

ALTERNATIVE APPROACHES TO FINANCING LIFELONG LEARNING

COUNTRY REPORT

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Alternative Approaches to Financing Lifelong Learning

Country Report Austria

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ABSTRACT

In the Working Agreements since the beginning of the 1990s, the coalition parties stress the increasing importance of education and training. Their concept of "lifelong learning" is referred to vocational and further education and training, whereas social and cultural aspects are secondary. The agreements contain a lot of measures to improve the supply of education and training programmes, the access to them and the financing arrangements. The social partners are incorporated in all government decisions on educational policy.

The participation rate in education and training has increased in all sectors over the last ten years, the sex-specific difference in regard to the level of participation has disappeared, an increase of the share of higher vocational education can be observed. In the field of further education and training, the participation rates differ considerably between the employment states. For all that, there are relatively wide gaps in the participation in Austria to fulfill the concept of lifelong learning. An additional amount of 30 billion ATS (this is about 40 per cent of the present expenses for education and training) are necessary to close those gaps.

Over the last ten years, the evolution of the expenses per participant differs between the diverse sectors of education and training as well as inside the individual sectors. On the secondary level II, the most important cost-increasing factors are the ascent in the salary structure (due to the rise of the average age of the teachers), the decrease in the number of pupils per class and the evolution of the standard wages for teachers. In the university sector, the expenses per student have not changed over the last ten years. The increase of the personell costs and the investments in equipment has been compensated by an increase in the number of students. In the field of adult education and training, the evolution in costs is determined by the pressure to diversify the supply of courses (decrease in the number of participants per course), by an intensification of the effort to develop course programmes, didactics and marketing as well as by a trend to employ professionalists.

In the field of the public education system, the government intends to influence the evolution in costs with the help of rationalization measures, austerity measures, and by improving the adaption between supply and demand of courses. New and innovative teaching technologies (computer-assisted methods, peer-group tutoring, telelearning) do not have importance as a means of reducing costs.

The majority of education and training activities on the upper secondary level as well as in the tertiary education sector is provided by public institutions. The costs for general and vocational education and training are borne by the companies and the employees. The federal, Laender and local authorities subsidize the non-profit organisations of adult education and training. The federal government runs public schools for working people and an Institute of Adult Education and Training. The Public Employment Service finances re-training programmes for unemployed.

As examples of innovative forms of financing, "Fachhochschul"-courses and Work Foundations were analysed. As for "Fachhochschule"-courses, the government restricts its subsidies to norm costs per study place on the basis of a development plan. The high success rates of the work foundations are rooted in the involvement of a great number of actors (companies, employees, Laender governments, local authorities, Public Employment Service and others) who give support on a financial, organisational and motivational level.

Chapter 1:

Introduction

This chapter deals with the political, economic, as well as social and cultural contexts in which lifelong learning is situated in Austria. The analysis is based on Working and Coalition Agreements of the coalition parties¹, two studies carried out by the Advisory Council for Economic and Social Issues², a programme elaborated by the Industrialists' Association³, the Federal Chamber of Labour, the Austrian Trade Unions' Federation as well as the passages of the National Action Plan for Employment regarding education and training measures.

1.1. Political context

(i) Definition of lifelong learning

In the Working and Coalition Agreements of the coalition parties, issues of educational policy are of major importance. Education is seen as a primary field of economic, democratic and cultural development. In the Working Agreements, the concept of "lifelong learning" refers to activities of education and training carried out by working persons and is put into the context of an expansion of the education sector, by means of which the workforce's qualifications are intended to be improved⁴.

In accordance with this definition of lifelong learning, the report in hand concentrates on the secondary level II, the tertiary sector and the area of adult education and training. In this way the connection of education and training and lifelong learning with the employment system is borne in mind.

(ii) Political commitments in connection with lifelong learning

The Working Agreements do not set any quantitative targets or actual priorities in the framework of an expansion of lifelong learning, however, as far as the previous years are concerned, the legal reforms carried out and the administrative measures taken indicate the main points of interest. For the future, however, no conclusions are possible. The Working Agreements also do not contain any fundamental reflections on the issue of the distribution of costs and benefits and of the orientation of financing towards this distribution. Only in the Working Agreement 1994 it is mentioned that an "adequate combination of public and private fund-raising"⁵ for the further expansion of the education system can already be found. This passage refers to the financing of non-university institutions in higher education, the so-called

¹ cf. Arbeitsübereinkommen 1990 and 1994, Koalitionsübereinkommen 1996

² cf. Beirat für Wirtschafts- und Sozialfragen 1989 and 1997

³ cf. Volkswirtschaftliche Gesellschaft/Industriellenvereinigung 1997

⁴ cf. in particular Arbeitsübereinkommen 1990, p. 65, and 1994, p. 26

⁵ Arbeitsübereinkommen 1994, p. 44

”Fachhochschul”-sector (i.e. university level study programmes of at least three years duration with vocational-technical orientation), in which the federal government provides financing services in accordance with a standard share in the costs⁶.

(iii) Main goals and policy priorities

In the Working and Coalition Agreements of the coalition parties, the following targets are listed in connection with lifelong learning, whose framework conditions are to be safeguarded by means of a comprehensive reform of the education system:

- Ø increase of the offers for the workforce, in particular by establishing ”Fachhochschul”-courses for people under employment with a focus on special topics,
- Ø equal status of adult education and training in the education system,
- Ø expansion and new forms of co-operation between public and private institutions,
- Ø increase of access chances for those persons who have had to suffer disadvantages so far and of the permeability between the dual system and the other education and training tracks,
- Ø incorporation of the right to continuing education and training times of working people while maintaining at the same time their employment contracts, but without the right to a continuation of salary payments,
- Ø improvements of the apprenticeship training by means of the introduction of "group trades", the intensified use of interplant training workshops, the promotion of foreign language instruction, and the support of creativity and co-operation in dual training.

In the Working Agreement 1990, priority was given in the budget to the sector of universities and related institutions; in the 1990s, expenses for "science and research"⁷ were heavily increased, their share in the GDP rose from 1.0 to 1.2 per cent between 1990 and 1996, their share in the federal budget increased from 3.2 to 3.9 per cent⁸. The reasons for these priorities are, on the one hand, the low rate of university graduates in Austria in comparison to other industrialised countries and, on the other, the strong increase of university student numbers, which has led to problems with regard to equipment and support.

For the other fields of the education system, the issue of financing in the Working and Coalition Agreements 1990, 1994, and 1996 is, in the main, concentrated on a more efficient use of existing

⁶ This, however, has not led to any considerable financing by private people so far. Even though the federal government pays for only 54 per cent of the expenses for Fachhochschule study courses, the rest - with the exception of two per cent, which come from the economy - is paid by the Laender governments (36 %) and local authorities (8 %). Cf. Pechar 1996, p. 60 and chapter 3.2.

⁷ Chapter 14 of the federal budget

⁸ cf. BMWVK 1996, Volume 2, p. 15

resources and on saving measures; the latter mainly since the "Strukturanpassungsgesetz" (Structural Adjustment Act) 1996. It cannot be deduced from the Working and Coalition Agreements in how far rationalisation and saving measures are intended to lead to an expansion of the educational offers in the sense of an improvement of lifelong learning, or merely a restriction and a reduction of the increase of educational expenses. Some of the mentioned measures, which will briefly be discussed in the following, have already been put into practice or are, at present, in the process of being put into practice⁹.

Rationalisation measures and increase of efficiency¹⁰

One means of rationalisation, which is intended to lead to a better use of resources in all fields of the public education sector, is the deregulation and decentralisation of the decision competencies (autonomisation). Lesson quotas and other resources which schools administer themselves and can use according to their own ideas are to be allocated to them according to general criteria (mainly student numbers). In this way they can set priorities in their teaching offers and develop their own profiles. By granting them a partial legal capacity they are intended to appear as independent providers and to be able to make their own profits. In the university sector, all relevant laws (Organisation Act, Study Act, Service Act) are supposed to shift decisions to the universities - in the sense of a deregulation and autonomisation - and guarantee a better and faster adaptation to changing needs.

In the school sector, an increase of the partitioning numbers for parallel instruction and an increase of achievement groups in the curricula is intended to make resources available for other uses.

In the university sector, achievement examinations in the first phase of the study courses, the introduction of time limits for employment contracts under public law (so-called "professors with contracts for a limited period"), and priorities in the offers of study fields at Austrian universities are taken into consideration as rationalisation measures.

Last but not least, the co-operation between the public education sector and the adult education and training organisations is intended to be improved and strengthened. The mutual recognition of courses and examinations is to facilitate permeability and transfer possibilities; the joint use of rooms is intended to increase the extent of utilisation of school buildings and to lead to the creation of regional education centres.

⁹ cf. a more detailed discussion of this issue in Section 3

¹⁰ On the following remarks cf. Arbeitsübereinkommen 1990, p. 64-68; Arbeitsübereinkommen 1994, p. 36-37 and 43-44; Koalitionsübereinkommen 1996, p. 14-16

Saving measures

Saving measures for the school sector which are mentioned in the Working Agreements of the coalition parties are: a reduction of lessons according to the curricula; an increase of the teaching load for teachers; and a new schedule for the school teachers' continuing education measures, namely in school-free times. Analogue measures have been taken also for the university sector: a decreasing number of lessons required for individual study courses; a reduction of the number of teaching assignments by increasing the teaching load of university professors; and by obliging also university assistants to hold lectures themselves.

Apart from these school- and university-specific measures, the Working Agreements also mention savings in the personnel expenses in the public service, which include also teachers and teaching personnel at universities and related institutions. Among these measures are: salary increases in the form of fix amounts; the suspension of one biannual pay rise; the reduction of additional fees; the reduction of the retirement pensions for civil servants by prolonging the times used as a basis for determining the pensions; and the increase of the actual retirement age.

Further saving measures are related to the indirect public costs of school and Hochschule¹¹ attendance: linking of the family allowance for students at schools and for university students to their study durations; limitation of expenditures for school textbooks to ATS 1,200 million; abolishing free public transportation for university students.

Vocational education and training

Reforms in the sector of the apprenticeship training come up in all Working Agreements. In this connection it is emphasised again and again that it is of tantamount importance to increase the quality of training in this sector (prolongation of the duration of vocational schools for apprentices, multiple qualifications, foreign languages, communicative skills, new technologies), and its integration into the rest of the education system, mainly by creating access possibilities to the post-secondary sector. In connection with the apprenticeship training again and again also the problem of the pre-vocational school is hinted at, the attractiveness of which should be increased. The "Fachhochschul"-courses are mentioned as those education and training institutions of the post-secondary sector that should be open for all apprenticeship graduates.

