Astronomy Education in Algeria



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 begin their formal schooling at age of 6 after usually one year of non compulsory preparatory school. Then, they have five years of primary school. After that, they have four years of Middle School, and and finally, three years of secondary school. In the last year students take the baccalaureate exam. Those admitted to that exam can access to the university where studies are based on the LMD system (three years for licence, two for Master and three for PhD degrees). All the twelve years of education at public schools are free of charge. There are also private schools for primary, middle and secondary levels. All schools teach in Arabic language, and the pupils also learn French (1st foreign language) and English (2nd foreign language). In central Algeria and the large coastal cities many students are bilingual, English is becoming more popular with the younger generation often at the expense of French.

Education facilities: Algerian schools have class sizes of 30-40 pupils, depending on regions and cities. School buildings are generally well-maintained but it is not uncommon for students to spend part of their education in temporary classrooms due to maintenance problems/lack of space.

Governance and organisation: Public (state) and private schools are under the supervision of the central government and are under the responsibility of the Cabinet Secretary for Education.

Teacher Training: A appreciable percentage of teachers have graduated of the National Higher Institutes of Teachers (Ecole Nationale Superieure), the remaining percentage are those having a university degree, either Bachelor (for a primary teacher) or a Master (for Middle and High Schools).

Astronomy in the curriculum: There are no normal special courses in astronomy in the curriculum. However, some astronomy related content can be found in various courses during the different levels (Geography, physics...).

Astronomy appears in the curricula in Algeria very early on. In the third year of primary school, pupils learn some concepts related to the rotation of the Earth and its consequences, the directions on the Earth using the polar star, the apparent movement of the sun with an inclined axis of the earth and the subsequent seasons and their succession mechanism.

In middle school, pupils learn about astronomy within the physics program, during their first year. The courses deal with optical and astronomical phenomena directly, starting from starlight to the Sun with the study of eclipses and lunar phenomena. In the same year, and within the geography program, they learn about the dimensions of the Earth with an indication of the Earth's movements.

During the secondary High School period, astronomy is included in the geography class in its first year, It is where the program deals with some astronomical phenomena and its relationship to environmental diversity. In physics, the curriculum extends to the various forms of matter we

encounter in the universe, from the atom to the galaxy, the stars and planets, light and some astronomical measurements (Eratosthenes experiment) or satellite mouvements study). It is noteworthy that there has been a decline in the amount of class time devoted to astronomy at High School since the last reform of the educational system back in the nineties.

Astronomy education outside the classroom: This aspect is confined to some of the largest cities, where some local astronomy clubs or associations are active. Constantine for example has an annual tradition since 18 past years for holding a three days International Festival in Popular Astronomy with the participation of various associations and institutions related to Astronomy in the country; across the country in addition to Mediterranean and Middle East astro associations.

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