

Country Report LIECHTENSTEIN

Sabine Archan & Bettina Lehner
Institut für Berufsbildung (ibw), Austria

1. Background and country context

National economy

Given its small size, Liechtenstein has a very diversified economic structure with main focus on industrial production. Although financial services are important for the country's national economy, they are not dominant. Compared to other advanced economies in Europe, Liechtenstein is more industrially influenced and less service oriented. The industry and goods-producing sector are responsible for 42 percent of the national added value, while financial services contribute 28 percent and general services about 25 percent. The various enterprises themselves are generally very innovative, often highly specialised, have a strong international alignment and produce generally high quality goods. Employees in Liechtenstein are usually well trained and committed to service, quality and performance.

Many industrial enterprises specialise in market niches, where they are very successful and sometimes even world leaders, e.g. Hilti AG in the sector of fastening systems for the construction industry, Ivoclar Vivadent Ltd. in dental products or Swarovski AG in producing faceted crystal stones. Other successful examples are Hilcona AG for food and convenience products, Unaxis Holding Inc. for production systems and services or Krupp Presta AG, which is a supplier for the automotive industry.

The productivity of the Liechtenstein economy is above average of most industrial countries. More than 85 percent of the population are said to be in employment, but this extraordinarily high number is due to the large number of commuters to Liechtenstein from Switzerland and from Austria: Out of about 30,000 employees nearly half, that is more than 14,000 people are commuters. The 30,000 employees are employed by about 3,700 employers, which means that one employer employs statistically about eight people. As a result, the typical Liechtenstein enterprise is rather a SME than one of the well known large industrial enterprises.

Educational system

The general structure of Liechtenstein's educational and training system follows the pedagogical traditions of its German speaking neighbouring countries, whereas influence from Switzerland seems to be stronger than from Austria or Germany. According to Liechtenstein's constitution, the state is responsible for the education and supervises the entire educational and training system.

In the school year 2005/2006 4,977 pupils were trained by 641 teachers in public schools in Liechtenstein. There were 58 nursery schools („Kindergärten“) with 770 children, 14 primary schools („Primärschulen“) with 2,159 pupils, 3 high schools („Oberschulen“) with 427 pupils, 5 secondary schools („Realschulen“) with 716 pupils, one grammar school („Gymnasium“) with 695 pupils and und one vocational high school („Berufsmittelschule“) with 138 pupils. The voluntary tenth year („freiwilliges 10. Schuljahr“) was attended by 72 pupils.

The final maturity exam („Maturität“) can be obtained after 12 years of school and a vocational maturity exam („Berufsmatura“) can be obtained at a vocational high school

„Berufsmittelschule“. A maturity exam is a prerequisite for an academic study („Hochschulstudium“) in Liechtenstein or Austria or an applied study („Fachhochschulstudium“) at a Swiss university.

Since 1992 when a new law on higher education became effective there have been four academic institutions in Liechtenstein. At Liechtenstein's university for applied studies, students can choose between architecture, business studies and informatics. In summer term 2005 there were 499 students thereof 105 from Liechtenstein. Else there are the university for humanities which offers the study branches psychology and neurological sciences, the Liechtenstein institute which focuses on Liechtenstein related research topics and an international academy for philosophy.

Bilateral agreements with Switzerland and Austria guarantee free access for Liechtenstein's citizens to Austrian and Swiss universities. Regarding Germany, such an agreement exists only with the Eberhard-Karls-Universität in Tübingen. As a result, in the year 2004/05 the majority of the 580 students who were residents in Liechtenstein, attended either Swiss (368) or Austrian (165) universities whereas only 19 studied in Germany.

IVET and CVET

As the educational system in general, the structure of Liechtenstein's vocational education and training system is very similar to those in its German speaking neighbouring countries which are all based on the dual or trial system. Influences from Switzerland seem to be dominant, but also Austria and Germany have had and still have some influence on Liechtenstein's VET system.