¹¹ "Hochschule" comprising universities and related institutions of higher education

Offers for working people

An increase of the educational offers for the workforce is considered the core of the promotion of lifelong learning. In this connection, the importance of the expansion of correspondence courses is underlined. In order to promote the participation in continuing education and training (CET), a reform of the labour law is suggested that would be suited to promote the attractiveness of employment as well as the creativity and participation willingness in continuing education and training measures of both wage and salary earners; a right to be incorporated in the law is the right to CET times while at the same time maintaining the employees' employment contracts, but without the right to a continuation of salary payments or to paid vacations.

Permeability

One point of the programme, which is also mentioned again and again in the Working Agreements, is the increase of the permeability of the complete system. As special problem groups, the graduates of the apprenticeship training and of secondary technical and vocational schools are mentioned. A reform of the vocational-school curricula and the introduction of the "Fachmatura" (put into practice as "Berufsreifeprüfung" meanwhile¹²) are intended to improve permeability. The "Fachhochschul"-courses are seen as the tertiary educational field that should be open for these groups. Permeability is planned to be promoted by means of the introduction of a publicly recognised certification system in the sector of continuing education and training and by means of a mutual recognition of courses and examinations. Moreover, the great importance of EDP information systems for CET offers is emphasised. With an amendment of the School Organisation Act on 1st January 1998, careers information, vocational guidance and educational path counselling has become a subject of the curricula on the secondary level I¹³.

Abolition of gender-specific discriminations

Statements on overcoming gender-specific discriminations refer, on the one hand, to the access to those apprenticeship trades and study fields which traditionally are not chosen by young women and, on the other, to the increase of the share of women among the instructional staff at institutions of higher education. Also measures of in-plant job-related training and CET are to be promoted for the purpose of overcoming gender-specific discriminations.

¹² This "Reifeprüfung" Certificate provides general university entrance qualifications for leavers of the dual system, 3- or 4-year courses at TVE schools, nursing and specialist paramedical courses.

¹³ This measure, although referring to the secondary level I, is included in this report by way of exception as it is an important contribution to the realisation of lifelong learning.

Future points of main concern

Many of the points included have already been put into practice - as has been stated earlier on - or are being put into practice at the moment. This is mainly true of the reforms in the university sector (organisation, service law, study law), the introduction of "Fachhochschul"-courses, rationalisation measures in the compulsory school sector, and the improvement of access for apprenticeship graduates to post-secondary education by introducing the "Berufsreifeprüfung"¹⁴ In the integration of non-school based adult education and training into the education sector, however, there has been only little progress so far. In the Coalition Agreement 1996, no priorities were set concerning future measures, but it can be gathered from the targets included there, which of them had not been put into practice until then. Furthermore, some new points can be found in the programme.

Among the targets that have already been a part of earlier agreements but have not yet been put into practice fully or partly, the Coalition Agreement 1996 mentions the following:

- Ø extension of "Fachhochschul"-courses for working people and promotion of access for apprenticeship graduates;
- Ø co-operation of continuing education and training institutions, improvement of permeability, recognition of education and training courses;
- Ø qualitative improvement of the dual system (apprenticeship training) and a better integration of this system into the education sector; increase of the acceptance of the pre-vocational school;
- Ø expansion of educational counselling at schools and of careers information;
- Ø expansion of autonomy in the school sector¹⁵.

The following new points appear in the Coalition Agreement 1996¹⁶:

- Ø adaptation of the law on colleges for arts and music to the new university law;
- Ø reform of the medical studies (increase of practice-oriented contents, EU-conforming education for dentists);
- Ø creation of a legally binding recognition procedure for private and foreign universities and university-related institutions; regulations concerning financing and quality;
- Ø better harmonisation of the various parts of the post-secondary sector.

¹⁴ cf. footnote 12

¹⁵ At the time of writing this report, a procedure is running to appraise the institution of partial legal capacity which was granted to the federal schools at the beginning of 1998.

¹⁶ cf. Arbeitsübereinkommen 1996 p. 18

(iv) Views on lifelong learning of social partners

The social partners are incorporated in all government decisions on educational policies in the form of the Advisory Council for Economic and Social Issues and by means of rights of participation in legislation and the execution of the law; a majority of the changes and reforms in the education system is based on proposals by the Advisory Council¹⁷.

The basic consideration on which the Advisory Council for Economic and Social Issues bases its proposals concerning educational policies is that the importance of job-related continuing education and training becomes more and more significant in the course of the working life¹⁸. From this situation the Advisory Council deduces new functions for the various fields of the education system and the concept of lifelong learning: The fields of initial training should concentrate more on providing fundamental skills and knowledge, which later continuing education and training activities can build on and which are suited for job-specific updating measures.

In its latest study, the Advisory Council for Economic and Social Issues elaborates a series of proposals for the further development of the CET sector¹⁹. It emphasises the State's responsibility in guaranteeing a broad offer and wide participation possibilities, in promoting continuing education and training activities financially, in laying down quality standards and entitlements, in providing for the usefulness of the acquired qualifications on the labour market, as well as in improving the permeability of offers (target groups, contents, entry requirements, duration and schedule, costs, etc.).

Fundamental reflections on the distribution of costs and revenues as well as proposals on new forms of financing are not made. The new demands focus on public resources as a source of financing. The major demands are:

- Ø an increased promotion of the infrastructure of the continuing education and training sector with public resources and a reduction of competitive advantages of schools and universities over commercial and non-profit providers;
- Ø increased emphasis on the subsidisation of individuals (in this connection the differences between employers' and employees' associations with regard to the use of work time and free time for continuing education and training are emphasised);
- Ø use of EU programmes of continuing education and training;
- Ø intensification of research and development in the field of job-related CET;

¹⁷ cf. Beirat 1989

¹⁸ cf. Beirat 1997, p. 89-90

¹⁹ cf. Beirat 1997, p. 98-114

- Ø public subsidising of CET activities in small and medium sized companies under certain criteria regarding labour market politics (e.g. in problem regions);
- Ø expansion of work foundations to include small and medium sized companies and involvement of the Laender governments and local authorities in the planning and financing;
- Ø improvement of the continuing education and training conditions for women, for mentally and physically disadvantaged persons, and long-time unemployed people.

In its programme "Qualifikation 2012", the Industrialists' Association does not include any reflections on the financing of the education system and especially of lifelong learning. As far as organisation is concerned, it demands a consistent further development of the autonomy of public educational institutions in all fields. The possibility of schools and universities to organize their activities on their own responsibility is seen as a prerequisite for increasing quality. Schools and universities, it says, have to respond to the students' and university students' needs, and then these should be able to orient themselves better in their decisions concerning education and training²⁰. The contents of the Industrialists' Association's programme focus on the following points:

- Ø providing key qualifications in all educational institutions, from compulsory school to university;
- Ø intensifying activities that promote internationalisation and the opening up towards other cultures (foreign languages, exchange programmes for teachers, students and university students, transnational projects);
- Ø promoting the gifted,
- Ø intensifying contacts between the education system and the economy (out-of-school practical in-company training programmes, company visits).

The Federal Chamber of Labour has elaborated a comprehensive catalogue of demands for the field of education and training²¹. As far as the financing aspect is concerned, it emphasises that an efficiency increase of the use of resources is achieved by means of accompanying continuous evaluation of the work done by the instructional staff, the schools, universities, university-related institutions, and institutes. In connection with the autonomy of educational establishments it also underlines the necessity of qualification measures in the field of school and educational management. The Chamber of Labour obviously managed to fit into the proposals by the Advisory Council for Economic and Social Issues many of their content-related points on the further development of the education system and the expansion of lifelong learning; they do not have to be repeated here. In its programme, in contrast to that, it raises the demand for a legally binding regulation according to which employees in employment should be granted the right to paid

²⁰ cf. Volkswirtschaftliche Gesellschaft/Industriellenvereinigung 1997, p. 50

²¹ cf. Bundeskammer für Arbeiter und Angestellte: Programm 2000

continuing education and training times and releases from their work's duties for being able to attend continuing education and training courses (paid leaves of absence). Moreover also in the Working Agreements of the coalition parties a series of points can be found which are in agreement with demands made by the Federal Chamber of Labour.

In its 13th Federal Congress, the ÖGB (Austrian Trade Unions' Federation) gave its opinion on the Austrian educational policy and decided on a series of demands²². A key point in their demands relates to the youth apprenticeship training:

- Ø its improvement by means of additional offers at the vocational schools for apprentices whereby the obtainment of a "Berufsreifeprüfung" Certificate²³ and hence access to post-secondary pathways is to be facilitated,
- Ø the general prolongation of instruction at the vocational schools for apprentices to two days per week,
- Ø the improvement of the technical equipment at the vocational schools for apprentices,
- Ø the general exemption from boarding-school fees for apprentices,
- Ø the nation-wide establishment of boarding-schools for apprentices.

In addition the ÖGB stresses the growing importance of CET in connection with the changes of the economic and social structures and raises a series of demands. In the context of the problem that the traditional education system has the tendency of reproducing access inequalities, the ÖGB focuses on adequate measures of how to counteract this tendency. They include: the employees' right to paid releases from work for being able to participate in educational and training events; the orientation of retraining and CET activities for unemployed persons towards the opening up of occupational perspectives (and not solely to qualification adaptations); the further expansion of work foundations²⁴; the widening of the offer for the later obtainment of qualifications; the easing of the studying conditions at universities and "Fachhochschul"-courses for working people; securing the foreman courses (which are essential for the higher qualification of employees) and complementing them with additional offers for obtaining the "Berufsreifeprüfung" Certificate; the extension of distance learning offers and the establishment of a state examination office for safeguarding the quality assurance of these offers. Regarding the financing of continuing education and training, the Trade Unions' Federation takes the view that a pure market control is not suited for reducing structural deficits and social inequalities. It advocates the following points: to find "new forms of financing"; to pass promotion regulations that guarantee the financial basis of CET; to include employers into the financing; and to design the financing system in a co-operative way (i.e. taking into account employees' and employers' interests). Furthermore, the ÖGB calls for an expansion of the

²² cf. ÖGB

²³ cf. footnote 12

²⁴ cf. section 5.3.

rights of co-determination of staff representatives in in-plant further and continuing education and training. In general it demands the establishment of a "CET board" that deals with issues of financing and sees to a better co-ordination in the CET sector.

