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Education and Culture

Lifelong Learning: Education and Training policies
Coordination of Lifelong Learning Policies

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**IMPLEMENTING THE
“EDUCATION AND TRAINING 2010” WORK PROGRAMME**

2005 Progress Report
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1. REFORMS IN EDUCATION: LIECHTENSTEIN

1. Liechtenstein and the Lisbon Strategy

Reforms and action to improve and enhance education are being undertaken continuously in Liechtenstein. The Lisbon Strategy was noted but no measures were implemented directly in response to its key elements. Many of the relevant benchmarks have already been achieved in Liechtenstein; the school drop-out rate, for example, is lower than 10%:

In summer 2003, 387 pupils went from primary to lower secondary school. These data refer to pupils in public primary schools. Of these 387, 115 (30%) decided upon (or were assigned to) the *Oberschule* (lower secondary school), 181 (47%) to the *Realschule* or *Sekundarschule* (intermediate secondary school) and 91 (23%) to the *Gymnasium* (academic secondary school). Pupils who have completed compulsory education: according to the data from the careers advisory service on the career choices of pupils who have completed compulsory education, a total of 421 pupils completed compulsory education in Liechtenstein in summer 2003. 202 school leavers (48%) then began an apprenticeship. 55 pupils (13%) went into the voluntary 10th school year. 17 pupils (4%) decided to go to academic secondary schools abroad. 94 pupils in the junior section of the Liechtenstein academic secondary school (22% of school leavers) went into the senior section. 53 school leavers (13%) enrolled at technical schools or decided upon work experience, a *Sozialjahr* (career-orientation year combining social work and school), or language training abroad, etc.

Source: Amt für Volkswirtschaft (Office for the National Economy), Vaduz: Education statistics 2004, revision 08/2004

The PISA study in 2003 showed that Liechtenstein is very largely on the right road, with the proportion of pupils who obtained poor results in reading skills in the 2000 study being reduced.

Liechtenstein also leapt up the league table in reading. It is ranked fifth in the world and is the only purely German-speaking country which is well above the OECD average. It is striking that, since the last study, all Liechtenstein pupils have made progress in reading — both those with poor and those with good individual results.

Source: http://www.schulnetz.li/assi/Schulnetz/pisa/Pisa2004/pressebericht_fl_pisa.pdf

In the 2000 PISA study, Liechtenstein was in the lower third of the participating countries, both in reading and in natural sciences. Only in mathematics did its results put it in mid-table. In 2003, however, it was in the top group in all subjects and in fifth place in reading, mathematics and natural sciences. It also scored well - eighth place - in problem-solving. Considerable progress on 2000 was therefore made in all the areas studied at that time. It is not possible to go into the reasons for this in detail here as they are very varied, but they are certainly partly the result of long- and medium-term reforms in Liechtenstein. Besides, the results for Liechtenstein must be qualified:

The full-scale survey of 15-year-olds meant that in Liechtenstein three upper secondary schools, five intermediate secondary schools and one academic secondary school participated in PISA 2000 as State schools. A single school can clearly have a considerable impact on the results as a whole. Although the full-scale survey produces very precise results for Liechtenstein, they could change dramatically as a result of natural circumstances independently of any political measures.

Source: Berweger, Simone; Moser, Urs: Pisa survey results for Liechtenstein compared with those of the German-Swiss Cantons. October 2002.

It must also be mentioned, however, that action was taken after PISA 2000. A package of measures was adopted covering five areas of activity: “promoting German as a language

of learning”, “learning”, “cooperation with external partners”, “standards” and “the school system”:

I.: Promoting German as a language of learning: 1. making German mandatory in nursery schools. 2. inspectors step up their monitoring of the use of the standard language in class and stress this matter in talks with staff. The *Schulamt* (Schools Department) develops guidelines for use in the respective tiers of school education.

II.: Learning: 1. libraries and schools are instructed/encouraged to promote reading. 2. schools are instructed to tailor their teaching approach/methods to PISA.

III.: Cooperation with external partners: 1. increased cooperation with industry at the “round table”; 2. cooperation with foreigners’ associations/other institutions: promoting language skills and cultural understanding of immigrants (especially of adults).

IV.: Standards: 1. standards programme.

V.: School system: 1. cooperation project on mathematics. 2. social work at schools.

Source: RA 2003/1363-4180

Promotion of reading: A special mention should be made of the *Lesesäcke* (book bags) project, an initiative to promote reading by the DEV (*Dachverband der Elternvereinigungen* — umbrella organisation for parents’ associations) in cooperation with the *Schulamt* (Schools Department). All children in the third and fourth classes of primary school receive a bag containing a book; after they have read the book and it has been processed briefly in a personal reading passport, the book is circulated further. This project has led to many children becoming bookworms.

Educational standards: Extract from a press bulletin of 19 November 2003:

Educational standards formulate requirements for teaching and learning at school. They identify the skills that the school must impart to the pupils so that certain key educational aims can be achieved. They establish what skills children or young people must have attained up to a given year. (...) In future, Liechtenstein will probably also participate in two projects run by the St Gallen canton. Both pursue the aim of analysing the performance of pupils at a specific point in time.

<http://www.llv.li/pressemitteilungen.htm>

Social work: Social work was introduced as a pilot project as part of the “School system” area of action. It has been warmly welcomed. For years, schools, especially secondary schools, had sociopaedagogical problems. Despite great efforts by the teaching staff and the authorities, teaching was becoming more and more difficult. The tools available and the skills acquired by teaching staff during their training were simply not sufficient to induce a change of behaviour in difficult pupils. School social work provides further support for the teaching staff so that they can devote themselves more to their core activity, i.e. teaching:

The “School social work FL” pilot project, which is designed to last for two years, offers schools, and especially upper secondary schools, additional support at the beginning of the school year 04/05. The government expects this to lead to a better climate in schools, rapid assistance for children and young people and their parents, and relief of the burden on teaching staff, which will lead to benefits in terms of more efficient teaching. School social work concentrates on crisis intervention, prevention, integration and advice for children and adolescents, teaching staff and parents.

http://www.llv.li/amtsstellen/llv-sa-amtsgeschaefte-weitere_dienste/llv-sa-amtsgeschaefte-weitere_dienste-schulsozial-arbeit.htm

Further areas of action will be dealt with in more detail in the respective chapters in as far as they relate to reforms under discussion.