While many educational tasks in Switzerland are regulated within the Kantons, vocational education is a federal competence. Swiss vocational education and training is regulated by a federal law on VET that came into force in 2004. The preparatory work involved in drafting the law gave a fresh impetus to Swiss vocational education. 200,000 apprentices, nearly 600 professional associations and approximately 25,000 graduates of higher vocational training schools per year are beneficiaries of a transparent vocational system now valid throughout Switzerland. The Swiss dual system is usually ranked largely positive, but experts nevertheless stress the need for constant reforms of the system and a closer monitoring of changes in the labour market. Innovations by OPET (Federal Office for Professional Education and Technology) in vocational education and training address this issue through legislation, but also through measures for increasing the number of apprenticeships available, further development of the professional baccalaureate, integration of professions in the health care, social work and arts sector, promotion of new types of education and training and by positioning vocational education and training in the international context.

On a reduced scale, Liechtenstein VET is based on the same outlines as Swiss VET. Initial vocational education and training is also based on the dual, and respectively on the trial system. While „dual“ refers to in-company training combined with training in a specialised vocational school, the „trial“ system additionally comprises interplant courses, so called „Verbandskurse“, which teach basic practical working skills. Initial vocational education and training is therefore usually transmitted through vocational training in an enterprise and full time or part-time attendance of a vocational school. And sometimes the vocational education comprises also additional trainings, „Verbandskurse“, usually at the beginning of an apprenticeship.

As in Switzerland, there is also the option of a more basic and short term vocational education in Liechtenstein, called „Anlehre“. An „Anlehre“ usually takes between one or

two years only and is addressed to young people who would not be able to follow a normal apprenticeship for social, physical or mental reasons. This kind of education is usually in step with practical working conditions.

For high performing apprentices on the contrary, there is the possibility of attending a „Berufsmittelschule“, a vocational high school. The final exam, „Berufsmatura“, a vocational maturity exam, offers various options of further study programmes up to the attendance of universities.

Liechtenstein offers nearly 100 different vocational specialisations in form of apprenticeship training. Nevertheless the ten most chosen professions cover more than half of all apprenticeships (52 percent, or 413 of 790 apprenticeships in 2006). The most frequently chosen professions in 2006 were: salesman, computer scientist, electrician, car mechanic, constructing engineer, sanitary technician and car technician. The common characteristic of a profession certainly does not reflect their standard, value and status. But it can be seen as a hint regarding the demand for the profession. And of course some apprenticeships are much more specialised than others and therefore less common.

It is obvious that all in all in Liechtenstein a lot more boys (526 in 2006) than girls (264 in 2006) choose vocational formation as their initial vocational education. The choice of professions seems to be more appealing to boys than to girls, although all professions are open to both male and female. Girls and women seem to choose more often an education in the social, pedagogic or health sector, which can apart from some exceptions (e.g. medical assistant or dental assistant) not be learnt in apprenticeship training.

In order to attend vocational schools, Liechtenstein's apprentices often travel to Switzerland. All job descriptions, education and examination regulations apply to Liechtenstein accordingly. Basically all vocational apprenticeships that can be learnt in Austria, Switzerland, Germany and Liechtenstein are mutually acknowledged, provided that these professions can be learnt in all countries.

In an even closer cooperation, Liechtenstein and Switzerland follow identical training guidelines and rules in the training of their apprentices. Only few apprenticeships show national differences regarding the concept of training and the duration of the apprenticeships. Teacher trainings of Liechtenstein teachers usually take place in Swiss training centres.

Training programmes are not provided as part of general compulsory schooling and are only available for pupils aged 16 to 20 years. Admission to vocational training is only possible for pupils who have turned 16 and completed compulsory schooling. Initial vocational training lasts for between two and four years depending on the profession, and The proportion of practical training in the profession accounts for 60 to 80 percent of the training period. Attendance of a vocational school („Berufsschule“) is compulsory. Companies can only train apprentices if they hold a training permit („Bildungsbewilligung“) issued by the Vocational Training Authority for the relevant profession.

In the school year 2004/05 Liechtenstein's enterprises trained 1,076 apprentices, thereof 735 from Liechtenstein, 337 from Switzerland and four from Austria. In 2004 325 apprentices completed their apprenticeships in 74 different professions. 54 apprentices from Liechtenstein were trained in Swiss enterprises. 25 Apprentices completed their apprenticeship in Switzerland.

