Astronomy Education in the Dominican Republic

Structure of education: Children begin formal schooling at aged 5 or 6 after a year of nursery (kindergarten). There then follows six years of primary education. Secondary school is compulsory for six years, studying all subjects offered by their school for the first three. In the final year of compulsory study students take National Level qualifications in 4 subjects. All thirteen years of education at public (state) schools are free of charge. There are also private (independent) schools which charge fees. 4% of the GDP goes to the public school system. Most schools are in Spanish, although a very small percentage of private schools are in English or other languages. Most schools are non-religious.

Education facilities: Dominican public schools have typical classes that are overpopulated. Some small schools only have a few pupils per school year, with teachers teaching groups from multiple years together. Not all Dominican public schools have access to running water and most don’t have access to internet connection. Students in orphanages sometimes receive their education in the same facilities where they live. Most public-school buildings are generally not well-maintained, it is also 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) schools are run by local district and city councils. The Curriculum is set by the central government in Santo Domingo and is the responsibility of the ministry of Education. The curriculum started to be reformed in 2014, with a Competency-Based Approach. It is expected to be completed by 2021.

Teacher Training: By law, primary school teachers mostly study undergraduate degrees in education at a university. Secondary physics teachers either study for a joint degree in physics and education at a university, or study for a postgraduate education qualification after a physics undergraduate degree. However, the reality is that anyone can teach at any level because they are assigned to their post by means of having connections or the lack of availability. Reforms in this aspect, which require teachers to pass examinations in order to qualify for teaching posts or be accepted into university education programs, have met with resistance by the teacher associations across the country.

Astronomy in the curriculum: Astronomy as a specific subject doesn’t exist in the curriculum but can be found in several grade levels and subjects across the school years. It can be found in the 3rd or 4th grade as a brief introduction, in the 7th grade as a part of the curricula of the Physics/Chemistry discipline where we can find a more in depth list of subjects. Can be found in several chapters of Biology lessons from 8th to 10th grade. It can also be found in Natural Science curricula, again as a brief introduction and in particular referring to the Sun and Solar System. It used to be integrated in the 10th year where a very nice introduction to the life cycle of stars could be found. Unfortunately, the last curriculum reform took this content out.
Astronomy education outside the classroom: There are several science centres, museums, observatories and planetariums in the country presenting astronomy related content to the public. There are also a couple of Solar System Walks where the participant can have a good idea of the scales in the Solar System. There is also a large program organized every year by the National Agency for Public Outreach (Ciência Viva), “Astronomia no Verão” (astronomy in summer) that gathers professional and amateur astronomers in events taking place all around the country. The amateur astronomers community also regularly organizes events devoted to the public.

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For specific information about astronomy education in the Dominican Republic or on this document please contact the Office of Astronomy for Education (oae@astro4edu.org).