

13 Entrepreneurship education

Entrepreneurship education (EE) is a priority for the General Directorate for Vocational Education and Training, Adult Education and School Sports (GD VET) of the Federal Ministry of Education and Women's Affairs. It is supported by numerous measures, which are implemented in cooperation with other ministries and institutions.

Entrepreneurship education aims to generate enthusiasm among pupils so that they believe in their own ideas and motivate them to work on these ideas and put them into practice.

Entrepreneurship education – education in entrepreneurial thinking and acting in a wider sense comprises all educational measures to encourage entrepreneurial attitudes and skills, it therefore refers to the development of specific values, attitudes and personal qualifications that can lead to graduates founding their own business and are also essential for employment. In a narrower sense, entrepreneurship education means teaching specialist knowledge, abilities and skills required for successful business start-ups and management.

The topics related to entrepreneurship education are taught in most schools of the VET sector as a cross-sectional theme in many different subjects of the respective curriculum; in addition, the special focus Entrepreneurship and Management is offered at schools of business and colleges of business administration.

The entrepreneurial examination

is a prerequisite in Austria for exercising a craft or trade on a self-employed basis. The entrepreneurial examination is waived upon completion of specific school-based educational pathways, such as part-time vocational schools with a business focus, schools of business and colleges of business administration, colleges for engineering, schools and colleges of management and services industries, schools and colleges of tourism, some specialist colleges, higher education establishments and universities (as laid down in Federal Law Gazette II no. 210/1999 § 8).

The teaching principle of entrepreneurship education

The curricula of part-time vocational schools, the curriculum of schools of business and colleges of business administration, the curricula of colleges for engineering and of tourism and fashion set forth a specific **educational principle**: “Education in entrepreneurial thinking and acting”. This means that an entrepreneurial approach must be promoted by teachers in **all school subjects**. EE is gradually becoming an integral element of all the curricula of the VET school sector as part of competence-oriented teaching.

Business projects

Depending on the school form chosen, students of colleges for higher vocational education prepare **diploma projects** in a team or individually which solve a specific task from the fields of business or technology. This is a detailed, academically founded work where students

apply the knowledge they have acquired on the basis of a practice-oriented assignment. These compulsory diploma projects must be documented and presented by students and are integrated into the final exam or into the matriculation and diploma exam as an **exam subject**.

EE-certified schools

In analogy to the “Quality Label Practice Firm” there are also **certified EE schools**; this quality certificate is awarded to schools which excel in the field of entrepreneurship education. This is an OENORM certification: By early 2014, 20 schools had been certified, which equals about 20% of all schools of business and colleges of business administration.

Promotion of participation by students in competitions

Ideas' competition and business plan competition, EuroSkills, Innovative Youth, etc.

Development of a competence passport (profile for teachers of entrepreneurship), which is available for schools and teachers and can be used as a self-test and as a test element.

Initial and in-service training for teachers

A specific **post-secondary teacher training programme** on Entrepreneurship and Management which aims at **in-service teacher training** for teachers of all school types (five one-week seminars) is offered by university colleges of teacher education. A large number of seminars on this topic with different focuses are also offered.

Specific **school textbooks and workbooks** on the topics of entrepreneurship and case studies from business administration support teachers in their work.

A media package for classroom use has been developed in cooperation with the Federal Ministry of Economy and is the result of accompanying research conducted at the Schumpeter College of Business Administration. The related **teaching material** for entrepreneurship education has been made available to **all schools (for students aged 14-19) free of charge**.

Entrepreneur's Skills Certificate/Junior Company

The **Entrepreneur's Skills Certificate** of the Austrian Federal Economic Chamber imparts fundamental business knowledge to students of **secondary academic schools** and adults. In combination with a Junior Company scheme, students can also acquire the Entrepreneurial Skills Pass (ESP). Junior Companies are set up and operated for one year, the students create products or provide services to earn money on the real market.

Entrepreneurship for Engineers

Since 2012 the federal working group Entrepreneurship for Engineers (HTL) has encouraged a structural and nationwide implementation of entrepreneurial thinking. Entrepreneurship for Engineers pursues the following objectives :

- combining the technical or technological know-how of students (their ability to create, design and build products) with economic requirements, thus strengthening their **subject-related competence**,
- widening the diversity of methods and focus on methods applied by successful entrepreneurs in terms of creativity, innovation as well as strategic development and project implementation (**methodological competence**),
- teaching thoughts and attitudes such as orientation towards opportunities, customers, solutions, benefits and service (**personal and social competence**).

The following focuses are pursued to reach the objectives of entrepreneurship education at schools and colleges for engineering and crafts:

- strengthening entrepreneurial thinking by setting up and operating Junior Companies,
- teaching the creation and elements of a business model and business plan,
- development of methodological know-how (methods for innovation, creativity, assessment, strategy development) and enhancing understanding of innovation management,
- initiating cross-curricular and practice-oriented projects for various age groups – participation in competitions (such as Innovative Youth, Invent a Chip, Young Austrian Engineers CAD Contest, and similar).

EESI competence centre

To encourage **entrepreneurial thinking** even more, BMBWF has set up the **EESI competence centre**, the task of which consists in further improving not only entrepreneurship specialist training but also the students' and teachers' positive attitudes towards entrepreneurial activity; the centre cooperates with the EESI disseminators in the provinces. National and international experience exchange is encouraged and symposiums and days for entrepreneurs as well as school-specific in-service teacher training events and expert conferences organised.

Entrepreneurship at the college of business administration

Entrepreneurship education is implemented most comprehensively in the **colleges of business administration**. One of the four curriculum clusters is **Entrepreneurship – Business and Management**, which signifies the development of practice-oriented business competence at a high level.

