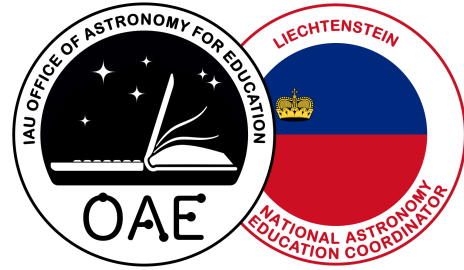


Astronomy Education in Liechtenstein



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 education system of the Principality of Liechtenstein is influenced by the school systems of the other German-speaking countries. The neighboring country of Switzerland exerts particular influence on the school structure and educational content.

Children take their first step into the Liechtenstein school system from the age of four. Almost all children attend kindergarten for two years, where they are prepared for the five-year elementary school (primary education). This is followed by the three-level secondary school. Secondary level I lasts four years and comprises three types of school: upper secondary school, intermediate secondary school and lower secondary school. The permeability of the three types of school has been optimized to such an extent that it is possible to change schools after almost any school year, provided the prerequisites are met.

After compulsory schooling (9 years, free of charge), various paths in general education or vocational training are open. The voluntary 10th school year offers various profiles and focuses for orientation on the path to vocational education. The Liechtenstein Gymnasium offers a broad general education at secondary level II, which leads to university entrance with the Matura. After completion of the vocational apprenticeship, the Berufsmaturitätsschule (BMS) Liechtenstein can also lead to university entrance (Berufsmaturität/vocational baccalaureate) on a part-time or full-time basis.

In addition to the state schools, two private schools are also licensed in Liechtenstein. The Liechtenstein Waldorf School, which teaches on the basis of Rudolf Steiner's pedagogy, and the "formatio", which offers education from elementary school through secondary school to upper secondary school. There is also one school for children and adolescents with special learning needs. The Heilpädagogisches Zentrum (hpz) is a non-profit foundation organized under private law. As a life-oriented and action-oriented school, the special education school strives for the highest possible independence of the students in order to ensure the best possible coping with everyday life.

Liechtenstein has two institutions of higher education with the right to award academic titles: the state-owned University of Liechtenstein, which offers programs in economics and architecture from the bachelor's to the master's and doctoral levels, and the private University in the Principality of Liechtenstein (UFL), which conducts doctoral programs in law and medical sciences. Depending on the field of study, Liechtenstein citizens often acquire their further degrees at higher vocational schools and universities in Switzerland, Austria or Germany.

Education facilities: Liechtenstein schools usually have class sizes of about 20 students. All eleven villages have a kindergarten and elementary school. Secondary school level I are based in larger

villages and there is only one secondary school level II based in Vaduz (easily accessible by school bus). All Liechtenstein schools have access to running water, good internet connections and are generally well-maintained.

Governance and organisation: The government is in charge of overseeing the entire education system. The government also has extensive general and abstract authority for managing important areas, including the curriculum, school organisation, student evaluation, school rules, teacher working hours, etc. The government is also the primary organ for hiring and handling legal affairs of the education system. In the kindergarten and compulsory school sector, the Liechtenstein curriculum "LiLe" has been aligned with the Swiss curriculum of the German-speaking cantons of Switzerland since 2019.

Teacher Training: Anyone wishing to teach at a public or private school in Liechtenstein must have a qualification. The qualification varies depending on the type of school and the subject area. Because it is such a small country, Liechtenstein cannot provide its own teacher training programs for different types of school and subject area, so teachers are trained in the neighboring countries (Switzerland/Austria/Germany). Liechtenstein has contracts with the Swiss institutions and authorities in particular, assuring access for its students to teacher training programs. Teachers are obliged to undertake regular further training in order to consolidate their professional skills. The Office of Education (Schulamt) offers professional development events on educational topics in a program of courses that is publicly advertised. The education inspector can prescribe specific further training courses as mandatory for certain categories of teacher. Attendance at further training events is free of charge.

Astronomy in the curriculum: In elementary school, children are taught about the basics of astronomy: the solar system, the Milky Way, some background/navigation knowledge. Other parts of astronomy can be found in the subjects Physics, Geography or Natural Sciences. Only in upper secondary school an elective course in "Astronomy" can be chosen. In this course, students spend an entire afternoon each week for one semester learning about astronomy. These students are about 17 to 18 years of age.

Astronomy education outside the classroom: There is one local astronomy club based in Schaan (Astronomischer Arbeitskreis). This club regularly invites the general public to stargazing evenings at the Cassiopeia Observatory. Observation objects include planets, planetary nebulae, galaxies, globular clusters and double stars.

The Natural Science Forum Association (Naturwissenschaftliches Forum) has also organized lectures in astrophysics and is member of the European Physical Society (EPS).

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