

EDUCATIONAL SOFTWARE FOR ASTRONOMICAL OBSERVATIONS

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In recent years, it has become increasingly clear that national education is trying to find a favorable way to evolve, so that specialized institutions can provide the opportunity to carry out the educational process through consistent, modern, resonant methods, which want to be materialized. at the company level. The education system has many connections and interdependencies with the political and economic system of the state, which determines a wide range of influences, based on which education is in a perpetual process of change. Thus, it is very clear that, although there seems to be a desire for improvement, the optimal conditions for development must be created so that a synchronization between the steps of making proposals and the centralization of efforts results. Our country is showing interest in modernizing the educational information system and also has the ability to participate in wide competitions opened by European and international education systems.

This paper presents some educational aspects of the application of modern teaching methods, depending on the number of teaching hours, respectively the research practice, in the disciplines of Astronomy and Applied Informatics, from the point of view of Didactics. Both in our country and abroad, the effectiveness of these modern, computational teaching methods has been proven, as well as their importance, in adapting the new curriculum to the guidelines of modern international education. There are important differences between our education system and the European education system; For example, in our country, the competitive mentality is promoted, while in other European countries, students are recommended by the school or assigned to a new level of education.

In this paper is presented a software application, which through certain computational methods manages to systematically process information and return results from complex calculations based on data collected from the observations of cosmic bodies. This application has been designed as an illustrative site for how to manage the transfer and processing of astronomical observations of asteroids. Two areas are addressed, Educational Informatics and Astronomy, which may have many common areas of study. After applying research methods for students of the University of Craiova, from Computer Science specialization to Astronomy, we find that most mathematical models used in the study of astronomical phenomena have a solution by numerical means, based on the two fields being Mathematics. The Dutch computer scientist Edsger Dijkstra stated: "In Computer Science you are dealing with the computer, as you have in Telescope Astronomy", today the two tools have become just as important for those who practice in the field of Educational and Research Astronomy. Professional astronomers use both powerful telescopes and powerful computers. Astronomers first collect information using these tools, then analyze the information and then compare it with existing theories.

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