Regarding the "Fachhochschul"-sector, the ÖGB stresses the following points of concern:

- Ø the opening of access for apprenticeship graduates and graduates from secondary technical and vocational schools (BMS) by means of the "Berufsreifeprüfung" Certificate²⁵,
- Ø uniform regulations of admission and examinations as well as of the students' participation in decision-making process of "Fachhochschul"-courses,
- Ø establishment of "Fachhochschul"-courses for the workforce by the federal government either on its own or in conjunction with other local or regional authorities²⁶,
- Ø the easing of access to "Fachhochschul"-courses by means of shortening the duration of study courses for graduates from secondary technical and vocational colleges (BHS) and by means of introducing organisation forms (distance learning, block events etc.) which take into account the needs of people under employment,
- Ø the drawing up of an "Fachhochschul"-course organisation act and the establishment of an inter-ministerial department for the "Fachhochschul"-sector for the purpose of efficiently fulfilling tasks in this area.

On the topic of the universities, the ÖGB agrees with the coalition parties in their demand for a more efficient use of personnel and financial resources. It speaks out against measures limiting access: the introduction of study fees; a "numerus clausus" (restrictions concerning student numbers by means of granting access only to those with better marks); or aptitude tests. In addition it advocates an expansion of the existing offers for the working people and a greater degree of recognition of work experiences as well as of qualifications obtained abroad. As far as teacher training is concerned, the ÖGB calls for a university-based education for all teaching staff; in the transition period - i.e. until this demand has been put into practice - the exchange between teachers of compulsory schools and teachers of secondary schools should be organised more flexible in both directions by means of the mutual recognition of qualifications. In the university-based teacher education and training, more weight should be put on pedagogical and didactic contents.

²⁵ put into practise meanwhile

²⁶ put into practise meanwhile

(v) Political context developing over time

Statements made by the coalition parties, the Advisory Council for Economic and Social Issues, the Industrialists' Association, and the Chamber of Labour agree in the point that the demand for lifelong learning will increase in the future both in size and in importance. Against this background, the political demands for an expansion and for the restructuring of the education system can be understood. No statements are made about the extent of the increase of demands. As far as fund-raising and financing are concerned, the coalition parties mention rationalisation and saving measures. The Advisory Council for Economic and Social Issues, the Industrialists' Association and the Chamber of Labour support these measures. The lifelong learning debate is confined to adult and work-related learning issues; certainly, effort is made to extend early childhood education and care, but these activities are not part of the concept of lifelong learning, they aim to make it easier for women to participate in work.

1.2. Economic context

The information society, globalisation, and changes in the world of work call for new concepts and approaches in society and economy. At the same time, they pave the way towards new opportunities to maintain and further develop those fundamental achievements that are the prerequisites for our lives. In this connection, education and qualifications represent a major basis – both for the individuals, who are thereby enabled to successfully stand their grounds in a world of work that is becoming more and more open, and for companies as well, for which vocational qualifications have become a decisive production factor.²⁷

In the brochure with the title "Qualifikation 2012", the economy and industry express the view that the importance of education is not limited only to the economic and occupational aspect. On the contrary: It is stated " ... that the dimension of a holistic form of education, with all elements of the fine arts and of creativity, of the reflection on our world that is based on values, of philosophy, and of social components, is deemed not only important but unrenouncable. Society, culture, and the economy are indivisible parts of a whole and are recognised as such. With the increasing interconnectedness of the economic world and with the changing requirements, a comprehensive education gains in importance to meet the demands made on intellectual flexibility and lifelong continuing education and training".²⁸

According to a programme of the economy on educational policies, a modern education system requires the following principles²⁹:

Ø careers guidance and preparation for career choice

²⁷ Qualifikation 2012 1997, p. 8

²⁸ Qualifikation 2012 1997, p. 40

²⁹ Austrian Federal Economic Chamber 1995, p. 4

- Ø a well-founded initial vocational training
- Ø lifelong learning
- Ø permeability of education and training pathways
- Ø needs orientation of educational policies
- Ø co-operation between school/university and economy/industry
- Ø practice-oriented instruction
- Ø permanent updating of educational contents
- Ø elimination of bureaucratic processes
- Ø all persons involved take the initiative and bear responsibility themselves
- Ø performance orientation
- Ø openness to international developments and global thinking
- Ø flexibility and mobility
- Ø understanding of connections
- Ø interdisciplinarity

Putting the issue of the reasons for lifelong learning into an economic context, continuing education and training can be assigned the following central functions, which are closely interconnected:

- Ø individual function: individual improvement of occupational and life chances
- Ø function from the perspective of business administration: safeguarding or even increasing the companies' competitiveness
- Ø function from the viewpoint of employment policies: reduction of unemployment due to better placement possibilities for job-seekers
- Ø function for the national economy: maintaining or even raising the attractiveness of Austria as a business location

Furthermore, participation in lifelong learning has to be seen also as a necessary reaction to the demographic development – against the background that the proportion of elderly people increases steadily so that the labour market demand for new qualifications has to be met by means of the already existing workforce potential rather than with new entrants.³⁰

³⁰ Federal Ministry for Economic Affairs 1996, p. 6f

The sources used in the following (the Working and Coalition Agreements of 1990, 1994, and 1996, recommendations of the Advisory Council for Economic and Social Issues and of the Federal Chamber of Labour) are national guidelines and have to be viewed under this aspect in the context of the following comments.

(i) Current and future needs for qualifications in the labour market

In the above cited Working Agreement of the Federal Government of the year 1990, also the quality increase within the education system is termed an adequate measure for meeting the current and future demand for qualification in the labour market. This increase – it is stated – has to be considered necessary mainly against the background of the dynamics of European integration, the opening up of our eastern neighbour states, as well as the internationalisation in a variety of fields of everyday life. In this connection, the raising of educational levels must not be seen exclusively as the development and expansion of competences in the use of new technologies but also as the ability for a social, political, and cultural participation.

The Working Agreement defines the raising of the educational attainment in a very general sense to cover both the general-education and technical-vocational school system, as well as adult education. It can be read, e.g., that educational dead-end streets existing in the field of youth apprenticeship training have to be eliminated by facilitating or easing participation in secondary educational pathways. One step in this direction came with the introduction of the "Fachhochschul"-system (non-university institutions in higher education), the target group of which is seen in graduates from secondary schools and young skilled workers. In addition to that, "Fachhochschul"-courses are supposed to satisfy the acute qualification requirements in different occupational fields. In the summer of 1997 the first "Fachhochschul"-students could complete their respective programmes.

In the area of school education an improvement of the pedagogical quality is to be ensured by updating curricula and syllabi, in which connection the intensified use of project-oriented and interdisciplinary learning is provided for.

For the area of adult education the Working Agreement in question specifies the following measures that aim at improving the quality of education. Aspects mentioned which can meet the demands of lifelong learning are: the facilitation of nation-wide valid qualifications according to criteria of public access as well as the expansion of the systems of continuing education for trainers in adult education in co-operation with

the adult education organisations. A closer co-operation between the public school system and adult education organisations is planned to bring about a mutual recognition of courses and examinations.³¹

In the Working Agreement of 1994 it is explicitly stated that – for the two coalition parties – education, science, and research are the essential bases for economic development. Again, the necessity of an intensified orientation towards the internationalisation of education, training, research, and instruction both inside the EU and with other states is mentioned. Furthermore, the intention of expanding the extensive continuing education and training offer in the area of the universities, “Fachhochschul”-courses, adult institutions, and schools for persons under employment to obtain educational qualifications and receive job-oriented continuing education and training (including distance learning or Open Universities) is expressed.³²

In the Coalition Agreement 1996, the coalition parties laid down that they will do anything for Austria to remain competitive in the field of research and technology. They state that educational policies have to safeguard the best possible development chances and this country's international position. The following measures are intended to be taken: "By means of an intensified permeability, transfers and acceptance of diplomas without serious time losses have to be made possible in the whole school system. (...) Initial vocational training must provide a motivation for lifelong learning. Modern distance learning opportunities as well as improved co-ordination and information are to increase the number of those who want to participate in continuing education and training."³³

Once more the issue of internationalisation is addressed, which is planned to be increased by means of a further target-oriented expansion of foreign language competences as well as the unbureaucratic granting of credits for school attendance abroad³⁴ – demands which have already been implemented to a large degree or are now being implemented (e.g. development of new apprenticeship trades, a new structuring and organisation of curricula and syllabi, putting the training emphasis on "foreign languages for business", "3rd living foreign language", etc.).

From the perspective of economy and industry all potentials and talents of young people have to be promoted. This includes not only the development of and challenges for particularly gifted persons – of elites – but also the unfolding of capacities, skills and widely differing talents of our youth in all fields.³⁵

³¹ see Arbeitsübereinkommen 1990, Beilage 14

³² see Arbeitsübereinkommen 1994, p. 36f

³³ see Koalitionsübereinkommen 1996, p. 33

³⁴ see Koalitionsübereinkommen 1996, p. 33

³⁵ Industriellenvereinigung/Volkswirtschaftliche Gesellschaft 1997, p.41

The starting point for the recommendations given in the Advisory Council's study "Qualifikation 2000" is the finding that the relative importance of school- and university-based pre-vocational education and training shows a downward tendency whereas the updating and appropriateness of vocational qualifications will increasingly have to be safeguarded by means of vocational training measures. It is thought, moreover, that it will be useful in the future only within very tight limits to "learn in advance" before taking up an employment. As a result, tasks will be shared by initial and continuing vocational education and training, and it will not make sense to limit the schools' educational tasks only to the impartment of qualifications that can be of use on the job immediately.³⁶

A recommendation of key importance contained in the above-mentioned study by the Advisory Council is the harmonisation of the educational tasks fulfilled by initial and continuing education and training ("the linking of contents") so that school-based learning will be the basis also for lifelong continuing education and training, and continuing vocational training can connect directly to the skills and knowledge imparted at school. In this connection also motivational factors are addressed, since they represent a necessary precondition for the use of CET offers. It is emphasised in this respect that the education system's tasks have to aim at enabling those persons who will later be integrated into the world of work to learn at their own responsibility and initiative.³⁷

