stimuli for those who will dedicate their careers to science teaching activities so as to correct the existing aberration in the teacher training centers.

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