2. Reforms in key areas

- 2.1.1. Legal reforms: *Lehrerdienstgesetz* (Teachers' Employment Act), *Schulorganisationsverordnung* (School Organisation Order), *Stipendiengesetz* (Student Finance Act)

An important priority over the past few years was to reform laws in education such as the Teachers' Employment Act, the School Organisation Order and the Student Finance Act.

Law of 26 November 2003 on the employment of teachers (Teachers' Employment Act, LdG): This is a new up-to-date employment law for teachers at State schools in Liechtenstein. It contains a large number of improvements (such as a legal basis for job-sharing in nursery schools and primary schools) and/or clarifications (of, for example, teachers' working hours). Nursery school staff have also been made State employees, like teachers at primary schools. Teaching staff receive a job description which lists the main fields of activity and covers matters relating to working time. A comprehensive list of posts is kept, including part-time jobs which are being placed on the same footing as full-time posts. The powers of school heads and supervisors are underpinned more firmly. The municipal authorities' responsibilities for nursery and primary schools are set out more clearly than hitherto.

Order of 6 July 2004 on the organisation of State schools (School Organisation Order, SchulOV): This Order had to be completely overhauled following the amendment of the Schools Act of 26 November 2003. At the same time, the revision brought in extensive deregulation of school legislation, particularly the organisational provisions. The Order also consolidates the regulations for various types of schools in the form of a standard instrument. Various new regulating measures are introduced, governing enrolment, late school entry and school leaving, and school bodies are listed and their responsibilities described, with particular attention being focused on school management. Cooperation between schools and parents is rewritten. The *Schulamt* has new powers to bill defaulting parents for contributions to costs of up to CHF 250 (for example, for the services of interpreters, experts, etc.).

Act of 20 October 2004 on State educational assistance (Student Finance Act, StipG): State education support is a key element of a forward-looking education policy. The following reforms were implemented in this area: transparency and standardisation of State education support for general and vocational training pathways, introduction of educational assistance independent of parents' means for applicants older than 25, greater financial relief for parents whose children are in education, relief for single parents in modest financial circumstances, adjustment of maximum eligible costs to reflect current circumstances, an increase in efficiency and administration by continuous processing of applications and advance payment for applications which are filed correctly and in good time. The range of education aid available from the State was augmented, with the emphasis shifting from grants to loans. Combining grants and loans as the standard form of aid and placing a general time limit on it have spelled it out to recipients of grants that they are to assume more responsibility for their education.

2.1.2. Structural reforms: secondary education

As well as legal reforms, structural reforms were implemented. The governmental decision of 2000 shortened the academic secondary school by a year with effect from the academic year 2001/2002 to bring it into line with developments in neighbouring countries. At the same time, the government adopted a reform of the *Gymnasium*, with the hitherto rigid examination structure giving way to a variety of profiles. Similar reforms had been undertaken in the neighbouring countries too, which meant that Liechtenstein pupils could continue to have access to the higher education institutions there without taking an examination. Pupils were also given the opportunity to choose the subjects they wished to concentrate on, reflecting the new socio-political developments. In order to pursue these aims a new curriculum was developed.

Vocational training was also reformed at this time and the *Berufsmittelschule* (higher vocational school) was adapted to cater for modern requirements: it was called the *Berufsmittelschule* in line with international terminology, the final examination was called the *Berufsmaturität* (vocational school-leaving examination) and it was made clear that this was preparation for higher education, should be open to all persons having completed vocational training and should last at least four semesters. The restrictive criterion “whilst in employment” was dispensed with in the interests of opening up pathways to the *Berufsmaturität*.

2.1.3. Specific reforms: dealing with diversity

“Dealing with diversity” is an area of schools development which has moved further up the Liechtenstein agenda recently. Attention is being focused on and/or reforms carried out in various areas, such as organisational development (annual planning, evaluation, streaming), cooperation development (daily schedules, temporary exclusion from class, cooperation with parents), teaching development (aptitude groups within a class, extra remedial tuition, support for gifted children, assessment standards) and staff development (further training and counselling).

2.2. Reforms in Liechtenstein and the general European goals

For many years Liechtenstein has attached great importance to enhancing the quality and efficiency of its education system. The European goals also apply for Liechtenstein. The main features have already been mentioned above (dealing with diversity, structural change, etc.).

2.2.1. Quality assurance and development and the new Liechtenstein curriculum

A further area of basic reform over the past few years was the “Quality assurance and development” programme, which was launched in 1999. This programme was developed by inspectors with the support of the pedagogical unit at the *Schulamt*. Extensive experience and research in other countries were used as a basis for developing the programme and its instruments, and the process of developing the Liechtenstein curriculum, in which the question of quality was stressed repeatedly, was another key contributing factor. The “Quality assurance and development” programme is an attempt to create transparent links between aims, results, methods and use of resources in school education. The programme is broken down into three areas, which, however, cannot always be clearly separated from one another: teaching and the teacher, the school premises and schooling. For each area there are between four and seven instruments. Most of them are designed to be applied directly. Some instruments take the form of

guidelines for action. One instrument which stands out from the others in terms of both scale and importance is the curriculum. This has been an exemplary exercise in cooperation between teachers, parents and the authorities in defining responsibilities for teaching. The curriculum legally enshrines several instruments from the “Quality assurance and development programme”.