The pluralism of providers is a distinguishing feature of the Austrian continuing education and training market and guarantees that a wide range of aims are followed and methods are used:

- Ø externally (regional and local authorities as well as the educational establishments financed by them, such as the universities, the TVE system, etc.; the Public Employment Service Austria, interest groups of employers and employees, other non-profit providers, private commercial providers, commercial groups of trainers and counsellors, company-based customer training)
- Ø internally (personnel and training departments of enterprises, regional and local authorities such as the Administration Academy, representatives of interest, and other institutions under public law)

From the part of the Chamber of Labour, the establishment of a Board for Continuing Education is demanded which is to act as a co-ordinator between all institutions in adult education (incl. local and regional authorities as well as interest groups). It should then be the task of this Board to analyse structural problems in the field of adult education and to prepare legal and organisational measures.³⁸

With a view to the system of vocational CET and its structures, a variety of activities arise. The Advisory Council for Economic and Social Issues recommends, e.g., the introduction and expansion of measures

³⁶ cf. Qualifikation 2000 1989, p. 35ff

³⁷ cf. Qualifikation 2000 1989, p. 20ff

³⁸ Programm 2000 1995, p. 11f

promoting transparency in order to safeguard an efficient content- and subject-specific harmonisation between continuing education and training offers and the related demand.³⁹

In its "Programm 2000", the Chamber of Labour (AK) argues in favour of a further expansion of careers guidance and educational orientation and information to guarantee a more intensive transparency of the Austrian education offers and, therefore, its optimal use. The transparency required is also supposed to be a step towards increasing equality of opportunity in access to education.⁴⁰

Another Council recommendation is also of interest: The possibility of transfer of vocational qualifications obtained in CET has to be promoted in the course of standardisation⁴¹. In this respect it can be said that concepts of this kind have so far, at best, been put into reality in the framework of entrepreneurial continuing education and training strategies (cf. below) or with particular providers. A general transferability going beyond the entrepreneurial sector and CET providers – apart from the TVE schools and colleges for people under employment, the first “Fachhochschul”-courses for working people, occupational qualification and master craftsman examinations, and the so-called professional examinations – is rather the exception than the rule.

In its "Programm 2000", the Chamber of Labour advocates a networking of the school-based CET field and adult education by affording the possibility of granting credits for qualifications acquired in adult education. In addition, it calls for the public recognition of vocational qualification obtained in adult education programmes.⁴²

Issues of quality management are increasingly becoming important. In this connection it is stressed by the Advisory Council for Economic and Social Affairs that institutions of continuing education and training as well as groups of counsellors have made big efforts for a certification in accordance with ISO 9000.⁴³ Apart from these it can be noticed that in the continuing education and training sector also other certification systems are being established.

In this connection, the Chamber of Labour recommends the creation of a certification system in which state examination offices for all distance learning courses and computer-based learning programmes are to be involved.⁴⁴

³⁹ cf. Qualifikation 2000 1989, p. 31

⁴⁰ Programm 2000 1995, p. 11f

⁴¹ Qualifikation 2000 1989, p. 32

⁴² Programm 2000 1995, p. 11f

⁴³ Beirat für Wirtschafts- und Sozialfragen, Arbeitsgruppe Beschäftigungspolitik 1996 (unpublished), p. 7f

⁴⁴ Programm 2000 1995, p. 11f

Also the new media (distance learning, computer-based training, etc.) are becoming more widespread. Complementing the use of the new media, accompanying measures such as the integration of phases have been developed that aim at overcoming social isolation where students have to be present.

Providers of vocational CET show intensified efforts of offering also modular continuing education and training programmes since the step-by-step imparting of knowledge and skills in short phases meets the requirement of the employees' time flexibility.

Continuing education and training offered by enterprises or institutions to their employees is one of the essential sectors in the whole spectrum of job-oriented CET. The gender-specific and occupation-related inequalities of access are treated in detail in Section 2.1.3 ("Adult education").

In connection with the vocational and continuing education and training carried out by enterprises it must be remembered that apprenticeship training in Austria is divided into a company-based and a school-based training part where the costs of the former are borne exclusively by the training company (except for special Public Employment Service promotions), whereas the running of the Austrian compulsory vocational schools is the responsibility of the Laender governments, which are refunded half the costs for the teaching personnel from the federal budget. More detailed comments on the company-based part are found in Section 2.4 ("Private costs").

(ii) *Measures of educational policies under the aspect of the reduction or prevention of unemployment*

In the Working Agreement 1994, measures of educational policies are seen under the aspect of a reduction or prevention of unemployment in so far as education and vocational training are understood as the best investment for the future. The aim of safeguarding the youth's future is the starting point for formulating a catalogue of measures in the section titled "Education and Culture".⁴⁵

In the Coalition Agreement 1996 the view is expressed that educational policy has to be seen also as an instrument for ensuring Austria's economic competitiveness. Furthermore it has the task of safeguarding the international positioning of this country by guaranteeing its youth's willingness to work and their creativity.

⁴⁶

In the study of the Advisory Council for Economic and Social Issues the improvement and adaptation of vocational qualifications of unemployed persons (active labour market politics) – after identifying concrete

⁴⁵ see Arbeitsübereinkommen 1994, p. 36

⁴⁶ see Koalitionsübereinkommen 1996, p. 33

labour market needs – is recommended.⁴⁷ Here it will become increasingly important for employers to define concrete entrance and qualification requirements for their workplaces.

Further recommendations concerning active labour market politics point to the direction of preventive measures to reduce unemployment, where a central element is the development and introduction of long-term, socially-backed CET times that are not subject to the "stigma of unemployment".⁴⁸ In order to create more transparency in the labour market as well as in the offers of qualification measures, the Advisory Council for Economic and Social Issues recommends a closer co-operation between the Public Employment Service Austria and employers.⁴⁹

A relatively young instrument of active labour market politics are work foundations (cf. mainly section 5.3: "Case Study 2 – Work Foundations"). These foundations are established on the basis of section 18 of the Unemployment Insurance Act with a certain time limit to reintegrate unemployed people into the labour market by means of job orientation, vocational and continuing education and training, placement activities, and counselling activities for company foundations.

Due to the framework conditions provided for by the Unemployment Insurance Act and the considerable financing volume, work foundations can be established more easily in larger enterprises. This fact, however, stands in sharp contrast to the Austrian company structure. For the future, therefore, the development of branch-related and regional work foundations has to be aimed at so that also employees of small and medium-sized enterprises have the chance of using them. Also opportunities shall be created for women which are compatible with their other activities.⁵⁰

In a paper of July 1997 published jointly by the Federal Ministry of Labour, Health and Social Affairs, the Federal Ministry for Economic Affairs, and the Federal Ministry of Education and Cultural Affairs, the agreement between the Federal Government and the social partners on a package of measures for combating youth unemployment is laid down. Concrete aims are, on the one hand, the medium-term increase of the number of young people within the dual system and, on the other, the growth of the number of training enterprises whilst at the same time maintaining the high education and training standard typical for Austria. These aims are to be met by means of a facilitation of access to apprenticeship training for young adults and for training enterprises. In this connection special attention was paid on the permeability to higher-level education and training tracks (general access to universities), which was achieved with the introduction of the so-called "Berufsreifeprüfung" (which came into force in July 1997). This

⁴⁷ Qualifikation 2000 1989, p. 19

⁴⁸ Beirat für Wirtschafts- und Sozialfragen, Arbeitsgruppe Beschäftigungspolitik 1996 (unpublished), p. 8f

⁴⁹ Beirat für Wirtschafts- und Sozialfragen, Arbeitsgruppe Beschäftigungspolitik 1996 (unpublished), p. 7

⁵⁰ Beirat für Wirtschafts- und Sozialfragen, Arbeitsgruppe Beschäftigungspolitik 1996 (unpublished), p. 30f

”Reifeprüfung” and TVE Diploma Examination equivalent provides general university entrance qualifications for leavers of the dual system, 3 or 4 year courses at TVE schools, nursing and specialist paramedical courses. In order to safeguard a sufficient offer for obtaining the "Berufsreifeprüfung", additional related offers were created at the vocational schools for apprentices and at the TVE schools and colleges.⁵¹

A major measure under the aspect of reducing and/or preventing unemployment is the National Action Plan for Employment (NAP) adopted by the Austrian Federal Government in April 1998 on the basis of EU-guidelines.⁵² In Guideline 5 on the national objective of increasing the share of persons in lifelong learning measures, the (further) pursuit of the following measures is laid down:⁵³

- Ø improvement of co-ordination and cooperation between the various CET institutions;
- Ø promotion of equality of opportunity;
- Ø distance learning, open universities;
- Ø modularisation of the programmes in adult and post-gradual education;
- Ø creation of the possibility for young adults below the age of 18 to complete their compulsory schooling free of charge;
- Ø well-aimed employee-promotion programmes for reducing financial access barriers to CET offers;
- Ø partial legal capacity for schools (in force since 1 January 1998) and full legal capacity for individual universities;
- Ø expansion of programmes for improving access to adult/further education and training in poorly supplied areas and for disadvantaged groups.

The fight against youth unemployment can be termed one of the priorities of the NAP (cf. also Section 2.6: "Characterisation of Lifelong Learning Needs and Barriers of Problem Groups in the Labour Market"). Essentially this fight includes:

1. the "Safety Net for the Youth 1998", which consists of foundations for apprentices, courses and programmes in TVE, measures for an apprenticeship pre-training, the exemption from paying accident insurance contributions in the first year of the apprenticeship training, tax allowances for the recruitment of apprentices, the completion of lower secondary school at a later point in life, and additional training places in the BMHS field;

⁵¹ BMAGS, BMwA, BMUK 1997, p. 15

⁵² The National Action Plan for Employment was also subject of an agreement with the Social Partners. Each of the Social Partners' proposals were laid down explicitly in the NAP.

⁵³ National Action Plan for Employment

2. various measures of the Public Employment Service Austria regarding careers guidance, financing, preparation, and promotions for persons taking up vocational training;
3. the establishment of new apprenticeship occupations in the dual system.

The related reforms in the school sector, the focus of labour market policies on the fight against long-term unemployment among young people, the introduction of future-oriented apprenticeship trades, and the cost relief for training employers are being complemented by the Safety Net for the Youth in 1998 and 1999. The latter refers to the sum total of the above-mentioned measures, which are intended to safeguard the youth's entry into the world of work; its legal basis has been created in the form of the Youth Employment Act.

