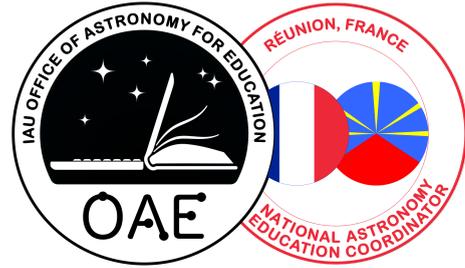


Astronomy Education in Réunion, France



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: The educational system on Réunion Island, a French overseas department and region, is the same as in mainland France. Instruction is compulsory from the age of 3, but not necessary at school (remote education and home schooling are allowed). Education path comprises three years of pre-school (age 3 to 5), five years of primary school (age 6–10), four years of middle school (age 11–14) and three years of high school (age 15–17). All students follow more or less the same teaching (apart from foreign languages and a few optional courses) until the second year of high school, when they choose three majors and then drop one of the three in the last year. At the end of high school, students take the “baccalauréat”, which is the university entrance exam. Most students (~91%) go to public non-religious schools while the remaining 9% attend private schools, most of which are Catholic with the same educational programs as public schools. The official teaching language is French but there exist a limited number of bilingual schools that offer teaching partly in Réunionese Creole. Note that La Réunion has a peculiar socio-economic context with respect to France, with a young population (41% are under 25), larger unemployment (21% vs 9%) and poverty (39% vs 15%) rates, lower diploma level and with some difficulties in learning French.

Education facilities: 21/25/29 pupils is the average class size in primary/middle/high schools in La Réunion. Some small primary schools in the island's cirques and highlands only have a few pupils per school with teachers teaching groups from different levels together. All French schools have access to running water and most of them have an internet connection (not always good though). 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 or lack of space.

Governance and organisation: Public schools are run by the city councils (primary schools), county (department) councils (middle schools), or regional councils (high schools). Most private schools are “under contract” with the State and run by a non-governmental association, but the Ministry of Education remunerates the teachers. A minority of private schools are outside the educational system, and therefore not subsidised by the government. The curriculum and organisation of teaching in high schools has recently been completely reformed (2019–2021) with all students following the same teaching core programme with optional courses.

Teacher Training: All teachers have to go through a master's programme and take a competitive exam. In-service teachers may attend, during the school year, 1-/2-day training sessions whose calls for application are open every year within the Training Academic framework. In astronomy, summer schools for teachers are also organised in mainland France by the French space agency (CNES) or by the non-profit and non-governmental organisation CLEA. On Réunion Island, some local initiatives do(/have) promote(d) astronomy for education by providing teachers with (1) training, formerly in the

form of week-long courses set up by Les Makes Observatory (see below) for many years until recently, and (2) pedagogical support, through the CLEA local representative.

Astronomy in the curriculum: Astronomy is no longer taught as such in French schools but elements of astronomy are found in the general science course of primary school, and mainly in the “Life and Earth sciences” and “Physics and Chemistry” classes in middle/high schools. It is tackled first at the end of primary school when teachers talk about “light and shadows” during science class. The Sun, Earth, Moon and the eclipses are then explained. In the first years of middle school, children learn about the orbit of the Earth around the Sun, seasons, and the solar system. Then, in high school, students learn about gravity and Kepler’s law, spectroscopy and black body applied to stellar physics, the Earth in the Universe, Moon phases, and the Sun as a star and its source of energy. In the last year of high school, the Philosophy course deals with the representations of the world (geocentric vs. heliocentric systems). Also, a few in-class astronomy activities have been developed by individuals (« Makes Astro », « Ciel Aterla »), through Rectorate-supported projects.

Astronomy education outside the classroom: Some middle and high schools (e.g. the Roland Garros high school in Le Tampon) have their own astronomy-related club/workshop and students are free to enrol and attend if they wish. Also, the Scientific Culture Center « Sciences Réunion », at the origin of the annual « Fête de la Science » scientific event since 1999, has designed several outreach activities and exhibitions for primary and secondary students, in General Sciences including astronomy. Finally, Les Makes Observatory (with currently 5 employees of which 3 animators) was created in 1991 by the AAR organisation in order to disseminate astronomical knowledge to a general audience and schoolchildren. Public training and stargazing sessions and conferences are regularly organized, while one-day visits, night observing sessions and 4-/5-day long astronomy camps are open for primary and middle school students (with an average number of 2000 pupils per year). The Observatory has collaborated with the Rectorate in the preparation of the annular solar eclipse in 2016 in order for schoolchildren to be able to observe this event.

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For specific information about astronomy education in Réunion, France or on this document please contact the Office of Astronomy for Education (oea@astro4edu.org).