Another area specialisation that is laid down in the curriculum as a special in-depth area is **Entrepreneurship and Management**. Entrepreneurship and Management is offered by more than one third of the college locations.

The Schumpeter College of Business Administration in Vienna's 13th district offers the area specialisation Entrepreneurship and Management in combination with **targeted promotion for gifted students** (the so-called “**fast-track scheme**”).

Post-secondary VET courses provided in colleges of business administration with the area specialisation **Entrepreneurship and Management** offer a post-secondary 4-semester specialist training course to graduates of other school types.

EE is established extensively as a teaching principle in the curricula of **schools of business** and also in the Business Competence cluster.

Development and implementation of educational standards for Entrepreneurship, Business and Management: These educational standards were developed in the area of schools of business and colleges of business administration. They are in line with the cluster objective of the 2014 curriculum.

Practice firms

Practice firms as **training locations for entrepreneurial thinking and acting:** Students work 3-4 hours a week for one year in the practice firm. They apply the learning content from other subjects and in this way learn to think and act like an entrepreneur. Practice firms have **real partner firms** in the world of business. This close partnership aims to encourage experience exchanges to simulate company practice.

A practice firm is the **model of a real company**, enabling the operational procedures of an actual company to be reproduced to varying degrees of complexity, with the aim of making them transparent for learning processes. Just as real companies have business contacts with other companies within the business world, practice firms also have **external contacts**, enabling students to discover their partners' **business culture** in Austria and abroad.

The practice firm as a place and method of learning is a compulsory part of the curriculum at all Austrian **schools of business and colleges of business administration**; in addition, it is recommended to integrate the concept into the business training of all VET schools and colleges. In 1993 the idea of practice firms was laid down in Austrian **school curricula** for the first time in Europe.

The practice firm is considered the **method** for action-oriented teaching, with individualisation and competence orientation at the centre.

Practice firms are also run in **other schools of the VET sector:** at part-time vocational schools, at schools and colleges of agriculture and forestry, at schools and colleges for engineering and crafts, at schools and colleges of tourism and, above all, at schools and colleges of management and services industries. Currently **around**

1,000 practice firms are being operated in Austria, some of them in the adult learning sector. Most of them are run in year 4 of colleges of business administration and in year 3 of schools of business, with the emphasis so far on the goods and services sectors.

ONR 42000 – OENORM rule

In 2002 a nationwide competition for external certification termed **Quality Label Practice Firm** was introduced; every year, some 30% of practice firms at all school types are certified. Since 2005, **ONR 42000** (an OENORM rule) has been applied as yet another evaluation instrument of practice firms.

Departments in the company

All **business situations relevant to specific sectors** are covered by the practice firm, from purchasing through to output and sales. The associated business administrative tasks must be carried out according to business usage and legal requirements. However, neither the goods or services offered nor the money implied in transactions actually exist.

Like in real life, each practice firm is organised in **departments** dealing with business management, human resources, secretarial services, marketing, sales, controlling, accounts, logistics, etc. Students rotate jobs in the various departments, where they carry out the specific tasks.

The teaching method in practice firms is different in that teachers are managing directors or counsellors, plan the company's **strategic and pedagogical objectives** and support the staff (students) in the implementation of the practice firm's operational objectives.

Pedagogical and company objectives

Practice firm modules aim at teaching internal procedures and relationships between businesses in a cross-curricular, task- and problem-oriented, pupil-centred way which corresponds with real-life practice. In particular, the activities of the business partners stimulate the students' **learning processes**, so that they are highly **motivated**.

Competence acquisition

The acquisition of **key skills** (e.g. teamwork, networked thinking, linguistic abilities) gives students occupational mobility and flexibility to allow for international career opportunities.

As well as their **international contacts**, simulation is another strength of practice firms. Even wrong decisions, which could put their own company at risk in real business life, have no serious economic consequences here, but are part of the students' **personal experiences** and constitute a major factor in **learning and personal development processes**.

Cooperation with the economy

Cooperation ventures with businesses – the **real partners** in the background – are another very important element for practice firms in terms of know-how and sponsorship. Over 70% of practice firms have partners in real business, who offer their support, allow visits to their premises and make their employees' skills available.

ARGE ÜFA

The working group on practice firms in the business sphere (ARGE ÜFA) comprises experts from the provinces. It is an important **driving force behind the further development** of the practice firm; it works together with ACT – the Austrian Center for Training Firms and academic support is provided by the Business Education department of Graz University.

ACT – the Austrian Center for Training Firms

ACT (the Austrian Center for Training Firms) was **established in 1993** on the initiative of the General Directorate for Vocational Education and Training, Adult Education and School Sports (GD VET) at BMBF as part of curricular reforms in schools of business and colleges of business administration:

ACT is the central office for **Austrian practice firms**, the link between national and international networks of practice firms and, as an innovation centre, an institution for further developing the concept of practice firms.

ACT represents the Austrian practice firms in the international umbrella organisation **Europen/PEN international**.

ACT provides Austrian practice firms with the **online services** (www.act.at) which the practice firm market does not offer but which are necessary for realistic business activities by simulating **public authorities** and supports national and international transactions through a variety of **services**:

bank, company register, tax office, social insurance, foreign trade office, court, the authority in charge of trades and businesses, customs, transport, shopping mall, foreign language service, tenders.

According to the curriculum of colleges of business administration, in the semester preceding practice firm work students are to make themselves familiar with the services of the Austrian Center for Training Firms.

ACT also offers support in the initial and continuing education of practice firm trainers and managers.

As a BMBF project, ACT forms part of the activities of the **General Directorate for Vocational Education and Training, Adult Education and School Sports** and works according to the **education and training concepts** of this field. The ACT staff are made up of experienced practice firm trainers and experts from the sphere of business.