

21 Years Activity of the ITAU Activities

Hasan Baghbani¹, Mahdi Rokni², Akihiko Tomita³
and Maryam Hadizadeh⁴

¹Graduate in Geology, President of Iranian Teachers Astronomy Union, Bushehr, Iran
email: hasan.baghbani1971@gmail.com

²Undergraduate Student in Software Engineering, Astronomy Instructor and
International Coordinator of Iranian Teachers Astronomy Union, Bushehr, Iran
email: mahdirokni75@yahoo.com

³Graduate School of Teacher Education, Course Specializing in Professional Development in
Education, Wakayama University, Wakayama City 640-8510, Japan
email: atomita@wakayama-u.ac.jp

⁴Undergraduate student of English Teaching, Astronomy Teacher,
Farhangian University, Fasa, Iran
email: Maryam.hadizadeh79@gmail.com

Abstract. ITAU, the Iranian teacher's astronomy union, has attempted for many years to introduce astronomy to the teachers and students not only in Iran but also around the world by providing various materials and projects. The primary goal of ITAU is also to protect the environment with a help of students; therefore, first, try to change the attitude of students. SINA, Student's International Network for Astronomy, will follow the goals.

Keywords. Iranian teacher's astronomy union, student's international network for Astronomy, international collaboration, environment education

1. Introduction

SINA is the Student's International Network for Astronomy in which students interested in astronomy from all around the world connect to each other and practice in groups. The primary goal of SINA is to create an easy access platform for students to learn astronomy practically, and also create a situation for various students to know each other, acknowledge world peace and importance of the environment, and strengthen their sense of altruism.

In recent decades, the education system and schools are not synced to the technological advances. Modern schools have started their way to educate and prepare students for modern life and industrial developments, however, they could not be updated with the rate of development in technology, leading to inefficiency. One of the most important needs in society is understanding environmental situations and world-wide peace. Attitudes towards the development and the current situation need to be changed, therefore, a method should be taken to bring students' attitude from local to global. They must put aside their desire for unbridled developments and become acquainted with sustainable developments.

2. History and Development of ITAU

Astronomy has been taught to students in Bushehr, the south of Iran, aiming to create a non-political and geographical perspective for more than 20 years using the sky without

borders (ITAU web site: <http://itaubu.com/>). ITAU, the Iranian teacher's astronomy union, has provided various projects besides educational courses to governmental education using world-wide knowledge and teachers' experiences. One of the most successful projects is the Sky Explorer festival which is held for more than 9 years by ITAU with aim of challenging students in environmental challenges, managing efficient usage of water and food, creating a world-wide perspective for students using the sky without borders, and increasing the spirit of teamwork among the students and giving students opportunity to be creative in the face of challenges. The poster of the Sky Explorers festival in which students can learn, enjoy, and become a leader in new courses, was accepted by the 2019 Munich Conference, which indicates that this project not only improves individuals' abilities but also helps educate new instructors and leaders. In the festival, first, students learn the instructions of the festival and then get involved in the project.

In this project, students are asked to mention their local environmental challenges, as environmentalists to demand the government to solve the environmental problems. This plan is one of the primary plans to control global warming and protect species in danger of extinction. Teachers and students in the south of Iran tried to raise awareness about environmental challenges. Expressing such experiences would help the education and would be promising.

One popular part of the Sky Explorer festival is expressing the experiences. This part is led by a student, and teachers express their experiences and ideas and also analyze the students' experiences. Another interesting part of the Sky Explorer festival is cultural, sports, and artistic programs in which different styles of music and different traditions are introduced to the students, and not only they would have physical movements but also it would be amusing and joyful.

The teacher-training program of NASE, Network for Astronomy School Education (www.naseprogram.org), is incorporated into the activity in Iran. The first Iranian NASE course was held in 2019 (Ros and Rokni 2019). The special on-line Iranian NASE course was held in 2020 (Ros and Rokni 2020).

3. Future perspective

Holding this festival for 9 years and its popularity among students and teachers indicates this project would get great attention and feedback from all around the world. It is suggested that UNESCO help in holding this project in the least developed countries that students and teachers meet their needs. Teachers could not contact other teachers around the world, however, now in the pandemic of Covide-19, they catch the opportunity to express their ideas to other teachers using virtual platforms. ITAU will share its experiences with teachers and students in SINA with online workshops and international astronomical projects for all of the students around the world.

References

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Closing Session

Introduction

Insightful closing remarks were given by IAU President-Elect Debra Elmegreen. Debra began by sharing that this virtual symposium became a positive experience during the pandemic. She emphasized the much larger virtual audience than would have been the case face-to-face. Debra recalled the part of the IAU's mission statement that says "promote and safeguard astronomy in all its aspects (including research, communication, education and development) through international cooperation," and commended IAU global initiatives that have now "engaged several hundred thousand people in education, heritage, and outreach activities. She then shared her observations of symposium highlights and mentioned key messages such as how astronomy inspires interests in STEM and STEAM. She ended by expressing how all were enriched by the many contributions and she thanked the organizers.