Although grammar schools become more and more popular in Liechtenstein, out of 350 to 400 school graduates per year (about 70 -75 percent) start apprenticeship training. That means that nearly three quarters of the 15 year old population that finish school after nine years start an apprenticeship, which is normally three or four years long. About 700 companies offer a range of nearly 100 different professions in craft, industry, trade, service and administration. Currently some 1,000 apprenticeships are registered. Per year about 330 young professionals conclude their training by passing the final apprenticeship examination. Free career advice is offered by the vocational guidance centres and free training advice by the vocational training authority.

Training programmes mostly are free of charge to trainees. The costs for vocational training are borne by the state and the training companies. The state pays the costs for vocational schools and examinations while the training company pays the apprentices a reasonable wage. The state bears the usual subsidy rate in Switzerland of 50 percent of the total cost of the mandatory one to two-week introductory courses. The respective training company bears the other 50 percent.

There are several options of further education and training after an apprenticeship, according to the regarding apprenticeship. Many apprentices start an additional second apprenticeship subsequent to the first. Schools for continuous vocational training are looked after by the “Amt für Berufsbildung und Berufsberatung” (the Liechtenstein National Agency for Vocational Training and Counselling) but must be attended in Switzerland and Austria. Study places are guaranteed by bilateral agreements.

The costs for initial vocational education and training in Liechtenstein amount to about 8 million CHF (13.3 million EUR), the costs for continuing vocational education amount to about CHF 2 millions (3.3 million EUR) per year.

As a member of EEA, the European Economic Area, Liechtenstein takes part in the vocational educational programmes of the European Union. These are mainly exchange programmes for young skilled workers (MOJA), for learners (Xchange), students (FAMOUS) and trainers (CEDEFOP study visits).

2. How is the work and training of trainers organised?

2.1) How is the training of trainers organised, how is it embedded in the general education system and in the further education system?

Three different types of “Ausbilder” exist in the Liechtenstein VET system. There are in-company trainers, trainers in interplant courses and trainers in third learning places, like apprenticeship workshops.

In Liechtenstein, a trainer in a company is typically involved in initial formative vocational training in a technical division or specialised area of a company. In-company trainers are usually called “Berufsbildner” (male) or “Berufsbildnerin” (female).

As the number of trainers in vocational education and training in Liechtenstein is very limited, not much data is available on their situation. This report therefore widely follows the assessment of the central training institute, the so-called “Amt für Berufsbildung und Berufsberatung”, the Liechtenstein national agency for vocational training and counselling. The “Amt für Berufsbildung und Berufsberatung” can be accessed via internet at: <http://www.llv.li/amtsstellen/llv-abb-home.htm>. Further insights were gained through a survey which was conducted in the course of the Eurorainer project.

Liechtenstein does not require a formal training of trainers, but trainers usually take part in a “Lehrmeisterkurs”, a train the trainer-course which can take place either in Liechtenstein, in Switzerland or Germany. These courses usually last one or two days and impart basic knowledge on training and pedagogical skills.

2.2) Which ways do exist to become a trainer and to further develop as a trainer?

Curious enough, in Liechtenstein, the so called “Bildungsbewilligung”, the certificate to train apprentices, is issued to companies and not to individuals. But companies must name a “BerufsbildnerIn”, who holds at least a recognised certificate in the relevant profession he or she will train. Before the “Bildungsbewilligung is issued, the agency for vocational training and counselling visits the enterprise that wants to train apprentices. At this occasion the company obtains general information on the apprenticeship and its legal basis and objectives. The authorisation of firms that may train apprentices is regulated in a national law on vocational education, the so called “Berufsbildungsgesetz”.

Different from Switzerland for example, Liechtenstein does not require a formal training in order to become a trainer in vocational education. But the Liechtenstein national agency for vocational training and counselling is well aware of the fact that the training of young people in their initial vocational education may be a very demanding and responsible task. Good vocational skills and experiences are therefore not considered to be enough for a trainer. To lead and guide young people also requires personal skills and soft skills as patience, empathy and also some pedagogical knowledge. Such skills are among others taught in so called „Lehrmeisterkursen“, train the trainer-courses which the Liechtenstein National Agency for Vocational Training and Counselling highly recommend. Lehrmeister-courses take one or two days only and future trainers might have to travel to Switzerland or Germany in order to attend these courses.

