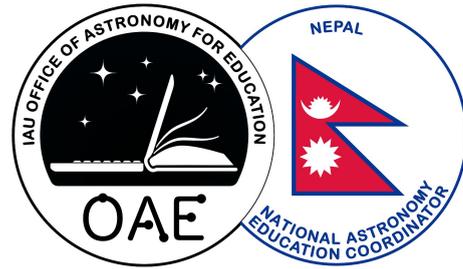


Astronomy Education in Nepal



This overview is part of the project "Astronomy Education Worldwide" of the International Astronomical Union's Office of Astronomy for Education.

More information: <https://astro4edu.org/worldwide>

Structure of education: Formal education in Nepal started with the establishment of Durbar High School in 1854. It was only in 1918 when Nepal opened a Tri-Chandra College. Similarly, Nepal established Tribhuvan University in 1959. These school, college, and university are the milestones for the modern education system in Nepal. With the introduction of our new constitution in 2015, Nepal has embraced the notion of free and compulsory education until class eight and terms it as basic education. As per the Act Relating to Compulsory and Free Education 2018, children should go to school for class one at the age of four and finish basic schooling by the age of thirteen. There are private/ institutional and public schools that are further classified as general, religious, technical, and special schools. The primary education can be offered either in Nepali, English, or mother tongue/language based on the ethnicity of the communities. However, education from class six to twelve can be offered in either Nepali or English or both.

Education facilities: The schools are designed for lecture-based instructions. The class size is usually for 30-50 students and most of the schools especially in villages have limited access to the internet, transport, drinking water. Most of the schools were damaged during the earthquake in 2015 and they are under construction. Except for major cities, students usually sit outside in the garden for the classes. Usually, the WASH facilities are below average in many schools, particularly in rural areas. WASH is the collective term for Water, Sanitation, and Hygiene.

Governance and organisation: Before 2015, Nepal had a central education system whereas after the new constitution the secondary education has become a responsibility of the local governments. They are required to set the curriculum, manage schools and teachers which is currently been a daunting task to the local governments. The university education has been the responsibility of provincial and federal governments and existing universities are not happy with the government's decision the scheme of categorizing universities as provincial and central. Nepal has seven hundred fifty-three local governments, seven province governments, and one federal government as per our new constitution.

Teacher Training: For the pre-service training, educational colleges of different universities are offering Bachelors and Masters in Education programs. For the in-service training, the Ministry of Education, Science, and Technology (MoEST) has Education Training Centers (ETCs) in each province. These ETCs provide Teachers' Professional Development (TPD) courses and refreshers training programs. The schools themselves organize in-house training programs as per the necessity.

Astronomy in the curriculum: In school, astronomy starts from class four in the present curricula. There is one unit in each class generally with the chapter name 'The Earth in the Universe' until class ten. The chapters include information about planets and its satellites, artificial satellites, the moon, the sun, the solar system, constellations, black holes, etc. In class 11 there is a chapter called Universe which discusses cosmology in brief. The chapter includes the Big Bang, Hubble law, Expansion of the Universe, Dark Matter, Black Hole, and Gravitational Wave.

Astronomy education outside the classroom: In 1992, the Government of Nepal has established the B. P. Koirala Memorial Planetarium, Observatory and Science Museum Development Board in 1992 in order to establish Planetarium, Observatories, and Science Museums in Nepal & conduct research activities in the area of Astronomy, Astrophysics, and Cosmology. The board has established an observatory at Nagarkot and did first light in 2008. It established the Science Museum at the premises of Tribhuvan University in Kirtipur Kathmandu. The planetarium has yet to be established. However, several private companies are operating mobile planetariums in the country. Similarly, the Nepal Astronomical Society (NASO) has been welcoming schools to visit our office for solar and night sky observation since 2007. It started the National Astronomy Olympiad program since 2014. NASO has been conducting training programs for both teachers and students for several years.

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