2.2.2. Access and support for gifted children

More open access to general and vocational education is a key item on the Liechtenstein political agenda. Some progress has already been made, such as simplifying the transition from one type of school to another at secondary level; Liechtenstein has a three-part school system and makes a distinction between *Oberschule* (lower secondary school), *Realschule* (intermediate secondary school) and *Gymnasium* (higher secondary school). Orders were amended to make it easier to transfer from one type to another.

Support for gifted children in Liechtenstein is part of the “dealing with diversity” area of activity and guidelines for this were published in February 2005. These state: “Solutions must be sought at all school levels and in the school environment to best support both children with learning difficulties and gifted children”. For some time now, a variety of measures to support pupils with learning difficulties have existed in Liechtenstein, but so far no explicit analysis has been made of or approach devised for supporting the gifted, which makes it necessary to form aptitude groups in classes and is, in turn, part of the “dealing with diversity” theme: “Support for the gifted at school must be seen in close connection with general school development”; it is, however, dependent on many factors at the same time which need to be tackled in a coordinated fashion. One practical measure is to expand schools where particularly gifted pupils can be supported in a host of different areas. A first example of this is the *Sportschule Liechtenstein* which was opened in 2004 and offers talented young sportspeople opportunities to combine school and sport more effectively.

2.2.3. Dependency and cooperation

It is precisely the fact that the country is so small that has made it aware of the need to open up its educational systems. As a result, the general structure of education in Liechtenstein draws heavily on the pedagogical traditions and education systems of the German-speaking countries, with Switzerland and Austria exerting the most direct influence: the types of school and the terminologies are similar to those in these countries. The size of the country also means that there is no fully-fledged educational system within its borders. However, Liechtenstein makes available funding for schools and educational institutions at home and abroad and places at schools and higher education institutions are secured abroad for Liechtenstein nationals by a series of contracts (cf. chapter 6.1.1.).

Since its accession to the EEA in 1995, Liechtenstein has been participating in the EU programmes Socrates, Leonardo da Vinci and Youth. The Socrates national agency is annexed to the *Schulamts* and the agency for Leonardo da Vinci is part of the *Amt für Berufsausbildung* (vocational training department). The national agency for the Youth programme is annexed to the *aha – Tipps und Infos für junge Leute* youth information unit. This unit has been in existence since 17 December 1999 to answer any questions young people have on a wide variety of matters. Young people are also intended to take advantage of the information on offer and draw encouragement and motivation from it to think about their own prospects. Considerable importance is attached to the regional and

international components. Youth institutions in Liechtenstein and the “aha” partners in Vorarlberg and Ravensburg (Germany) participate in a network.

3. Implementing comprehensible and comprehensive strategies for lifelong learning

Lifelong learning has been on the political agenda in Liechtenstein for some considerable time. Promotion of adult education is as much a part of this as developing further training opportunities and hence increasing equal opportunities in vocational training.

Adult education in Liechtenstein is broken down into general adult education and vocational further training. Both design their courses selectively with an eye to the need for lifelong learning in an economic and social environment which is changing ever faster. These are geared in particular to the European information society defined by the European Commission with the two focal points of a dynamic knowledge-based society and economy which will enable Europe’s economy to maintain its competitive edge by focusing increasingly on knowledge. What applies to Europe as a whole is particularly valid for a small State like Liechtenstein, whose *raison d’être* and resources lie mainly in its population’s know-how.

Eurydice: Structures of general and vocational training and adult education in Europe

3.1. Main tactics/measures

3.1.1. In general adult education

The public foundation *Erwachsenenbildung Liechtenstein* (Liechtenstein adult education) has been in existence since 1999 and, under the law of 1998, is an independent institution. Its activities are focused on the following main areas: funding and coordination of adult education in Liechtenstein, training, monitoring and quality assurance, and maintaining international contacts. It is run by the board and the management. The board is appointed by the government for a term of four years and is responsible for fulfilling the foundation’s aims and ensuring that the assets accruing to the foundation are managed and used in accordance with the legal provisions. The management is appointed by the government upon a request and recommendation from the board. The organisational, structural and financial arrangements for adult education are primarily based on the *Erwachsenenbildungsgesetz* (Adult Education Act: Act of 5 July 1979 on promotion of adult education). The foundation is intended to assume responsibility for coordinating, as an independent entity, adult education in Liechtenstein in such a way as to attain synergies. To this end, the various organisers of adult education courses must approach the foundation with their proposals for programmes and courses and apply for support. The foundation decides how the funds are to be distributed under the terms of the *Erwachsenenbildungsgesetz*. There is a detailed annual budget which the foundation is free to allocate in support of individual applications. The foundation can run programmes itself but in a role subordinate to non-State organisers. Its revenue is made up of a national annual contribution based on the national preliminary budget, which constitutes the lion’s share of its resources, voluntary contributions from municipalities and private persons, income from conducting adult education programmes and courses and other revenue such as donations or bequests.

3.1.2. In vocational further training

Providing for the best possible quality of vocational further training is seen as a priority and a constant challenge in tertiary education (the formal sector) and the world of business and work (the informal

sector) in Liechtenstein. In the formal sector, the courses on offer are constantly being expanded. The social partners also make a great effort in the informal sector to support their employees with attractive further training programmes and to target future employees. Lifelong learning is seen in both sectors as a constant feature throughout life at work.

Eurydice: Structures of general and vocational training and adult education in Europe

The *Berufsbildungsgesetz* (Vocational Training Act) of 7 July 1976 forms the legal framework for vocational further training and devotes a large section to it. Although this Act is not recent, it covers the main elements of vocational further training, including lifelong learning. The Act is currently being revised and is at the reporting stage.