Generally it is still rather untypical for trainers in enterprises to engage in continuing training to update their knowledge and skills related to their training activities.

2.3) Who is taking which decisions concerning the work and training of trainers?

The “Amt für Berufsbildung und Berufsberatung”, the Liechtenstein national agency for vocational training and counselling is the main player in the vocational training sector in Liechtenstein. Holding the status of an official agency, the “Amt für Berufsbildung” is the controlling institution for initial vocational training during vocational apprenticeship. Its main tasks are to consult learners as well as the people who are responsible for education and training, to accredit apprenticeship contracts, to grant educational permits, the certificate to train apprentices, the so called “Bildungsbewilligungen” and to issue certificates on skills and grades and finally to finance initial vocational education and training as well as continuing vocational education and training. A national law on vocational education “Berufsbildungsgesetz” regulates the authorisation of firms that may train apprentices.

3. How is the work and training of trainers financed?

3.1) How is the training of trainers financed, who invests why into the training of trainers?

The work of trainers is financed partly by the enterprises who employ in-company trainers and partly by the state of Liechtenstein, via the “Amt für Berufsbildung und Berufsberatung”, the Liechtenstein national agency for vocational training and counselling.

3.2) How much money is invested in the training of trainers (percentage/GDP(gross domestic product))?

There is no direct data available. The costs for initial vocational education and training amount to about 8 million CHF (13.3 million EUR), the costs for continuing vocational education amount to about 2 million CHF (3.3 million EUR) per year. The GDP amounts to 4,279 million CHF (7,100 million EUR), but given the large number of commuters (more than 14,000 of 30,000 employees are commuters) it is not easy to draw conclusions from the GDP.

3.3) Who benefits from the work of trainers (average income of trainers, cost-benefit analyses per enterprise/sector/region/nation)?

There is no data available, neither on the average income of trainers, nor on cost-benefit analysis. Some enterprises evaluate the quality of the education and training they provide, but usually not on a regular basis. Moreover, the focus of these evaluations is usually on the trainee and not on the trainer and they are generally output-focused.

3.4) Which role does the work and training of trainers play as a means for economic development?

There is no direct data available. Given the international orientation of the Liechtenstein industry and the variety of high quality goods that are produced by the Liechtenstein industry, it may be assumed that highly qualified employees play an important role in the success of Liechtenstein's enterprises.

4. How are trainers selected and how are human resources allocated?

4.1) How many persons are working as a trainer (formally/informally; full-time/part-time; female/male; nationals/foreigners)?

There are about 700 training companies in Liechtenstein, which employ all in all about 1,000 trainers. Full-time trainers seem to be the exception, they exist only in some of the largest companies. Trainers are normally working full-time in a company and training is more or less additional, part-time work for them. According to an interview partner of the Eurotrainer study trainers in enterprises usually dedicate 10 to 30 percent of their working time to training related activities. As the number of foreign workers is generally high in Liechtenstein, it may be assumed that there are also quite a lot of foreigners among the trainers in enterprises.

4.2) What are the prerequisites to become a trainer?

In-company trainers in Liechtenstein typically hold a formal qualification certificate, although it is not a prerequisite, only strongly recommended. Further trainers in enterprises usually have completed an initial vocational training programme to acquire skilled worker status. Generally a trainer in a company is somebody who holds the job position of a trainer and was assigned as trainer by the management or his supervisors.

To become a trainer in a company in Liechtenstein a person needs to have above all subject-specific or technical competences as well as social competences and last but not least long work experience.

The typical work tasks of a trainer in a company cover the assessment of skills and competencies of employees and trainees, the counselling and mentoring of trainees, the facilitation of a trainees' or employees' personal development and growth as well as the resolving of conflicts and the balance of different interests. Further tasks of trainers are the implementation of new training and teaching methods, the introduction of learning-

supportive elements in the work environment and the establishment of contacts with other training institutions and schools.

The most commonly applied training methods are class teaching, demonstration and imitation, task-oriented learning supported by guidelines and self-organised learning.

4.3) How are trainers recruited by enterprises?