The incentives for enterprises recruiting apprentices (tax allowances and suspension of the obligation to pay employers' contributions for accident insurance in the first year of the apprenticeship training), provided for in the NAP, are linked with the expectation that they prevent the use of the "Safety Net".

(iii) Public financing of lifelong learning

As has been discussed already in more detail in Section 1.1 ("Political Context"), the Austrian coalition parties explicitly mention the expansion of lifelong learning as their top priority. The issue of distributing the costs and benefits and of orienting the financing towards this distribution is not explained in the quoted Working and Coalition Agreements.

In the programme on educational policies of the year 1995, the Austrian Federal Economic Chamber clearly advocates that the financial responsibility in the education sector is to be ensured both by individuals and institutions, in which connection the subsidiarity principle is intended to be applied as well: Only an absolutely necessary minimum of state regulation and allocation is to take place. As a sidepoint it can be noted that a (partial) financing of the education sector in terms of the market economy and social insurance coverage on the one hand and the creation of equal opportunities on the other do not exclude each other.⁵⁴

Regarding the realisation of the concept of lifelong learning the Advisory Council for Economic and Social Issues proceeded from the assumption that measures for an institutional safeguarding of CET financing need to be guaranteed by provisions of labour and social law. Thus for instance especially for the group of workers with very low access to CET inhibiting factors such as low level of previous knowledge and skills, their time budget, the costs of CET, and insufficient regional offers shall be overcome. Increasingly, initiatives would have to be taken on the basis of support of individuals. This recommendation has been put

⁵⁴ Austrian Federal Economic Chamber, 1995, p. 15f

into practice in some Austrian provinces, where financial promotions take the form of "educational chequebooks" or "educational accounts", and in Vienna, where the "Wiener Arbeitnehmerförderungsfonds" (Viennese Employees' Promotion Fund or WAFF) has been established. All the mentioned examples are measures at Laender level. At company level, the use of resources from the European Social Fund for the promotion of companies can be mentioned.⁵⁵

A current recommendation of the Advisory Council concerning active labour market politics goes into the direction of preventive measures to reduce unemployment as well as steps to fully use qualification potentials, all of which have to be given priority in the development of public expenditure. The Federal Government and the Laender governments shall draw up and co-ordinate regional promotion programmes and also take into consideration the respective preconditions for obtaining promotions from the EU. Regarding the promotions of company investments it is said that the granting of these promotions would have to be connected with the creation of permanent and competitive jobs.⁵⁶

The Chamber of Labour advocates a subsidisation system agreed upon by the Federal Government and the Laender governments which makes it possible for all employees to take part in educational events independent of their social situation and their place of residence.⁵⁷

1.3. Social and cultural context

(i) Social and cultural goals of lifelong learning

The Working Agreements of the coalition parties speak about a "qualification offensive" in connection with the changes of the economic structures as well as with the changes of the economic framework conditions after the formation of economic blocks, the EU integration process and the opening of eastern Europe. In the Working Agreement 1990, social and cultural contents still take a prominent position. They deal with the growing internationalisation of the various fields of life and the promotion of intercultural learning (expansion of foreign language instruction in the general and vocationally-oriented education sector, expansion of exchange programmes for teachers and students also in the field of technical and vocational schools). Teenagers are intended to be enabled "to participate socially, politically and culturally"⁵⁸; creativity, identity through arts and culture, and communication skills are given a high rank in connection with the further development of democracy.

⁵⁵ Beirat für Wirtschafts- und Sozialfragen, Arbeitsgruppe Beschäftigungspolitik 1996 (unpublished), p. 19f

⁵⁶ Beirat für Wirtschafts- und Sozialfragen, Arbeitsgruppe Beschäftigungspolitik 1996 (unpublished), p. 19f

⁵⁷ Programm 2000, 1995, p. 11f

⁵⁸ cf. Arbeitsübereinkommen 1990, p. 63.

The later Working and Coalition Agreements have vocational qualification in the centre of their reflections. Also the proposals made by the Advisory Council for Economic and Social Issues concentrate on this aspect. The integration of mentally and physically disadvantaged people and the reduction of gender-specific discriminations concerns also the field of employment. The Federal Chamber of Labour and the Industrialists' Association mention, in contrast to that, also issues of creativity, of communication, of intercultural learning and of personality development.

(ii) Most important impacts on lifelong learning needs

As the major developments that cause needs for lifelong learning, there are stated: technical and organisational changes in the enterprises as well as changes of the economic and political framework conditions (formation of economic blocks, opening of eastern Europe). Changes in the social and cultural field (e.g. re-entry of women into working life, opening of traditional men's jobs for women, integration of mentally and physically disadvantaged and unemployed people, expectations regarding the field of employment and the general organisation of life) are not formulated in the Working and Coalition Agreements as being the causes for changing demands of individuals and groups to the education sector, but as programmatic points of the related policy.

(iii) Co-ordination of formal education system and non-formal providers

A better harmonisation and co-ordination between the public education system and private providers with regard to standardisation, mutual recognition, and use of capacities are the subjects of all the mentioned programmes, both of the Working and Coalition Agreements and of the programmes of the social partners. It can be concluded from the fact that this point comes up again and again in all programmes that it still represents a weak point of the system. Concrete activities for a better harmonisation do not appear in the programmes. One reason for this problem could lie in the fact that the competencies of the federal government, the Laender governments and the local authorities concerning adult education and training are not satisfactorily regulated in the Austrian law and that a lot of adult education and training organisations are closely linked to the employers' and employees' associations and their interests.

Chapter 2:

Estimating Public Costs of Implementing Lifelong Learning

The level of participation in education and training has been increasing continuously over the past two decades. Twenty years ago, for instance, one in five Austrians did not take up any continuing education or training programme after compulsory education; today, however, a mere 2 %⁵⁹ are without secondary education; more than 50 % attend a school type that is completed with the "Reifeprüfung"-Examination (i.e. the final examination of the academic secondary schools) or the "Reifeprüfung"- and TVE Diploma Examination (i.e. the final examination of a TVE college). With the introduction of the "Fachhochschul"-sector (non-university institutions in higher education) in 1994, the range of post-secondary education and training offers was expanded. It must, however, also be kept in mind that more than one fifth of the population does not finish their respective educational tracks started after compulsory education and that more than half of the Austrian university students do not finish their respective study courses with a graduation.⁶⁰

Increasing difficulties in the transition of young people from education and training to the world of work show that the formal aspect of education is not enough any more for an integration into occupational life. Content-related, personnel-specific, and social aspects of education and the willingness for lifelong learning are coming into the centre of interest. Vocational CET is gaining more and more in importance as compared to initial vocational training.

It is a characteristic of the Austrian education system that a high share of the population participates in initial vocational training. Thus, e.g., more than three quarters of all secondary level II students attend secondary technical and vocational schools and colleges (BMHS) (cf. for more details the table "Percentage of students at secondary level II in all public and private academic (general education) and technical and vocational institutions – school year 1995/96"). This high participation rate can be associated with the well developed system of initial vocational education.

At this level, the foundations for lifelong learning are established, e.g. by curricula, methods, and work forms of secondary TVE schools and colleges. The vital function of initial vocational education becomes evident, for instance, in the educational careers of graduates of secondary colleges for engineering, who, in their majority (60 %), opt for taking up a university study.⁶¹ Therefore it can be stated that CET does not gain in importance relative to initial vocational education, but in addition to it.

⁵⁹ Lechner speaks of 3.4 %; cf. 2.1.3 (i) Labour market opportunities in relation to educational attainment

⁶⁰ Qualifikation 2012, p. 9, 1997

⁶¹ BMWVK 1996, p. 190

In the following section, an estimation of participation gaps in various education and training programmes at secondary level II⁶² and the tertiary level as well as in adult education offers is carried out. On this basis, a first cost calculation can be made to establish how high expenses would have to be to close these participation gaps.

2.1. Current Enrolment Patterns

The structure of the following descriptions follows the classification into secondary level II, tertiary level and adult education. For these sectors, the respective schooling and participation rates are shown.

2.1.1. Secondary Level II

(i) Age participation rates

The transition from school year 8 to school year 9 respectively 10 involves major decisions in terms of the school-based educational, and hence vocational, careers. In contrast to the transition to secondary technical and vocational schools and colleges (BMHS) in the ninth year, transitions to compulsory vocational schools in the framework of apprenticeship training do not take place before the tenth year, after completion of general compulsory schooling. In this tenth year, many students in the first grade of secondary TVE schools (BMS) or secondary TVE colleges (BHS) change over to the dual training system (i.e. apprenticeship training).

The table below shows that from the lower cycle of academic secondary schools (AHS) almost all transitions lead to secondary schools: More than 60 per cent go to the upper cycle of AHS and about 30 per cent to the BHS. Transitions from lower secondary school (HS) can be divided as follows: approximately 30 per cent to the pre-vocational school (PS)⁶³, 20 per cent to secondary technical and vocational school (BMS), and about 15 per cent directly to the vocational school for apprentices (BPS). About 30 per cent of students from lower secondary school change over to a secondary school after the eighth year, especially to secondary technical and vocational colleges. Thus, lower secondary school represents a significant supplier for secondary schools. Over the time, only small shifts of the transition rates in the various branches can be found.⁶⁴

Transitions from secondary level I to secondary level II - 1989/90, 1993/94, 1994/95

⁶² The term "secondary level II" is used here for terminological purposes in an international context, even though it is not used in the Austrian School Organisation Act (SchOG).