The aim of vocational further training is described as follows: “Vocational further training is intended make it possible to acquire or enhance vocational knowledge and skills, adapt to progress or further one’s career”. In principle, every promoter is free to choose priorities, training programmes, teaching methods and performance targets. There is only a loose agreement among the individual institutions and private promoters. For State institutions, the government issues instructions on the organisation and curriculum. The *Amt für Berufsbildung* can also organise vocational further training courses itself with the government’s approval. The Act makes provision for the costs of the higher full and part-time vocational schools set up by the State and the State’s own training centres to be borne in full by the State. The government also grants subsidies to private and foreign organisations which are either approved higher part-time vocational schools or offer approved vocational further training, with the amount being determined by the government. Depending on the institution, subject-based, post-graduate or course certificates are issued. The *Hochschule Liechtenstein* offers opportunities for further training in the form of post-graduate and executive master studies, courses and seminars, lecture courses and lectures in addition to bachelor and master degree courses in architecture and economic sciences. In the post-graduate courses, graduates of higher education institutions can complete three-semester further training courses whilst in employment. The *Universität für Humanwissenschaften* (University for Human Sciences) also offers further training in the form of post-graduate courses.

3.1.3. In school education

Liechtenstein is aware of the crucial importance of promoting lifelong learning, particularly for the youngest generation which is currently undergoing education at school.

School imparts basic general education and fosters readiness for lifelong learning. It has the task both to strengthen young people in their individual characteristics and to help them to become capable members of society. The school shares this task with the family and other institutions.

Curriculum for Liechtenstein (www.schulen.li/lehrplan)

The new Liechtenstein curriculum, which covers nursery, primary and secondary schools, is designed to cover all stages of school education and uses the same template for all of them. The aims also complement one another and have the same foundations. One of the foundations are the key skills which it defines. An extract from “Key skills” in the chapter “Basic principles” reads as follows:

Freedom and responsibility: school supports children and young people in developing awareness of rules and freedom. It thereby helps them both to become aware of freedom and to live responsibly *vis-à-vis* the community. It creates conditions in which children and young people take part in shaping their own lives responsibly and enables them thereby to experience living together in a democracy.

Willingness to work and leisure: schools offer children and young people a place to discover that work, *joie de vivre*, creativity, leisure and thought are important values which mutually influence one another. Schools promote the interaction between concentrated and relaxed learning..

Independence and ability to cooperate: as places of social learning, schools create an atmosphere of goodwill in which children's and young people's thoughts, feelings and actions are taken seriously. Children and young people therefore acquire the ability to act independently, build relationships and work with others.

Ability to adopt a course of action and a critical stance: children and young people learn to acquire and process information. By looking at circumstances and events from various points of view, they practise assessment and judgement. They learn to appraise possible courses of action, take responsible decisions and act accordingly. They acquire the ability to exercise appropriate criticism and to accept justified criticism themselves.

Ability to deal with conflicts and enter into dialogue: children and young people develop the ability to see their own and other people's interests and needs and to formulate them. They learn to talk to people, to resolve conflicts by means of argumentation without detriment to human dignity and to deal with people. This enables them to integrate into and help shape society.

In addition to the key skills, networking is a constant theme throughout the entire curriculum. The chapter "Networking" contains the following comments under "Key qualifications":

Skills: learning in and on networked structures helps to acquire key qualifications, which are those skills which, together with academic knowledge and ability, form the basis for coping with life and are the prerequisite for lifelong learning. The key qualifications which the curriculum seeks to inculcate can be broken down into the following five areas: networked thinking, recognising subjectivity, practising solidarity, taking responsibility and developing courage and optimism. These form the basis for implementing the teaching approach formulated in the basic principles.

As a result of the *Gymnasium* (higher secondary school) reform in 2001, the curricula for the basic and optional subjects for upper secondary education had to be rewritten. The curriculum for the first two stages of the *Liechtenstein Gymnasium* is identical to the curriculum of the other types of school in lower and intermediate secondary education. The curriculum for level 3 (which is identical, with slight variations) to level 7 of the *Gymnasium* is intended to develop this curriculum in the same direction and is also learning-target based. The key aims of the new curriculum are: improving transparency, making it easier to transfer from one type of school to another, facilitating networking of individual disciplines, emphasis on holistic learning, easing the transition from one level to another, safeguarding continuity in secondary education. Under the heading of "Educational aims", the curriculum for the Liechtenstein *Gymnasium* reads as follows:

The aim of the *Gymnasium* is to impart basic knowledge to pupils with a view to lifelong learning and to foster open-mindedness and the ability to form independent judgements.

Here too, the focus is on imparting key skills. These are explained in more detail under "Skills required for higher education" and are set out below:

Balanced training of the intellect, willpower, creative talents and physical abilities, secure possession of basic knowledge and the ability to acquire new knowledge independently, capacity for independent, critical and networked thought, the ability to express oneself clearly and accurately in German and at least two foreign languages and to know and appreciate the wealth and singularity of a culture associated with a language, the ability to work in a team, willingness to take responsibility for oneself, one's fellow human beings, society and nature, and the social skills and political maturity needed to make a contribution to cooperation in our society.

3.1.4. ICT to support lifelong learning

In Liechtenstein, many information and communication technology (ICT) projects have already been carried out in schools. At the end of the '90s, Liechtenstein was compelled to bring ICT developments in individual schools, which had hitherto been uncoordinated, under a single banner and to restructure them. In autumn 1999, the *Schulamts* finally presented the political authorities with an innovative package - based on the foundations of hardware, support and further training which are still valid today - asking them to support the proposed ICT offensive. The government and parliament approved the report in early 2000 and thereby authorised an annual increase in the national education budget of approximately 1.3% for expenditure on ICT in compulsory education. By 2004, some 1 500 computers used in the school system were networked, which means that around 3.6 pupils share a single PC. The aim is to increase the use of computer-aided teaching at all school levels and to promote critical processing of the information acquired in this way. The ideas behind these investments are described as follows:

Schools have tasks such as encouraging willingness to learn throughout one's entire life and promoting individual learning skills accordingly. Working methods and learning techniques must therefore be acquired and practised that enable people to obtain information themselves, assess it and evaluate it and to interpret and cope with daily situations and problems. Teaching with computers requires new forms of learning to be used. Self-driven learning and project-based learning are assuming increasing importance and are effectively supported by the use of computers. Teaching staff are being given suitable further training. In the interests of equal opportunities, also with regard to media competence, it is also the school's task to strike a balance between social and gender-specific differences. Pupils who have modern media facilities at home should not have an advantage over others. By opening up schools to the outside, intercultural learning is promoted by cooperation and communication with other institutions. Access to suitable interactive learning materials and to the Internet is guaranteed.

