Astronomy Education in

Kenya

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 national language in Kenya is Kiswahili and the official language is English. The language of instruction in schools in english although sometimes there may be a need to translate in Kiswahili, this is in rare cases. Kenya is transiting from the 8-4-4 system to the Competency Based Curriculum (CBC) (2-6-6-3 system) for public schools. Compulsory education at the moment is 8 years in primary school and 4 years in high school.
Most private schools follow the Kenyan education system, quite a majority of these schools are kindergarten schools and also a good number in underserved communities. The fact that parents take their kids to private school does not necessarily mean that they are rich. International schools follow the different international schools curriculum, and most common here is the British system.

Education facilities: An average class size would be 40 – 50 students in a public school and ranging from 25 – 30 in public schools per class. There are disparities between rural and urban areas. For example, T urkana has on average 92 learners per teacher, while Mandera had 80 and Garissa had 67. Most schools still do not have internet access. Majority of school kids walk to school, there are a small number mostly in cities who would take school transport or public transport. Most schools do not have proper sanitation and running water. Most schools have proper classrooms however there are a few schools that lack proper buildings.

Governance and organisation: The central government is responsible for the curriculum through the Kenya Institute of Curriculum Development. A province in Kenya would consist of several districts. However, Kenya no longer has provinces as the former districts have been replaced with counties. There are 47 counties in the country and each county has an education minister. The counties are primarily in charge of Early Childhood Development Education (ECDE). Astronomy for KIDs toy kits could be developed and used at this level.

Teacher Training: Most teachers are trained in Teacher Training colleges and universities. Sometimes, teachers can receive extra training from Teachers' seminars or from dedicated STEM education facilities like CEMASTEA – this is a government funded education facility in partnership with JICA. There are other organisations that offer teacher training, CEMASTEA still leads with a national reach.

Astronomy in the curriculum: Where does astronomy appear in the curriculum? Is astronomy a separate subject in school or does it fit into physics or science courses? At what stages do children encounter certain topics in astronomy, i.e. when do they learn about the Sun and Moon or the planets or maybe more complex topics like cosmology. Astronomy isn't a separate subject in school, and fits in Physics in high school. The topics covered in primary school are also covered in high school under

geography. Students learn about the Solar system, Phases of the Moon, seasons, eclipses in primary school under social studies. Astronomy as a stand-alone course is offered at the undergraduate level in a few institutions.

Astronomy education outside the classroom: There are some organisations that offer teacher training and sometimes cover astronomy. One such organisation is E - limu -.
The Travelling Telescope visits schools with their telescope and portable planetarium, and space themes robotics program. So far they have visited more than 500 schools reaching teachers and students (www.travellingtelescope.co.uk). There is a fixed planetarium which only started operating in January 2020 and has had a few school visits. It is also owned by The Travelling Telescope. The school visits sadly had to stop because of the current pandemic. There are youth groups that have included astronomy education in their activities e.g. Africa Space Workshops (ASW), Leo Telescope.

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