In-company trainers are usually internally recruited, that is among the existing employees of an enterprise. While larger industrial companies can usually afford to employ full-time trainers, SME in trades and craft usually cannot. Small enterprises and trades and therefore typically lack the necessary personal resources for high quality vocational training. The larger a company, the more professional its standards for trainers are.

4.4) In which main occupational areas trainers have specialised?

There is no direct data available. But looking at Liechtenstein's successful industrial enterprises, it may be assumed that the market niches which the enterprises focus on will be at the same time the areas in which trainers have specialised.

Such areas of specialisation would therefore be the fabrication of fastening systems for the construction industry (Hilti AG), the production of dental products (Ivoclar Vivadent Ltd.) production of faceted crystal stones (Swarovski AG), food and convenience products (Hilcona AG), production systems and services (Unaxis Holding Inc.) or supplies for the automotive industry (Krupp Presta AG). More generally spoken, trainers can be expected to have specialised in high technology products, metal, plastic and sanitary technology, as well as constructing and engineering.

Looking at the most commonly chosen apprenticeships in Liechtenstein, a similar impression on the trainers' areas of specialisation can be obtained: After salesman the most frequently chosen apprenticeships in Liechtenstein are computer scientist, electrician, car mechanic, constructing engineer, sanitary technician and car technician.

4.5) Are there too many/not enough trainers in different sectors of the labour market?

As trainers in enterprises are usually internally recruited there should be no real shortage as it should be easy enough to recruit the required number of trainers among the employees. But it may well be difficult in financial regards, especially for SMEs, to pay the necessary personal for high quality vocational in-company training.

5. How are trainers qualified?

5.1) Who determines the training contents for trainers and how are these contents found?

Generally a trainer in a Liechtenstein company is somebody who holds the job position of a trainer and was assigned as trainer by the management or his supervisors. To become an in-company trainer a person needs to have above all subject-specific or technical competences as well as social competences and last but not least long work experience. In-company trainers in Liechtenstein typically also hold a formal qualification certificate, although it is not a prerequisite. Further trainers in enterprises usually have completed an initial vocational training programme to acquire skilled worker status.

Training contents for trainers are usually determined within an enterprise, as also in-company trainers are usually internally recruited, that is among the existing employees of an enterprise. While larger industrial companies can usually afford to employ full-time

trainers, SMEs in trades and craft usually can not. Small enterprises and trades therefore typically lack the necessary personal resources for high quality vocational training. The larger a company, the more professional its standards for trainers usually are.

Training contents for trainers are widely determined by their work tasks. The typical work tasks of a trainer in a company cover the assessment of skills and competencies of employees and trainees, the counselling and mentoring of trainees, the facilitation of a trainees' or employees' personal development and growth as well as the resolving of conflicts and the balance of different interests. Further tasks of trainers are the implementation of new training and teaching methods, the introduction of learning-supportive elements in the work environment and the establishment of contacts with other training institutions and schools. The most commonly applied training methods are class teaching, demonstration and imitation, task-oriented learning supported by guidelines and self-organised learning. Moreover, the work of in-company trainers has to be in accordance with the regarding national job descriptions and regulations as provided by the national agency for vocational training and counselling.

As a member to EEA, European Economic Area, Liechtenstein takes part in the vocational educational programmes of the European Union. Liechtenstein's trainers therefore regularly take part in CEDEFOP study visits.

5.2) Which institutions are incorporated in the training of trainers and how do they co-operate?

The "Amt für Berufsbildung und Berufsberatung", the Liechtenstein national agency for vocational training and counselling is the main coordinator of trainer trainings and also the main evaluator of in-company training and trainers. But evaluations usually focus on the apprentices, not on the trainers.

Trainers use regularly educational reports (so called „Bildungsberichte“) as a measure of leading the apprentices. Every six months, at the occasion of the vocational school report, the trainer and the apprentice talk about the learner's progress, current situation and future targets. In this discussion they usually use a template provided by the "Amt für Berufsbildung und Berufsberatung", the Liechtenstein national agency for vocational training and counselling. The usage of this standardised template makes it easier to compare the results with those of earlier evaluations. Trainer and apprentice have to sign these educational reports and hand in copies to the agency for vocational training and counselling.