4. Reform of the higher education system

Since 1992 (the date of the entry into force of the *Gesetz über Fachhochschulen, Hochschul- und Forschungsinstitute* (Act on Technical Colleges, Higher Education Institutes and Research Institutes) of 25 November 1992), Liechtenstein has formally had a tertiary education sector. However, the vast majority of school-leavers from Liechtenstein go to higher education outside the country. Access to the higher education institutions of Switzerland and Austria is secured by agreement on the mutual recognition of school-leaving certificates. A further agreement guarantees access to the University of Tübingen in Baden-Württemberg (cf. Chapter 6.1.1).

4.1. Main aims/*Hochschule Liechtenstein* (Liechtenstein University)

Implementation of the Bologna targets is well advanced in Liechtenstein and is to be continued steadily. In order to place the developments on a legal footing, a new Act was adopted in 2004 and published in 2005: the *Hochschulgesetz* (University Act). This forms the basis for the tertiary education sector and governs approval, operation and State supervision of higher education institutions. It establishes the Bachelor/Master system and the ECTS credit system in law and regulates matters relating to approval and recognition of higher education institutions and aspects of quality assurance and development. The most important tertiary institution in Liechtenstein is the *Hochschule*

Liechtenstein. It is a public foundation which enables it to fulfil its mission independently and flexibly. The curricula are based on society's needs and industry's requirements. The priorities are Bachelor and Master degree courses, further training, applied research and development and technology and knowledge transfer. There are some 700 students engaged in Bachelor and Master, Executive Master and postgraduate studies and university courses. The curricula are interdisciplinary and are geared to skills usable at international level.

4.1.1. Structure and organisation of qualifications

Since 2003/2004, studies at the *Hochschule Liechtenstein* have been exclusively on the basis of the Bachelor/Master system in accordance with the Bologna Declaration. Since the introduction of the new Act in 2005, all higher education institutions are legally obliged to tailor their courses to the three-tier Bachelor, Master and Doctorate system.

The *Hochschule Liechtenstein* introduced the ECTS in 1997. The ECTS Course Catalogue contains all the information needed to prepare for studying at the University. The credits obtained are entered in the diploma supplement. The *Hochschule Liechtenstein* and the IAP (*Internationale Akademie für Philosophie* - International Academy for Philosophy) were amongst the first higher education institutions in Europe to introduce the diploma supplement back in 1999. Under the new Act, both ECTS and the diploma supplement are mandatory.

4.1.2. Quality assurance at institutional and systemic level

Article 38 HSG (University Act): *Quality management* 1) Higher education institutions shall ensure and constantly upgrade the quality of their research and teaching 2) The quality of the higher education institution is to be assessed at least every six years. The costs are to be borne by the higher education institutions.

A higher education institution first requires provisional approval of the government before it can operate. This is linked to strict criteria: presentation of a sustainable plan for the building and running of the institution and corresponding evidence of funding, together with other requirements. This is one of the new Act's major innovations.

Peer reviews are to be carried out regularly in order to verify that the above requirements are met and to ensure the quality of higher education institutions in the long term. The peer groups are made up of experts and are intended to make a considerable contribution to quality assurance and development. Provision is also made for private foreign quality assurance agencies to be involved and regular involvement of students in evaluating the teaching curriculum and the quality of teaching is an integral part of quality assurance. The higher education institutions are obliged to produce annual quality management reports. Supervision of higher education institutions is a matter for the government and is carried out by the *Schulamt*. If shortcomings in the running of a higher education institution are ascertained, the government sets a deadline for the institution to remedy them.

In 1998, the *Hochschule Liechtenstein* developed a process-oriented system for further quality development and assurance – of which the “continuous upgrading process” is a key element -in keeping with legal requirements and international standards. In October 1998, the *Liechtensteinische Gesellschaft für Qualitätssicherungs-Zertifikate AG* (LQS Liechtenstein Quality Insurance Certification Company) certified the management system in accordance with ISO 9001. All employees in teaching, research and

administration are obliged to comply with defined work processes and to take an active part in shaping the improvement process. There are various procedures for students and teaching staff to assess teaching and degree courses and the results provide an important basis for further development and improvement. In accordance with the Studies Order of 1 March 2004 (Article 15), all students are obliged to take part in measures which contribute to promoting and assuring quality. Teaching and modules are assessed by the teaching staff by means of oral and written surveys. The *Stabstelle Hochschulpädagogik* (unit for teaching methods in higher education) establishes the principles of the teaching method together with the rectorate and the key basic information is presented in teaching guidelines.

4.1.3. Apprenticeships and tertiary education

In Liechtenstein, the education system is traditionally very broadly based. This means that young people can shape their own education pathways in many different ways and in accordance with their own needs. Many more people in Liechtenstein than in other countries complete an apprenticeship after the lower secondary level (ISCED 2):

Although the trend towards education at a *Gymnasium* has hardened considerably recently, around 70% of the 350 to 400 school leavers a year start a 3- or 4-year apprenticeship.

