

THE UNIVERSITY STUDENTS' ROLE IN SCIENTIFIC DIFFUSION IN MEXICO

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At the present time, diffusion of the science takes an important role in the development of our society, particularly in Latin America, where the economic situation is unfavorable for the advancement of science, because a great part of the population's basic necessities are not covered. This is one of the reasons for which the resources of scientific and technological research are limited. Therefore, the situation becomes critical if we consider the inexistence of a scientific culture in Mexico, as a consequence of the lack of diffusion, for a great part of the scientific community. In addition to the unselfishness of the information means (T.V., radio, papers, etc.) in a greater production of scientific spaces, although this means having a high penetration and influence on the development scheme of the individual culture.

Unfortunately, the foreign technology advancements in our country result an impediment for the generation of a Mexican technology, because it has produced a very deep technological dependence. Furthermore it isn't always appropriate for resolving our country's problems.

Within Mexican society, and maybe in the rest of Latin America, the social difference originated by the unequal economic situation is an obstacle for the incorporation of more than the 95% of young people at university, especially in scientific areas due to the great amount of time and monetary resources this studies require, despite the low cost of the education at public universities. Public universities make more than the 98% of the total scientific research in our country, and only 2% is made by private universities, where the focus is mainly applied research. The private superior level of

teaching centers offers a low number of scientific carriers and adequate infrastructure for basic research.

The few opportunities of good remunerated employment, the time required on postgraduate studies and the lack of information about the multiple areas of scientific knowledge, provokes very low demand for scientific carriers, mainly at the poorest levels.

The concept of the “scientist” is not present on the mind of many people in Mexico, however, we could associate this phenomenon with the educational state of the population. In addition, the role of the researchers in the society is not clear because there isn’t enough diffusion of their labor. They often pass unperceived within the scheme of fundamental activities of the country that contribute to productivity. At the same time, the null interest of national industries in attracting local specialists for the innovation of new products and technologies with practical applications that comes from foreign laboratories, contributes to the overall phenomenon.

In Mexico the number of young people that enter scientific carriers is descending at present, besides the high level of desertion in the same careers, makes urgent the promotion of choices for that area, and enhances the presence of science in the country.

In this situation, it is of great transcendence to make public the importance of scientific labor for social development in every aspect. So, the diffusion of science is central to attain this objective. We believe that it is a responsibility of those who have access to scientific knowledge, to help in some way, to extend scientific culture to people who do not have it through a direct relationship between the public and us.

We as students of scientific careers think that is our obligation to begin to interact with the public, transmitting our experiences in this area, stirring up the restless toward a most wide participation on scientific jobs. In this way, it is important to know the state of the diffusion of science at the international level, in order to acquire the applied innovations in this field, integrating new ideas that will make our work easier; represents a very important step for this purpose.

The project: “Una ventana estudiantil hacia la ciencia” (A student window toward science) was born two years ago as a united effort that began by a group of students in the scientific area, with the purpose to wake up the interest of medium-basic level and medium-superior level (high-school) in the sciences, and to show the options that Mexico offer into this field.

“Una ventana estudiantil hacia la ciencia” consists in a series of lectures imparted by young people that are involved in the topics exposed using a didactic and accessible language. We considered the idea to include only students into the program with the objective getting a better identification between the auditorium and the lecturers; all the subjects that form part of our program have been revised and approved by all the members. Each lecture lasting approximately thirty minutes is supported by audio-visual material. At the end of each one, we talk about the schools and all other centres of superior studies in the country which they may incorporate, when they finish their medium level studies. On the last series’ conference, we apply a questionnaire that will serve as a reference for the verification of the attainment of the program’s objectives.

The program is composed of the themes: a) The origin of life, b) Genetics: searching for the life’s secrets, c) Cancer: the cell rebellion, d) AIDS: The body at disposition to disease, e) Teratogeny, f) S.O.S. The blue planet in danger, g) Sea mammals, adventurers of the ocean, h) The axolotl: biology, importance and utility of an amphibian typical of Mexico, g) Human beings and the conquest of the space. These topics, by their contents produce an enormous expectation among the public, drawing a special interest.

During this short time we have seen and can verify several problems existing on this educational level, and can take account of the value of a well-planned teaching of sciences in schools. The students don’t have an interest in science because they many times do not know the scientific work. On a high percentage, they do not consider the science as something useful for society; they think that science is exclusive of industrialized countries, and that in Mexico there is no future for scientific research. Others think that they don’t have the “natural” abilities for science studies.

Thanks to interaction with nother divulgation groups, we can say that the problems are the same for everybody: the lack of economical and logistic support to realize their social labor.

In the future, we will wait for our project to have national coverage, to extend our labor to a great number of people, by means of interaction with other interested people within other states of the Mexican Republic; in addition, we believe it is necessary to include other themes of scientific areas like chemistry, mathematics, physics etc. and finally the creation of an independent diffusion bulletin with the participation of all group members.

In Mexico, we need to promote a scientific culture on the basis of more wider divulgation, particularly in the basic levels of education, by means of accessible information to an unspecialized public. We think that the researchers and students have the responsibility of catching the attention of the public in revaluating the role of science in society.

It is worthwhile to remember that everybody is not more than he thinks he has learned, and of course to learn sciences will make our people better.