5.3) How do trainers acquire competences (theoretical and practical knowledge, work experience)?

Different from Switzerland, Liechtenstein does not require formal training in order to become a trainer in vocational education. In Liechtenstein there is no so called "Bildungs-Obligatorium", or "Lehrmeisterkurs-Obligatorium", which means that future trainers ("BerufsbilderInnen") are not obliged to attend special train the trainer-courses.

But the Liechtenstein national agency for vocational training and counselling seems to be well aware of the fact that the training of young people in their initial vocational education may be a very demanding and responsible task. Good vocational skills and experiences are therefore not considered to be enough for a trainer. To lead and guide young people also requires personal skills and soft skills as patience, empathy and also some pedagogic and didactic skills and knowledge. Such skills are among others taught in so called „Lehrmeisterkursen“, train the trainer-courses, which the Liechtenstein National Agency for Vocational Training and Counselling highly recommend.

These Lehrmeister-courses take one or two days only and partly future trainers have to travel to Switzerland in order to attend these courses.

Generally it is still rather untypical for trainers in enterprises to engage in continuing training to update their knowledge and skills related to their training activities. Curious enough, in Liechtenstein, the so called "Bildungsbewilligung", the certificate to train apprentices, is issued to companies and not to individuals. But companies must name a "BerufsbildnerIn", who holds at least a recognised certificate in the relevant profession he or she will train.

6. How is the reputation of trainers and how are they integrated in enterprises/society?

6.1) Which functions of social integration are fulfilled through the work and training of trainers?

Training related activities are generally well accepted and recognised. Assuming a training role in a company is rather attractive for employees, as it is usually combined with an improvement of status and salary. But there are no concrete measures or practices to raise the attractiveness of assuming a training role in a company nor to enhance the overall status of this role in Liechtenstein.

6.2) How is the work of trainers recognised in enterprises and in the society?

According to the appraisal of the head of the national agency for vocational training and counselling, a training role in a company in Liechtenstein is recognised by the enterprise. Training related activities are said to have a positive impact not only on the status of the employee, but also on his salary.

The key motivational factors for employees to assume the role of a trainer in an enterprise therefore are employer-related incentives such as higher pay, higher status, better career prospects, personal interest and qualifying aspects as the trainer role is usually broadening the range of skills.

6.3) Which is the unemployment-rate of trainers?

There is no data available. But given the generally very low rate of 1.3 percent of unemployment in Liechtenstein, it may be assumed that also unemployment among trainers is far below the European average. The absolute number of workforce is 30,000, out of which less than 400 people are unemployed.

7. How innovative is the work and training of trainers?

7.3) Which are weaknesses and strengths with respect to the training of trainers? Where is a need for reform?

Qualifications and competencies of in-company trainers are never assessed, monitored or adjusted in Liechtenstein. Also up to now no methodological tools are in place to assess the qualifications and competencies of trainers in Liechtenstein's enterprises. Moreover, trainers in enterprises do generally not regularly engage in continuing training to update their knowledge and skills related to their training activities. This is mostly due to the fact, that there are no adequate training offers or that trainers typically do not have access to such offers as well as to the fact that trainers are not supported by their employers to participate in continuous learning.

In the course of the Eurotrainer survey, an interview partner criticises the lack of a legal basis for trainer trainings and the lack of mandatory guidelines for continuous trainer trainings in Liechtenstein. Another problem seems to be that SMEs – as in most other European countries - often lack the necessary personal resources for high quality vocational in-company training.

7.4) Are there any ‘good practice examples’ at company or sectoral level?

A good practice example is the “Juniorenfirma Vice Versa” set up by Hilti AG. The concept of this junior company is an enterprise entirely run by “juniors”, young apprentices in their third year of apprenticeship. The idea is that the juniors shall develop entrepreneurial thinking, skills and abilities through their work in the firm. The juniors operate very professional, and even via internet they can be visited at <http://www.jufa.li/>. A German press article about the junior firm at [Hilti AG is available at: http://www.jufa.li/viceversa/Zeitungsartikel.pdf](http://www.jufa.li/viceversa/Zeitungsartikel.pdf)