⁶³ since the latest SchOG amendment called "pre-vocational school"

⁶⁴ Lassnigg, L. 1997, p. 88 (special evaluation by the Institute for Advanced Studies)

Trans. in the years	AHS-U- AHS-O	AHS- BHS	AHS- BMS	HS- AHS	HS- BHS	HS- BMS	HS- PS	HS- BPS
1989/90	61.9%	33.1%	4.4%	4.0%	21.6%	21.7%	30.6%	14.5%
1993/94	63.8%	28.2%	2.5%	5.9%	24.2%	21.4%	27.6%	13.5%
1994/95	65.9%	27.7%	2.7%	6.4%	25.4%	20.8%	25.9%	12.7%

Source: BMUK - Kenndaten des österreichischen Schulwesens 1990, 1994, 1995

Apart from different drop-out rates, the distribution in year 10 provides a good approximation to the development of educational participation at secondary level II. The development of the distribution by school types shows two clear tendencies: On the one hand, the share of full-time schools has been increasing continuously since the beginning of the 1990s whereas apprenticeship training shows decreasing trends. On the other hand, the distribution of students in full-time schools has shifted, from about equal shares held by AHS and BHS (16.6 % and 16.4 %, respectively) in 1985 to the following: the percentages of BHS (with the exception of one year) have been on the increase (by 4.8 percentage points in the whole period) and the AHS share, all in all, has grown with fluctuating tendencies (by 1.7 %), whereas the BMS share has constantly fallen (by 3.5 %).⁶⁵

The Austrian Central Statistical Office annually carries out a special evaluation of the education and training sector, thus allowing a calculation of specific schooling rates broken down by age groups. According to this special evaluation the participation rate of 15-year-old teenagers in educational pathways at secondary level is 87.0 %. This schooling rate may seem surprisingly small. This situation is caused by the fact that a rather considerable number of 15-year-old pupils still attend the lower cycle of the AHS and are, therefore, at still subject to general compulsory schooling. Net participation rates in educational tracks at secondary level II continuously fall in the individual age groups of the 16-to-20-year-old pupils, from 74.5 % to 13.8 %, without showing any above-the-average declines. In these age groups, students from one-, two-, three- and four-year secondary schools as well as AHS- and BHS-students leave secondary level II, thus completing their educational track. At the age levels 21 to 23, where – with a few exceptions – also the five-year BHS is finished, schooling rates make up only a few percentage points.

Net participation rates in all public and private educational institutions of secondary level II specified in the following do not include students attending an apprenticeship training since they have employment status.

Table 2.1

Net participation rates in all public and private educational institutions at secondary level II (including special forms) - school year 1995/1996⁶⁶

⁶⁵ Lassnigg, L. 1997, p. 90 (special evaluation by the Institute for Advanced Studies)

⁶⁶ These calculations do not include the ninth year of special needs school since no respective data is available.

<i>Net participation rates broken down by age cohorts (in per cent and absolute figures)</i>								
age: 15	age: 16	age: 17	age: 18	age: 19	age: 20	age: 21	age: 22	age: 23
87.0%	74.5%	55.8%	45.7%	31.9%	13.8%	5.5%	3.5%	3.2%
85,237	69,538	50,197	41,196	29,170	13,217	5,548	3,716	3,535

Source: ÖSTAT, calculations by the study authors

In a great number of countries there exists the possibility for young people who have obtained a certificate at secondary level II to participate in a continuing educational track at this educational level and thus obtain additional qualifications. These continuing educational pathways, which in Austria are called "special programmes" as the overall term, have been established in this country both at academic secondary schools and at secondary TVE schools and colleges.

The proportion of Austrian students deciding for yet another track at secondary level II after having graduated from secondary level II before is rather low, as will be shown in the following. In the following table it can be seen how the whole student potential is distributed over programmes in initial education and second training (= special programmes⁶⁷). Initial education boasts a share of 96 % of students, the remaining 4 % can be found in the various special programmes, which serve the function of obtaining a qualification at a later point in life and/or a higher qualification.

Among initial education programmes, TVE clearly dominates. 76.5 % of students attend technical colleges, industrial colleges, colleges for arts and crafts, colleges for the training of nursery school teachers or colleges for social education, whereas 23.5 % go to academic (general-education) types. Within programmes for obtaining a second training, the distribution is shifted even more markedly towards vocational training. Around 80 % of all students are in technical and vocational training programmes, 19.6 % attend academic special programmes (=secondary academic schools for people under employment).

Percentage of students at secondary level II in all public and private academic (general-education) and technical and vocational institutions, broken down by their participation in initial education and second training programmes - school year 1995/96

Initial education			Second training programmes (special programmes for the workforce)			Total
Secondary level II	Academic (general-education)	TVE and apprent. training	Secondary level II	Academic (general-education)	Vocational training	

⁶⁷ Special programmes at secondary level II include: secondary academic schools for people under employment, add-on courses, master craftsman courses, foreman courses, and courses for building workers, with the three latter partly provided by training institutions of the social partners and not at public schools.

96.0%	23.5%	76.5%	4.0%	19.4%	80.6%	100%
397,431	93,279	304,152	16,401	3,176	13,225	413,832

Source: ÖSTAT, calculations by the study authors

Analysing the students' participation behaviour in public and private educational institutions at secondary level II (including special programmes) with regard to the content-orientation of the chosen school form, it can clearly be seen that the focus is on technical and vocational training. Whereas more than three quarters (76.4 %) are at secondary TVE schools and colleges, only approximately one quarter (23.6 %) attends academic (general-education) institutions at secondary level II. This imbalance is due to the structuring of the Austrian education and training landscape, which offers far more technical and vocational tracks than academic pathways.

Percentages of students at secondary level II in all public and private academic (general-education) and technical and vocational institutions - school year 1995/96

General education	Vocational training (including apprenticeship training)	Total
23.3 %	76.7 %	100 %
96,455	317,377	413,832

Source: ÖSTAT, calculations by the study authors

Analysing the students' share in the respective school forms offered at secondary level II (including the special programmes), there is the following distribution: The biggest proportion – with nearly one third (31.0 %) – falls to vocational schools for apprentices (BPS), followed by secondary TVE colleges (BHS), where one quarter of the students is enrolled. Academic secondary schools (AHS) and secondary TVE schools (BMS) are frequented by approximately equal shares (18.9 % and 16.5 %, respectively), whereas the remaining school types are attended by a relatively small percentage compared to the other educational institutions at secondary level II.

Percentages of students at secondary level II in all public and private academic (general-education) and technical and vocational institutions - school year 1995/96

General education			Vocational training and apprenticeship training					Total
AHS	Pre-voc. school	Special needs school	BPS	BHS	BMS	Teacher training	Other voc. school	
18.9%	4.2%	0.2%	31.0%	25.0%	16.5%	2.9%	1.3%	100%
78,174	17,474	807	128,509	103,408	68,396	11,840	5,224	413,832

Source: ÖSTAT, calculations by the study authors

The age group 18 to 21 is the transition area between secondary level II and tertiary level in the sense that at that age a participation both in the first- and in the second-mentioned area is possible. 18-year-old youths hardly attend the post-secondary level at all – a result which does not come as a surprise since the access requirement is usually the "Reifeprüfung"-Examination or the "Reifeprüfung"- and TVE Diploma Examination, which is passed at the age of 18 or 19. Also in the case of the 19-year-olds, net participation rates at tertiary level are still rather low, even though participation rates in the university sector already dominate. The proportion (of 31.9 %) of this age group in education and training pathways at secondary level II is, however, considerable. At the age levels 20 and 21, net participation rates in the university sector increase to 16.4 %, whereas those in the non-university sector stagnate. The enrolment in education and training programmes at secondary level, however, falls from 13.8 % to 5.5 %.

Transition features for each age group between 18 and 21: Net participation rates broken down by field of education and training in public and private institutions – school year 1995/96

Age: 18			Age: 19			Age: 20			Age: 21		
Sec. level	Non-univ. sector *	Univ. tertiary sector**	Sec. level	Non-univ. sector *	Univ. tertiary sector**	Sec. level	Non-univ. sector *	Univ. tertiary sector**	Sec. level	Non-univ. sector *	Univ. tertiary sector**
45.7%	0.0%	0.2%	31.9%	2.7%	5.7%	13.8%	3.5%	12.8%	5.5%	3.6%	16.4%
41,196	29	169	29,170	2,509	5,241	13,217	3,264	12,283	5,548	3,618	16,506

* Not including university programmes and courses for non-degree study programmes

** Including non-degree study programmes

Source: ÖSTAT, calculations by the study authors

(ii) *Projections for higher secondary level up to 2010*

The Austrian secondary level II is dominated by school forms where graduates have to pass a "Reifeprüfung"-Examination (general higher education entrance qualification) or a "Reifeprüfung"- and TVE Diploma Examination (double qualification with general higher education entrance and professional qualifications allowing immediate entitlement to job on the executive level). The development of the numbers of "Reifeprüfung"-holders is, therefore, an essential descriptive feature of pre-university schooling, at the same time permitting to draw conclusions on future participation in post-secondary forms.

The determining factors for the development of the numbers of "Reifeprüfung"-holders are, on the one hand, the demographic development and, on the other, the extent of participation in pre-university schooling. The simulation model that - briefly described in the following - was introduced by Dell'Mour and Landler.⁶⁸ It allows projections on the further evolution of the numbers of "Reifeprüfung"-holders until

⁶⁸ Dell'Mour, R., Landler, F. 1996, p. 137

the year 2010 by taking transition rates of the individual cohorts of school entrants to their completion of school education into account as well as repeater rates and drop-out rates.

The school year 1995/95 marked the end of a phase at secondary level, which had lasted for around 20 years, in which a pronounced demographic decline had taken place and the corresponding birth year cohorts decreased by around one third. Therefore – in spite of the upgrading of colleges for the training of nursery school teachers or colleges for social - stagnating or even sinking numbers of "Reifeprüfung"-holders were observed up to that time. The smallest birth cohort so far left secondary level II in 1996/97. The following age cohorts show a wavy development.

The demographically-induced changes, however, were and still are conspicuously modified by the extent to which existing education and training offers are actually used. In the two most recent decades, the following basic tendencies within pre-university schooling could be identified in Austria:

- 1) elimination of gender-specific differences in participation rates at the different levels of education and training;
- 2) a conspicuous shifting of the weight from academic (general-education) towards TVE education;
- 3) a general increase of school attendance.

point 1.:

After decades of female under-representation at secondary schools in Austria, the women's share among "Reifeprüfung"-holders exceeded the 50 % hurdle for the first time in 1993.⁶⁹ After the upgrading of colleges for the training of nursery school teachers and for social education, which are mostly attended by women, the share of female "Reifeprüfung"-holders increased to 55 % in 1995/96. The table below shows previous developments as well as projection figures until the year 2010 with regard to the selected rates of transfer into pre-university education differentiated by gender. From the table it can be deduced that the trend towards a growing participation in educational programmes at secondary level II among the female population will remain unchanged also in the future. Transfer rates of women are, with a few exceptions, usually higher than those of men. The share of female "Reifeprüfung"-holders expected for the year 2010 reaches – according to the simulation model – a value of 56.1 %.

point 2.:

The increasing influx to secondary technical and vocational colleges seems unbroken. Since 1990 more students at secondary level II have passed a "Reifeprüfung"- and TVE Diploma Examination (i.e. final examination of the secondary TVE colleges) than a "Reifeprüfung"-Examination (i.e. final examination of

⁶⁹ Gruber, K.H. 1991, p. 50

the academic secondary schools).⁷⁰ The table below ("Selected transfer rates in pre-university schooling") shows that the transfer rates from lower secondary school (HS) to secondary TVE colleges (BHS) or to the upper cycle of secondary academic schools (AHS) projected by Dell'Mour and Landler for the years 2000 and 2010 and also transfer rates from the lower cycle of the AHS to the BHS are increasing steadily. Analysing the transfer behaviour of lower secondary school pupils, a both pronounced and strongly increasing preference for secondary TVE in relation to secondary academic (general-education) schools can be found.

point 3.:

The above-mentioned demographic decline at secondary level has – thanks to existing room-related and personnel capacities – led to a dynamic increase of education and training participation. Thus, transfer rates shown in the following table – with two exceptions (= slight declines of transfer rates from AHS to BHS between 1989/90 and 1993/94 as well as between 1993/94 and 1994/95) – indicate increasing, sometimes even strongly increasing, tendencies.

