

**Parallel Session 27: Cultural differences in public understanding of science**

**SOCIAL PERCEPTION OF THE SCIENCE AND THE TECHNOLOGY IN THE CITY OF MELILLA**

*José M. Cabo<sup>1</sup>, Carmen Enrique<sup>2</sup> y José R. Cortiñas<sup>3</sup>*

<sup>1</sup> *Facultad de Educación y Humanidades. Campus de Melilla. Universidad de Granada. Tel: 952698736, Fax: 952691170, E-mail: [jmcabo@ugr.es](mailto:jmcabo@ugr.es)*

<sup>2</sup> *Facultad de Educación y Humanidades. Campus de Melilla. Universidad de Granada. Tel: 952698737, Fax: 952691170, E-mail: [cenrique@ugr.es](mailto:cenrique@ugr.es)*

<sup>3</sup> *Facultad de Educación y Humanidades. Campus de Melilla. Universidad de Granada. Tel: 952698737, Fax: 952691170, E-mail: [peperra91@hotmail.com](mailto:peperra91@hotmail.com)*

**Abstract**

The public perception of Science and Technology has been an object of evaluation in numerous countries. Generally it is a question of interviews or polls orientated as criteria elaborated by the USA National Science Foundation. In the present work results on public perception of Science and Technology in the city of Melilla are exposed, focusing the need to incorporate the cultural origin as variable, since in the works consulted variables of genre, socioeconomic level or grade of formation are included, without taking account of the tendency of the industrialized countries towards multicultural societies.

**Key words:** Public understanding, cultural diversity, citizen participation.

**Text**

**Context and precedents**

In a recent study (Cabo y Enrique, 2004) on the concept of Multicultural Science we synthesize numerous works published in the context of the Science Education where the existence of two views evident for the Science from the cultural diversity: the universalist orientation and the multicultural orientation. The first can be supported for several reasons, for example, to understand that Science and Technology are immune to cultural influences or, on the contrary, to believe that Science and Technology have advanced thanks to the contributions of multiple cultures. On the other hand, the multiculturalist orientation supports that Science, as sociocultural practices, have its origin in the western European culture and, therefore, its assimilation can collide with not western cultures. This debate, open and polemic, is not included in the works consulted on social perception, although in this context the existence of cultural influential factors is supported, for example, to criticize the *model of cognitive deficit* whose results are interpreted on social perception of Science and Technology.

This work is framed in the research promoted from the Facultad de Educación y Humanidades de Melilla and orientated towards the public divulgation of knowledge. The first phase of the project involves the evaluation of the offer

and the demand of knowledge on the part of the local population, Science and Technology from us.

### **Objective**

The basic target of this work is to identify possible differences in the social perception on Science and Technology among samples of population of Muslim and Christian origin in order to find empirical evidences that support the need to include the “cultural origin” in the analyses of social perception of Science and Technology according to the general tendency towards the multicultural societies in the industrialized countries, particularly in Melilla.

### **Methods**

Seventy six interviews was performed face to face following the same protocol of questions as in the poll published by the FECYT in 2003, on social perception of Science and Technology in Spain, which was not fulfilled in the cases of Melilla and Ceuta.

The results of part of the chosen questionnaire are exposed here: grade of interest and of information about Science and Technology topics, sources of information used, professionals’ credibility, attitudes towards the Science and Technology and evaluations on the benefits and the need of public finance. We will establish a previous diagnosis in order to elaborate a program of public divulgation of the Science and the Technology in Melilla.

### **Results and conclusions**

The general results obtained in Melilla do not show big differences compared with the results of the State and other national studies. Therefore we can state that the interest, attitudes and expectations towards the Science and the Technology are positive, but the grade of knowledge or information is low.

In the sample from Melilla, the negative consequences of the scientific and technological development related to environment are feeling in a lower grade, and lower confidence in social organizations such as ONG’s, consumer’s association and in a lower proportion in ecologist associations.

In the literature consulted on public perception of the Science and the Technology, the differences observed in relation to the genre, the grade of formation and socioeconomic level, are analyzed, however the cultural origin of the sample is not analyzed. In Melilla, where the majority of the population is Muslim or Christian, the religion is a good indicator of the cultural origin of the population, being able to state that the origin of the Christian community is the Spanish western culture and of the the Muslim community is Tamazight or Rifeña culture, it is North African origin.

We found differences between the Muslim and Christian population, characterized for a major interest and information about for topics of medicine and health, major percentage (more than 25%) of “does not know, does not answer”, and different credibility in professionals in the case of Muslims. The attitudes and expectations towards the Science and Technology are positive in both religious communities. For all these reasons we believe that it is necessary to include the “cultural origin” in the analyses of social perception of Science and Technology.

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