<http://www.llv.li/amtstellen/llv-sa-amtsgeschaefte-schularten/llv-sa-amtsgeschaefte-schularten-berufsschulen.htm>

In Liechtenstein, educational pathways such as the *Berufsmatura* (final examination at secondary vocational schools) have opened up more and more. This qualification can be obtained whilst in employment or during or after an apprenticeship. The *Hochschule Liechtenstein* and other institutions have adapted to the situation: employees with practical experience but no *Matura* (university-entrance level examination) are also accepted for various non-academic courses. This also makes for more equal opportunities.

4.1.4. Higher education institutions and partnerships/cooperation

Technology and knowledge transfer: Applied research and development and technology and knowledge transfer are amongst the legal responsibilities of the *Hochschule Liechtenstein* and are closely connected with and supplement its teaching duties. State-of-the-art and problem-solving skills are imparted by working on practical projects. Some 20 000 hours a year are devoted to dealing with projects and commissions from enterprises and there is also demand for the university's research and development capacity in industry, especially small and medium-sized enterprises. This work is done by the institutes and associated institutes.

There are four institutes which are active in the field of technology and knowledge transfer: architecture and regional planning, entrepreneurship, financial services and industrial computer science. At the associated institutions (ICQM - Institute for Compliance and Quality Management, KOFL - Konjunkturforschungsstelle Liechtenstein (Liechtenstein Short-term Economic Research Unit), KMU Zentrum), it is mainly issues specific to Liechtenstein that are researched. The institutes and associated institutes with their research mission, their commitment to further training, their counselling activities and their other services form an important bridge between the University and practice, and provide key impulses for teaching with their diverse activities.

5. Vocational training

5.1. Main policies/measures

The vocational training system in Liechtenstein is based on the dual-training system, which provides educational and practical training in parallel. The current *Berufsbildungsgesetz* (Vocational Education Act) of 7 July 1976 is in the process of being amended. There are many reasons for this, on the one hand the landscape of education has changed, on the other hand lifelong learning policy requires a more flexible education system. The new *Berufsbildungsgesetz* will take account of the increased requirements to meet the needs of the market.

5.1.1. Implementation at national level of the tools developed under the Copenhagen process

At national level, matters have reached the negotiation stage. For the first round the parties (stakeholders) will be: the *Amt für Volkswirtschaft* (Economic Affairs Department), *Amt für Berufsbildung* (Vocational Training Department) and *Berufsberatungsstelle* (Vocational Guidance Centre). The *EUROPASS-Berufsbildung* (Europass training) was launched in 2001. Since then, almost 150 persons have received a *Europass-Training* in Liechtenstein which is – in relation to the country's size – an excellent achievement. The National Contact Point (NEC) for the *Europass* (2005) is in the *Amt für Berufsbildung*. The website www.europass.li links the user to the transparency instrument of all five *Europass* documents.

5.1.2. The needs of low-skilled and disadvantaged groups

Due to the individual counselling system, the proportion of persons who are not able to start an upper secondary school or an apprenticeship is very low. In addition, the *Amt für Berufsbildung* offers and finances special pre-apprenticeship courses, e.g. a *Sozialjahr* (career-orientation year combining social work and school) or training courses in a household for young low-skilled or disadvantaged persons (foreign-language speakers, such as refugees). Moreover, special vocational education pre-classes are being introduced for immigrants to familiarise themselves with the German language.

The promotion of equal opportunities and the elimination of any form of discrimination, racism and xenophobia are emphasised.

5.1.3. The image and attractiveness of the vocational pathway

The government of Liechtenstein collaborates closely with the government of Switzerland. VET is financed by the State, whereas the *Amt für Berufsbildung* is in charge of implementation of the *Berufsbildungsgesetz*. A major initiative to raise the status of VET is the possibility to attend an additional training course (*Berufsmatura*), which provides access to tertiary education. The level of this additional training course is 3A under the ISCED Code if it is attended during the apprenticeship or 4A if it is attended after the apprenticeship.

The *Berufsberatungsstelle* provides a wide range of activities to improve the attractiveness of VET. First, all secondary school pupils receive career guidance lessons to actively reflect on vocational choices. In addition, the *Berufsberatungsstelle* offers

individual counselling for pupils (up to 16 years old) and all persons involved in the process of selection for VET. The VET committee meets on a regular basis to evaluate the current situation and to conduct projects to analyse specific problems (such as the situation of immigrants in the VET system).

The Chamber of Trade, which represents SMEs in Liechtenstein, has set up a working group dealing with the topic “How can we improve the attractiveness of apprenticeships in industry?” The working group, composed of trainers, has been working on this theme for the past year and will continue this project. In parallel, the Chamber of Commerce has launched a working group, called AGIL, to promote attractive training places in various industrial companies in Liechtenstein. Furthermore, the Association of Liechtenstein Banks has implemented a successful cross-border framework to teach apprentices specific subjects in banking.

5.1.7. Specific learning needs and the changing role of vocational teachers and trainers

Trainers in enterprises are experienced professionals with the ability to deal with young persons. Only if they possess this combination will they acquire a good reputation. In short, persons who are encouraged, motivated and able to deal with young people will become good trainers or teachers, the others will fail. The dual system supports the selection process of persons who can cope with the challenges. It is the job of the HRM (human resource) department of the enterprises to find out who will fulfil these requirements.

Liechtenstein does not have any VET schools. All VET schools are located in Switzerland and therefore the teaching and learning methods and contents for VET are based on the VET schools in Switzerland.

A monitoring programme helps to identify further learning programmes and courses for teachers to continuously upgrade their capabilities and knowledge in the fields of teaching, social skills and technology. In general, the monitoring programme is based on a feedback system. It is worth pointing out that this feedback is from the teachers’ as well as from the apprentices’ point of view. Furthermore, the feedback for each teacher (from several classes) is compared with that for all the other teachers. This evaluation generates an excellent overview of the teachers’ strengths, weaknesses and opportunities and also shows where further training is required. The vocational schools are in charge of identifying training needs, whereas the *Schweizerisches Institut für Berufspädagogik* (<http://www2.educa.ch>) is responsible for the learning programmes.