Selected transfer rates in pre-university schooling, 1989 to 2010 (in per cent)

	CURRENT VALUES			PROJECTIONS		
	1989/90	1993/94	1994/95		2000	2010
HS – AHS	4.0	5.9	6.4	male	5.5	6.2
				female	11.9	14.1
HS – BHS	21.6	24.2	25.4	male	30.2	35.5
				female	34.9	41.1
AHS – BHS	33.1	28.2	27.7	male	35.9	39.5
				female	31.1	34.8

Sources: Haider; Indikatoren zum Bildungswesen, 1997; Dell Mour, Landler, Prognosen für den postsekundären Bildungssektor bis zum Jahr 2010

⁷⁰ Gruber, K.H. 1991, p. 50

The analysis by Landler and Dell'Mour for the post-secondary sector shows that in 1996 and 1997 approximately one third of the age cohort (33.9 %) has completed an AHS or BHS form successfully, whereas this figure was at only about one quarter (25,6 %) in 1986. By 2010 the percentage of persons with a "Reifeprüfung"-Certificate or a "Reifeprüfung"-Certificate and TVE Diploma will lie at 43.1 % of the respective age cohort.⁷¹

2.1.2. Tertiary Sector

(i) Age participation rates

The majority of students who have obtained a graduation at secondary level II and want to continue their education opt for an educational pathway at tertiary level; in this connection it is worth mentioning that Austrian students clearly prefer the university to the non-university sector and, in addition to that, the latter is by far not as expanded as the former.

The non-university sector, comprising post-secondary courses in TVE, post secondary colleges and certain university short programmes, is attended by 2.5 % of the 18-to-21-year-old population. In these educational programmes, the women's participation rate is significantly higher than the men's (1.1 % vs. 4.0 %) – a result which has to be linked to the occupational fields mainly covered by the post secondary colleges corresponding to the traditionally female occupational and educational expectations:

- Ø social field: post-secondary colleges for social work
- Ø pedagogical field: post-secondary colleges for teacher training (vocational teachers, vocational teachers in agriculture and forestry, teachers of religion)
- Ø medical field: post-secondary colleges for dietetic and nutritional counselling
post-secondary colleges for ergotherapeutic assistance
post-secondary colleges for midwifery
post-secondary colleges for logopedic, phoniatic and audiometric assistance
post-secondary colleges for specialist paramedical assistance
post-secondary colleges for orthoptic assistance
post-secondary colleges for physiotherapeutic assistance
post-secondary colleges for radiological-technical assistance

Also in the university sector, the share of women surpasses the men's proportion in the age group of 18 to 21 (15.2 % vs. 12.5 %), which is possibly due to the fact that a great number of male "Reifeprüfung"-

⁷¹ cf. Dell'Mour, Landler, F. p. 137ff

holders do not immediately take up a university study after passing their "Reifeprüfung"-Examination or "Reifeprüfung"- and TVE Diploma Examination, but first do their military service.

Table 2.2a

Net participation rates at public and private tertiary levels for persons between the ages of 18 and 21, broken down by educational pathway - school year 1995/96

Age group 18 to 21								
Non-university tertiary level*			University tertiary level**			Whole tertiary level		
m. + f.	male	female	m. + f.	male	female	m. + f.	male	female
2.5%	1.1%	4.0%	13.8%	12.5%	15.2%	16.3%	13.5%	19.1%
9,420	1,978	7,442	52,201	23,689	28,512	61,621	25,667	35,954

* not including programmes and courses at universities and related institutions nor non-degree study programmes

** including non-degree study programmes

Source: ÖSTAT, calculations by the study authors

In the age group between 22 and 25, the university participation rate amounts to 15.5 %. An analysis differentiating by gender gives the following distribution: Whereas in the age group of the 22-to-25-year-old population in the non-university sector there is still a conspicuous predominance of female participation, though in a weaker form, a trend reversal occurs in the university sector: The male participation rate is 16.9 %, the female 14.1 %.

Table 2.2b

Net participation rates at public and private tertiary levels for persons between the ages of 22 and 25, broken down by educational pathway - school year 1995/96

Age group 22 to 25 years								
Non-university tertiary level*			University tertiary level**			Whole tertiary level		
m. + f.	male	female	m. + f.	male	female	m. + f.	male	female
2.1%	1.3%	2.9%	15.5%	16.9%	14.1%	17.6%	18.1%	17.1%
9,760	2,853	6,907	71,575	38,101	33,474	81,335	40,954	40,381

* not including programmes and courses at universities and related institutions nor non-degree study programmes

** including non-degree study programmes

Source: ÖSTAT, calculations by the study authors

Among persons between the ages of 26 to 29, participation in the university sector falls to a share of 9.0 %, still with a stronger presence of male than female students, which could be observed already in the age group before them (10.4 vs. 7.6 %).

In the case of post-secondary courses in TVE (Kollegs) and post secondary colleges, ÖSTAT data for the age group between 26 and 29 is not broken down by age groups any more. We can, however, proceed from the assumption that participation rates are negligibly low in this age group since these educational pathways, lasting between two and three years, will usually have been completed already by then.

Table 2.2c
Net participation rates at public and private tertiary levels for persons between the ages of 26 and 29, broken down by educational pathway - school year 1995/96

Age group 26 to 29 years								
Non-university tertiary level*			University tertiary level**			Whole tertiary level		
m. + f.	male	female	m. + f.	male	female	m. + f.	male	female
negligibly small	negligibly small	negligibly small	9.0%	10.4%	7.6%	9.0%	10.4%	7.6%
negligibly small	negligibly small	negligibly small	50.323	29.191	21.132	50.323	29.191	21.132

* not including programmes and courses at universities and related institutions nor non-degree study programmes

** including non-degree study programmes

Source: ÖSTAT, calculations by the study authors

(ii) *Projections for the post-secondary sector*

Of central interest for educational and occupational policies is access to Austrian universities, determined by the development of transfer rates of the given numbers of "Reifeprüfung"-holders. Until the mid-1980s, a long phase of continuous growth of transfer rates at Austrian universities could be observed, which, however, showed some gender- and school-type specific differences. Thus, 63 % of all "Reifeprüfung"-holders started a full-time, regular study course in 1973, whereas in 1985 this percentage was already 68 %. In the following, stagnating, partly also declining student numbers enrolling at universities could be found. Already in 1990 and 1991, a new marked reversal of the trend came about: Transfer rates increased significantly and reached peak levels.

These contradictory factors were taken into account in the projections by Dell'Mour and Landler, who, among other things, analysed the development of the university sector, in so far as the relatively high values, which recently could be observed, were held at an essentially constant level. For the year 2010, according to Dell'Mour and Landler, a 92 % enrolment rate can be expected for "Reifeprüfung"-holders from secondary academic schools (AHS). For graduates from secondary colleges for engineering (HTL)

and from secondary colleges for business administration (HAK) it can be assumed that they will study in proportions of 57 % and 54 %, respectively, at Austrian universities. Furthermore, transfer rates of graduates from teacher training colleges as well as from secondary colleges for agriculture and forestry are 41 % and 37 %, respectively.

**Transfer rates of "Reifeprüfung"-holders to Austrian universities:
Previous developments and projections until 2010**

All school types	1975	1980	1985	1991	1995	2000	2010
total	63%	67%	68%	71%	72%	73%	72%
male	68%	72%	73%	76%	75%	76%	75%
female	56%	62%	68%	65%	69%	70%	69%
school type	1975	1980	1985	1991	1995	2000	2010
AHS	73%	80%	89%	90%	92%	92%	92%
HTL	32%	46%	52%	57%	58%	58%	57%
HAK	37%	41%	46%	54%	54%	54%	54%
agriculture and forestry	34%	27%	35%	43%	39%	38%	37%
teachers teaching colleges	0%	0%	0%	33%	41%	41%	41%

Source: Dell'Mour, Landler, Prognosen für den postsekundären Bildungssektor bis zum Jahr 2010

Starting in the academic year 1986/87, a consolidation phase began within the university sector, which was characterised by slightly declining, or stagnating, figures of new student enrolments, the end of which, according to the projection model by Dell'Mour and Landler, could be expected for the mid-1990s. Reality, however, shows a different picture: In the winter semester 1996/97 – in contrast to the winter semester of the previous year – an 8.5 % decline of first-year university students was recorded. In the winter semester 1997/98 this decline continued, with 4.9 % enrolling for the first time as against the previous year.⁷²

First-year students at the universities for arts and music⁷³ experienced a decrease in numbers to 2.7 % in the winter semester 1996/97 and to 13.3 % in the winter semester 1997/98 – the latter, as shown by the table below, being of subordinate relevance only when expressed in absolute figures.⁷⁴

The high growth of student figures admitted to "Fachhochschul"-courses in Austria has to be seen under the following aspect: The "Fachhochschul"-sector is still in the setting-up phase, which means that the establishment of new institutions brings about a growth in first-year student figures. Assuming that the

⁷² BMWV, dept. I/B/14

⁷³ formerly called "Kunsthochschulen" (colleges for arts and music), now "Universitäten der Künste"

⁷⁴ BMWV, dept. I/B/14

numbers of those applying for a study place will also in the future exceed – or be equivalent with – the numbers of vacancies, the year when no more new "Fachhochschul"-courses are established will mark the time when first-year students' figures will, with some exceptions, remain stable.

