Astronomy Education in China, Nanjing



This overview is part of the project "Astronomy Education Worldwide" of the International Astronomical Union's Office of Astronomy for Education. More information: <u>https://astro4edu.org/worldwide</u>

Structure of education: Children usually go to primary school at the age of 6 or 7. There then follows six years of primary education. Junior middle school is compulsory for three years, studying all subjects offered by school. All nine-year compulsory education at public schools are free of charge. Senior high school will take another three years then students go to university. Students can also choose to attend three-year secondary technical vocational schools or vocational high schools instead. There are also private (independent) schools which charge fees. Most schools teach in Mandarin, with some schools in minority areas using bilingual education with both Mandarin and the minority language.

Education facilities: The situation could be quite different for different areas across the country. A Chinese school may have a typical class size around 50 students. All Chineseschools have access to running water and most schools have internet connection.

Governance and organisation: Public (state) schools are usually run by local city(county) or provincial government. The current Chinese curriculum management system is set by three levels with National Curriculum, Local Curriculum, and school-based Curriculum.

Teacher Training: In China, teachers in primary schools generally need a bachelor's degree in physics or geography, while teachers in secondary schools need a bachelor's or master's degree. Full-time astronomy teachers are rare in primary and secondary schools, and mainly teachers in physics, geography or science teach astronomy there. Teacher training is generally provided through national, provincial and city /county training projects, as well as special training conducted by universities and institutes. Specific astronomy training projects were performed by different institutions with limited numbers of participants in previous years.

Astronomy in the curriculum: Astronomy content can be found in General Science (primary school) and in Physics & Geography (junior & senior high school). In primary education, children are taught various astronomical concepts related to the rotation and revolution of the Earth, as well as the identification of the starry sky and a general understanding of the names of the various types of celestial systems in the universe. In middle and high school students are taught gravity, geocentric coordinate system, the solar system, other astronomical systems and cosmology. In recent years, Astronomy became a School-Based Curriculum in some schools in Beijing as well as more than 50 schools around the FAST (Five-hundred-meter Aperture Spherical radio Telescope) location in Pingtang, Guizhou, China.

Astronomy education outside the classroom: The situation is quite different for different areas in China. Many schools in big cities have their own astronomy clubs. Astronomy education is provided

after normal school hours by school teachers or volunteers with some astronomical background. The students can also visit planetariums and science centers as required by the educational plan, or travel to other places for observation during 'big' astronomical phenomena.

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