5.1.8. Early identification of skills requirements and planning of VET provision

Liechtenstein is in an unusual position with regard to its employment objectives. The economy provides approximately 29 000 jobs for a population of 34 000. The current unemployment rate fluctuates between 2 and 2.5%. The number of commuters from the neighbouring countries is around 13 000.

However, the high pressure within the labour market is the most important indicator. Globalisation makes it possible for companies to employ the most suitable person for each task. Market requirements and, even better, future market requirements have therefore to be recognised to convert these requirements into training modules. Consequently, the training modules have to be adapted constantly and at ever shorter intervals. This costs money and will challenge the balance between the added value of VET and the costs.

5.2. Obstacles and areas for further progress

The speed of the transformation is slow. VET has become a very complex issue which requires the various stakeholders to be directly involved in the decision-making process.

6. The European dimension in the education system

Liechtenstein participates to an extent commensurate with its size in the activities under the Socrates programme such as Erasmus, Comenius, Grundtvig, Arion and Eurydice. This participation opens up unprecedented opportunities for European cooperation for those responsible for education in Liechtenstein. Language assistant exchanges, student and teaching staff mobility, the school partnerships founded under Comenius and the further training courses for European teaching staff have now become an integral and indispensable component of cross-border cooperation with the EU/EEA States and the accession countries.

http://www.liechtenstein.li/liechtenstein_main_sites/portal_fuerstentum_liechtenstein/fl-buw-bildung_wissenschaft/fl-buw-allgemeineb/fl-buw-allgemeineb-sokrates.htm

6.1. The need for mobility in a small country

The size of the country means that there is no State fully-fledged educational system within its borders. However, Liechtenstein makes available funding for private schools and educational institutions at home and abroad and places in schools and higher education institutions abroad are secured for Liechtenstein nationals by a series of contracts.

Eurydice: Structures of general and vocational training and adult education in Europe

6.1.1. Mobility in the higher education system

The Council of Europe's Conventions on Higher Education came into force on 23 June 1991 for Liechtenstein. These "equivalence agreements" are recommendations and are not legally binding. They are intended to create the conditions for as much mobility as possible in higher education in Europe. On 22 July 1994 Liechtenstein also became a signatory to the UNESCO Convention on the recognition of higher education studies, university diplomas and academic degrees in the countries of Europe of 21 December 1979. The Council of Europe and UNESCO conventions have been consolidated to form a joint convention taking into account developments in higher education since the '60s. This new joint agreement — which was adopted on 11 April 1997 in Lisbon — entered into force on 1 April 2000 for Liechtenstein.

Students from Liechtenstein are guaranteed free access to Swiss universities and equality with Swiss students. In 1981, Liechtenstein became a signatory to the Intercantonal Agreement on higher education contributions for the first time. Since 1 June 1997, these rights are enshrined in the Intercantonal University Agreement, which also regulates the funding of entry to higher education by contributions which are graded according to faculty. The Liechtenstein school-leaving certificate has been recognised by Switzerland since 1976. After Switzerland had integrated various training courses in the tertiary sector (such as technical, economic and pedagogical studies) into higher education as specialised college studies, access to these institutions was reformed by the Intercantonal Agreement on Specialised Colleges of Higher Education and is now treated in the same way as university access. Liechtenstein became a signatory to this agreement in summer 1999. The agreement places students from Liechtenstein on the same footing as those from Switzerland. Since the courses of the *Fachhochschule Liechtenstein* (Liechtenstein

Specialised College of Higher Education) form part of the agreement, the *Fachhochschule Liechtenstein* is open to the Swiss education market: for students from Switzerland the cantons of residence can levy contributions to operating costs. In order for students to have access to the many non-university courses in Switzerland in the tertiary sector, Liechtenstein also became a signatory to the Intercantonal Technical College Agreement in summer 1999.

Access to Austrian universities is also guaranteed. In the agreement and additional agreement on the equivalence of school-leaving certificates (1977 and 1983 respectively), access to Austrian universities for pupils completing their education at the Liechtenstein *Gymnasium* was regulated and the Liechtenstein school-leaving certificate was recognised. On the basis of these agreements, Liechtenstein students are on the same footing as Austrian students and therefore have free access to universities. On the basis of the Agreement on further equivalence of studies, exams and academic degrees of 1991, students who complete their studies at the *Fachhochschule Liechtenstein* and the *Fachhochschule für Technik Buchs* (Buchs Technical College of Higher Education) and present their diploma are credited with six of the study semesters for the duration of a standard course in the corresponding faculty at an Austrian technical college and the examinations they have passed there are recognised as the initial diploma examination. In the 1990 Agreement on the equivalence of studies, examinations and academic degrees, studies, examinations and academic degrees in the Faculty of Philosophy completed at the International Academy for Philosophy were credited in full at Austrian universities. As a result of the Agreement on equivalence and recognition for middle and higher education, which came into force on 1 December 1997, the relations between Austria and Liechtenstein in this area have been reformed. All the provisions in force previously are consolidated and supplemented, taking into account the current developments in higher education in both States. The Agreement guarantees full equivalence of school-leaving certificates, full mutual recognition in specialised college and university education, crediting of studies and use of academic titles.

The 1990 Agreement on the post-graduate training of Liechtenstein doctors in Austria gives Liechtenstein doctors the right to train as general practitioners or specialists in Austria. The conditions are that the persons are of legal age, have graduated from an Austrian university in general medicine and are entered in the doctors' register.

In 1988, the government concluded an agreement on scientific cooperation with and access to the Eberhard-Karls University in Tübingen. This means that the school-leaving certificate obtained from the higher secondary school in Liechtenstein is recognised by the Eberhard-Karls University and applicants from Liechtenstein have the same status as those from Baden-Württemberg. By the same token, degrees obtained at the Eberhard-Karls University are recognised in Liechtenstein.

