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THE SCIENTIFIC DISSEMINATION OF ASTRONOMY IN STUDENTS OF THE MIDDLE LEVEL OF THE CAREER DIGITAL GRAPHIC DESIGN IN VIDEO WORKSHOP

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The teaching of astronomy at the basic level of education is important due to the special interest of a large part of the population since it allows questioning the place that the human being occupies in the universe, however most people have few knowledge on the subject and due to the daily rhythm they are not used to looking up to observe the sky and the phenomena that occur there.

This research was applied to students of the upper secondary level with an age range of 16 to 18 years, with the aim of disseminating scientific information through the creation of videos and three-dimensional models, using graphic and multimedia design as a tool to capture the interest of the student body. The topic that was made is The sound of the planets where summarized information was included with the most important aspects and an analysis of the graphic elements that the video project should contain, in this way to guarantee that the video is attractive and of interest to teenagers. It is important to remain that most of the information we receive is through sight, visual messages play an important role in the attention of users and this allows us to attract their interest. There are issues of scientific dissemination that are difficult for recipients to understand, for this reason graphic design plays a fundamental role where it is responsible for the elaboration of images, graphics, photographs, animations, videos among other resources to reinforce the contents. Graphic design establishes a functional communication through a visual impact, it is necessary to consider to whom the information is going to be directed, the context and the format in which it is going to be carried out, in this way we can consider different psychological factors, age, level socioeconomic, etc., analyzing these factors allowed us to implement the use of colors, shapes, hierarchies, images, vectors, etc. A video was made with three-dimensional animations, for the realization of the three-dimensional models we worked with the Cinema 4D software, the animated titles were made with the After Effects software, for the editing and the assembly of the material the Premiere software was used Pro.

This project was presented to the upper secondary level students and they were given a questionnaire of 10 questions related to the topic, this allowed us to know the retention of the knowledge acquired by the students. The results of the questionnaire focused on learning showed a favorable increase, making it clear that both the understanding and the retention of the subject were greater with the use of videos for scientific dissemination.

A satisfaction survey was also applied to the group in order to know the experience that the students had during the interaction with the video. The results obtained showed the importance of the implementation of graphic design in topics of scientific dissemination, generating significant learning.

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