

ASTROSPACE COURSE OF STUDY FOR YOUTH IN THE PLANETARIUM. E. N. Tikhomirova¹ and E.E. Sinitsyn², ^{1,2}Valentina Tereshkova Cultural and educational centre, Tchcaikovskogo st., 3, Yaroslavl, Russia, 150000; ¹en_tikhomirova@mail.ru; ²phtsutterby_86@mail.ru.

Introduction: The contemporary era is marked by a development stage, which is important for mankind – overcoming of terrestrial gravitation, conquest of near space. The further aspiration to new knowledge and opportunities sets tasks which, undoubtedly, require original, but thus optimum decisions for people. Thus, educational technologies, connecting with the astrospace researches in one way or another are particularly topical nowadays. Planetaria are considered as the unique centers where educational and research activities are successfully combined.

Valentina Tereshkova Cultural and educational centre is a modern cultural and educational complex including the planetarium, the museum of the history of cosmonautics, the astronomical observatory, the interactive classroom for astronomical study group, media café “TRANS – FORCE”. The outreach and educational work is carried out with a population of different age and social groups on the basis of the Centre [1].

Now Valentina Tereshkova Cultural and educational centre starts the implementation of the developed project of astrospace education and awareness of the younger generation Russia – young cosmonauts' Group [1],[2].

Young cosmonauts' Group: The purpose of the program is assistance to development of intellectual, spiritual and physical potential of younger generation, familiarizing with history of cosmonautics and its present, public spirit development. The pupils from 10 to 16 years, the leaders, the teachers of schools, additional education teachers, heads of clubs will take part in the work of the project. The activities of group include educational components such as studying of fundamentals of astronomy and development of space, studying of activity of the cosmonauts, in particular the cosmonaut № 6 – V. V. Tereshkova, research activities, carrying out excursions in the museums of the city of Yaroslavl, in the museums of the Star city and the museums of space of other cities, intellectual and creative expeditions.

Another, important area of work is practical one. Pupils will visit the rates of aviamodelling, release of profile printed materials, produce the prototypes, carry out the intellectual and creative tournaments and tournaments with representatives of other schools and

associations, participate in summer spacecamp, organize the campaigns and rates of a survival, participate in scientific and practical conferences, reviews, tenders, meetings, promote their work through mass media, interact with other groups of young cosmonauts, organize the correspondence and meetings.

This program is based at the principles of an individual approach to everyone according to its age and opportunities, collective activities, the activity, creativity and an the initiative of everyone, and also the equality of all participants of the program are underlain (children and adults).

The educational process assumes using the richest material of the museum “History of Cosmonautics” of Valentina Tereshkova Cultural and educational centre and other museums. The Star hall (planetarium) of the Centre allows for any weather, at any time of day and year, at intervals of thousands of years - "travel to the future and the past" – to demonstrate the starry sky, and observed in different parts of the globe. Besides the starry sky, there are ample opportunities for studying of Solar system, planets, and comets, fireballs, meteor showers, and others. The deep sky objects can also be represented using specialized software and digital optical systems. Thus, the proper use of the grand demonstration opportunities of planetarium using traditional and innovative techniques is the guarantee not only of high interest to the presented material, but also attraction of youth to activity in space and astronomical researches. The astronomical observatory of the Centre promotes to the acquisition of practical skills for working with astronomical devices.

Conclusion: According to the new state educational standards aimed on formation of creative competence of students is expected to build educational process on the basis of search and research works using problem-analytical methods, with prosperity of a cult of their own creativity; while denying compilation; with formation of steady creative interest. During the young cosmonauts' group activity many problems can be solved, such as a professional orientation of teenagers and expansion of their outlook, activization of interest of school students in studying of history of development and space exploration and increase of level of knowledge in the field of technical, natural and the humanities, aimed

at peaceful research and development of a space, physical self-improvement of teenagers, education of patriotism through heroics of a profession of cosmonauts, training of school students in bases of research work and forming of the competitive personality.

References:

- [1] Tikhomirova E. N. and Gorodenskaya M. N. (2015) *LPS XXXVI*, Abstract # 1390.
- [2] Tikhomirova E.N. Astrospace education and awareness system in Valentina Tereshkova Cultural and educational centre (2015) *Yaroslavl: Publishing house of YSPU*, p. 205-211.