The *Hochschule Liechtenstein* has also been, and still is, involved in the European education programmes COMETT, Socrates-[Erasmus](#), [Leonardo da Vinci](#) and the 6th Framework Programme for Research and Technological Development since Liechtenstein became a member of the EFTA and EEA. Progress is being sustained in setting up and expanding attractive student exchange programmes, developing and operating Erasmus intensive programmes with partner universities and steadily implementing the [European Credit Transfer System \(ECTS\)](#). The *Hochschule Liechtenstein* also has a worldwide network of selected partner universities and its international activities are constantly being expanded through joint projects, student exchanges and exchanges of lecturers,.

6.1.2. Mobility in primary and secondary schools

Pupils in the upper level of the *Gymnasium* can go to equivalent schools in other countries for up to a year, with the time being credited in full as part of national compulsory education. Pupils from other countries also attend the Liechtenstein *Gymnasium*. There are also pupil exchanges under the Comenius and Erasmus programmes. The curriculum of the Liechtenstein *Gymnasium* states:

Upper level, basic subject English: language courses abroad, pupil-exchange programmes and European education projects are of prime importance for achieving the learning targets for this subject. These activities are necessary to supplement English classwork and are to be promoted and supported by the teaching staff as far as possible.

Under Comenius 1 activities, schools can also apply for support for a Comenius language assistant. The aim is to enhance the pupils' knowledge of languages and motivation to learn them and to spark interest in the language assistant's country and culture. The Liechtenstein *Gymnasium* also cooperates with teacher training colleges in Norwich, UK, and Neuchâtel, Switzerland to exchange language assistants and works with various private promoters for pupil exchanges.

6.1.3. Teachers and lecturers

Under the legal arrangements for intensive further training of teaching staff, they can go to other education institutions for six months. The qualifications they obtain are recognised.

Higher education teaching staff from other countries are working full- or part-time at the three higher education institutions in the country, the *Hochschule Liechtenstein*, the *Internationale Akademie für Philosophie* (International Academy for Philosophy) and the *Universität für Humanwissenschaften* (University for Human Sciences).

6.1.4. Mobility and vocational training

As a member of the EEA, Liechtenstein takes part in the EU vocational training programmes. These are primarily exchange programmes for young workers after completion of their basic vocational training (MOJA), apprentices (Xchange), students (FAMOUS) and people responsible for training (CEDEFOP study visits).

http://www.liechtenstein.li/liechtenstein_main_sites/portal_fuerstentum_liechtenstein/fl-buw-bildung_wissenschaft/fl-buw-berufliche_bildung/fl-buw-berufliche_bildung-eu_programme.htm

Liechtenstein is a member of the intercantal technical school agreement FSV. This governs intercantal access, status of students as well as the amount of money the residential cantons of the students (or Liechtenstein) pay the sponsoring agencies of the technical colleges in the tertiary sector. The *Amt für Berufsbildung* therefore bears the costs for students under certain defined conditions.

Vocational training in Liechtenstein has for decades been based on the dual or triple system during the basic training stage (apprenticeship). Dual training is training at work and at a vocational school and triple training is when the latter is supplemented by introductory courses. Although the trend towards education at a *Gymnasium* has increased considerably in recent times, around 70% of school-leavers a year start a three- or four-year apprenticeship. In addition to the practical training in the teaching establishment, the apprentice attends a vocational school one or two days a week in order to acquire the necessary theoretical knowledge. These vocational schools are exclusively

in the adjoining areas of Switzerland. Contracts with these schools were concluded in order to secure access.

6.2. The European dimension in education

The European and international thrust of education and training has always been important for Liechtenstein because of its size. So far, that has been seen most clearly in the cooperation with the adjoining States. Since its accession to the Council of Europe in 1978 and the European Economic Area in 1995 this natural development has been pursued more deliberately and more intensively and is now reflected at various levels of education from school education and vocational training right through to adult education.

6.2.1. The European dimension in the Liechtenstein curricula

The European dimension is a feature of the Liechtenstein curriculum, with this and the international dimension of education being given considerable space in a chapter on networking. Five learning areas – mutual dependence, images and perception, diversity and justice, conflicts and solving them, change and the future – reflect the preoccupation with networking and global and intercultural learning at practical level. As the learning areas overlap the subject areas, they enable European and international aspects to be brought into sharp focus when subjects are being chosen for teaching syllabuses.

Several exemplary extracts on learning targets for various levels and subjects further confirm this:

History and culture, basic aims: to become aware of one's own origins and to get to know those of one's classmates (ISCED 1). To learn about the origins and culture of various population groups in Liechtenstein (ISCED 1). To acquire a spatial overview of Europe (ISCED 2). A spatial and cultural/geographical overview of our two neighbouring States, Switzerland and Austria (ISCED 2). Learning about typical landscapes of Europe and insights into the interplay of landscape factors (ISCED 2).

Liechtenstein *Gymnasium*, upper level, basic subject history: change in southern and eastern Europe, the route to German unification, European integration policy, the origins and development of the most important international organisations, and the relations between Liechtenstein and these organisations. Subjects to be learned: UNO, EU, EFTA, Council of Europe, human rights, the history of Europe: from Greek sagas to the European Union.

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Responsible for Chapter 5:
Stefan Sohler, Leonardo-Büro Liechtenstein (National Agency), *Amt für Berufsbildung*

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Gesetz vom 5. Juli 1979 über die Förderung der Erwachsenenbildung

(Adult Education Act)

Gesetz vom 18. Dezember 1998 über die Stiftung "Erwachsenenbildung Liechtenstein" (EbLG)

(Act on the Liechtenstein Adult Education Foundation)

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