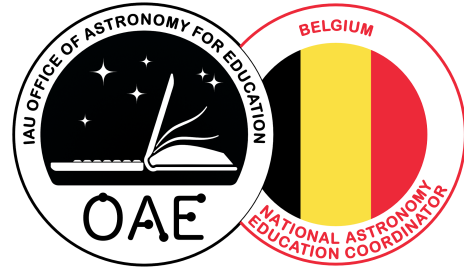


Astronomy Education in Belgium



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 compulsory school age throughout Belgium is between 5 and 18. Compulsory education is divided into primary (6-12 years) and secondary (12-18 years). Most children between 2,5 and 6 years old go to preschool (Kindergarten) which is only compulsory from the age of 5. Belgium has a large range of schooling styles and levels, and regulations which vary between and within the Dutch-, French-, and German-speaking communities.

Almost all schools are working under umbrella organizations like:

- Free public schools: schools from private origin, but funded by the Community education department. Most of them have a catholic origin.
- Community schools: schools that are founded, organized and funded by the Community education department.
- Municipal schools: schools that are founded, organized and funded by the city of their location, also funded by the Community department.

As all of these three categories are funded by the Community(free of charge for the pupils), they have to work with the mandatory curricula as defined by the community department. Regular inspections are sent out to schools for control. Some schools, in all of the above umbrella organizations, have specific education methods like Montessori, Jenaplan, Freinet, Steiner, ...

People are also free to realize the compulsory education with private education if they prefer. The curriculum is broad to begin, but as students move into higher years, or cycles, they have more choice about the subjects they take. In the final cycle, between ages 16 and 18, it is also possible for students to study part time while undergoing vocational training. During this specialization, courses of study focus on one of four areas: General education, Technical education, Vocational education, Art education. Schools may specialize in a particular stream, or offer different sections for different streams. In each of these streams, astronomy education can get a place, but more focus is given to it in the General education stream.

Education facilities: Belgian schools have typical class sizes under 30 pupils. All Belgian schools have access to running water and basic internet connections. Most of them are equipped with common tools like an interactive whiteboard, beamers, didactic models and some provide tablet computers and/or 3D printing facilities to the students. School buildings have basic comfort, and are generally maintained to keep it this way, although some suffer from limited budgets.

Governance and organisation: Schools are run by what is called "koepels" in Flanders and "réseaux" in the French-speaking part, meaning networks. There are indeed several networks: public schools, religious schools, council schools, alternative education schools. The curriculum is set by each of the regional governments and are elaborated more in detail by each network. In Flanders, the curriculum in secondary school is currently being reformed.

Teacher Training: 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. Teacher training for those already working is typically done with a few “in-service” training days per year (not accredited in Flanders, but accredited in French-speaking schools with 4 days per year dedicated to training activities).

Astronomy in the curriculum: There are no specialised school courses in astronomy (except at the university level). Astronomy is part of different courses of General Science, Physics and Geography in primary school and secondary school.

Astronomy education outside the classroom: There are many active local astronomy clubs in Belgium. There are several planetariums and public observatories and outreach centres. The people involved in the Belgium NAEC team are for instance closely linked with (i) the STEM for teachers cell in the University of Leuven, (ii) the Public Observatory of the University of Ghent, (iii) an observatory that has been rebuilt at the University of Namur with the purpose of offering astronomy education and outreach (iv) and the Planetarium of the Royal Observatory of Belgium in Brussels.

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