**Development of students admitted to universities,
universities for arts and music, and "Fachhochschul"-courses for the first time**

Winter semester	first-year students at universities		first-year students at universities for arts and music		first-year students at FHS-courses	
	absolute	change in %	absolute	change in %	absolute	change in %
1995/96	24,106	+3.7	858	-7.5	1,199	+114.9%
1996/97	22,065	-8.5	835	-2.7	2,204	+83.8
1997/98	20,976	-4.9	725	-13.2	2,536	+15.1

Source: BMWV, dept. I/B/14

The total decline of first-year students (at universities, universities for arts and music, "Fachhochschul-courses) amounts to 4 % in the winter semester 1996/96 and in the following winter semester a decrease of 3.5 % can be observed.⁷⁵

Reasons for the declining influx to universities are manifold and can be listed here in keywords only: the austerity package; the creation of an alternative post-secondary education ("Fachhochschul"-courses); deterring study conditions such as overcrowded lecture halls; increasing unemployment among university graduates; lack of assistance by professors, etc.

Furthermore, previous developments as well as projected assumptions with regard to gender-specific differences in university access are of interest. Whereas the proportion of new female entrants was still below 30 % at the end of the 1960s, the winter semester 1984/85 for the first time saw more women than men taking up a study course. Through the upgrading of colleges for the training of nursery school teachers and of social education primarily attended by young women, the circle of female persons entitled to enrol at universities was dramatically increased. In correspondence with these current developments at secondary level, Dell'Mour and Landler reckon with an increase of the women's share among new entrants to 54 % by 2010.

Analysing new student cohorts in relation to the corresponding age group, 21 % of this age group took up a university study in 1994, with the proportion of women being conspicuously higher than the men's (23.3 %

⁷⁵ BMWV, dept. I/B/14

and 18.9 %, respectively). A comparison: In the year 1980, new students made up 13.3 % of the corresponding age group. In 1970, it was a mere 8.7 % who changed over to an Austrian university. At that time, the men's participation rate was 11.6 % and thus more than double as high as the women's. Around the year 2000, we can – according to the projection model by Dell'Mour and Landler – reckon with a Hochschule enrolment of more than a quarter of the respective age group, in the year 2010 already with about 30 %.

Looking at the development of total student figures (at universities and universities for arts and music), the picture is the same as 40 years ago: continuously rising student figures. In the past academic year (1996/97) already approximately ten times as many students attended universities as 1955/56. In the field of universities the number of full-time students in the winter semester 1995/96 stayed essentially the same as in the winter semester 1996/97 (1995/96: 213,525 students, 1996/97: 213,510 students), but sank slightly in the winter semester 1997/98 (by 0.6 %).⁷⁶

In the development of total student figures at the universities for arts and music⁷⁷ a minor increase of 0.8 % becomes visible in the winter semester 1997/98 as against the winter semester of the previous year.⁷⁸

Similar things can be said about the quantitative development of participants in "Fachhochschul"-courses and about students admitted to "Fachhochschul"-courses for the first time: Major growth rates are related to the progressive expansion of the "Fachhochschul"-sector. Stopping the expansion would – due to the study place management – lead to a stabilisation of student figures, which fluctuate only inconsiderably.

Development of students at universities, universities for arts and music, and FHS-courses

Winter semester	students at universities		students at universities for arts and music		students at FHS-courses	
	absolute	change in %	absolute	change in %	absolute	change in %
1995/96	213,525	+2.0	6,833	-0.1	1,754	+152.4
1996/97	213,510	0.0	6,835	0.0	3,756	+114.1
1997/98	212,247	-0.6	6,893	0.8	5,769	+53.6

Source: BMWV, dept. I/B/14

Including universities, universities for arts and music, and "Fachhochschul"-courses, a slight increase by 0.4 % in the winter semester 1997/98 as against the previous year's winter semester is calculated.⁷⁹

⁷⁶ BMWV, dept. I/B/14

⁷⁷ formerly called colleges for arts and music

⁷⁸ BMWV, dept. I/B/14

Of immediate significance for labour market policies is the further development of the numbers of those persons who complete their studies successfully and leave universities as so-called young graduates. The relevant measuring quantity is the success rate which indicates the size of the share of new students who reach a certain (e.g. first) degree. In contrast to that, the drop-out rate specifies the proportion of those persons who leave the university system without graduation. The past two decades are characterised by an ongoing tendency of continuously increasing drop-out rates. In the year 1988, this rate reached its peak level of 57 %. In the more recent past, this trend could be interrupted. The success rate increased to 52 %, the men's being at 51 % and the women's at 44 % (1993 values). For proving the assumption that success rates will keep growing in the future, the observation period seems too short, however.⁸⁰

In the case of the numbers of university graduations, the demographically induced consolidation phase started to make its full impact felt in the mid-1990s. Early 1990s' graduates were born at the time of the baby boom in the 1960s. The following decline led to stable numbers of new entrants. This development lasted for a decade so that the level reached in the year 1993 (11,500 graduations, of which 10,350 were first degrees) should remain basically unchanged in the coming decade.⁸¹

2.1.3. Adult Education

As the educational attainment of the population is closely linked to the structuring, design and structurability of working life, its detailed analysis – in particular regarding certain problem groups such as unqualified or poorly qualified people – is of special interest for occupational policies.

(i) Labour market opportunities in relation to educational attainment

According to the Population Census 1991, a proportion of 37 % of Austrians have completed an apprenticeship training as their highest completed training track, with marked gender-specific differences existing in this respect. Whereas nearly half of all male Austrian adults (48.6 %) have completed an apprenticeship training, only little less than one quarter of Austrian women (24.4 %) have done the same. The percentage of compulsory school graduates is similarly high as that of apprenticeship graduates: 34.2 % of the population between 25 and 64 do not have any secondary graduation beyond compulsory school level. Also here there are similarly high differences in the gender-related differentiation, which, however, show a reverse orientation. Approximately one quarter of men (25.3 %) and 43.1 % of women have completed only general compulsory education.

⁷⁹ BMWV, dept. I/B/14

⁸⁰ cf. Dell'Mour, Landler, p. 138 ff

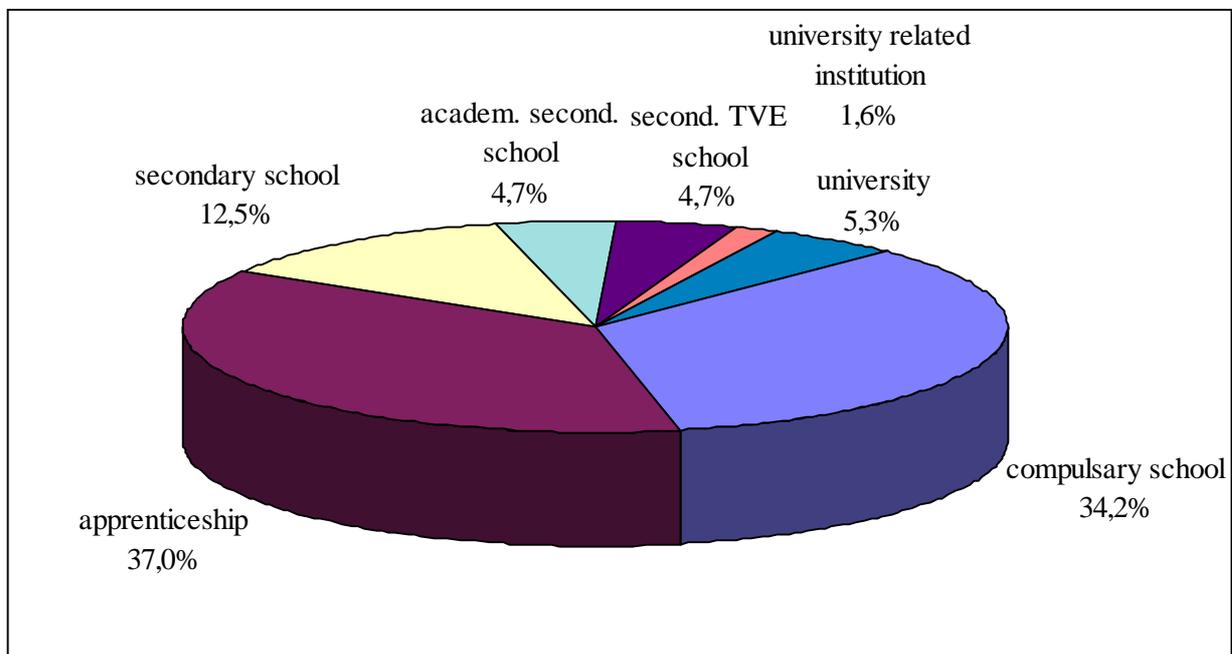
⁸¹ cf. Dell'Mour, Landler, p. 138 ff

The percentages of Austrian adults who have other educational qualifications are conspicuously smaller. Thus, only 12.5 % of the population have completed a secondary school, with the female rate surpassing the male's by far (17.0 % vs. 8.0 %, respectively). 4.7 % of both men and women are graduates from academic secondary or secondary TVE schools; gender-specific differences are small in this respect.

The university graduation rate among the Austrian population is at a total of 5.3 % and is considerably higher among men than among women (6.9 % vs. 3.7 %, respectively). A very small share of Austrian adults (1.6 %) have completed a pathway at a university-related institution⁸² (teacher training college, post-secondary course in TVE, etc.) as their highest educational attainment. Since they cover primarily occupational profiles traditionally preferred by women, a higher rate among women than among men can be found here (2.3 % vs. 0.9 %, respectively).

Graph Fehler! Unbekanntes Schalterargument.

Proportions of the population between the ages of 25 and 64 with corresponding highest educational attainments



Source: Population Census 1991

Triggered by the ongoing trend towards educational expansion, which makes the obtainment of a vocational qualification the rule and the "state of being unqualified" the exception, unqualified workers are marginalised more and more or even pushed out of the labour market altogether. In other words: Qualified persons are better protected against unemployment than unqualified ones.⁸³ This fact can be proven

⁸² Classification criterion of Population Census 1991, ÖSTAT

⁸³ Lechner, F. et al. p. 186

impressively by means of employed persons' shares in the labour force which are specified in the following and broken down by educational levels.

Workforce who have "merely" a graduation from general compulsory education show the smallest participation rates in working life compared to persons with higher educational qualifications. Another fact worth mentioning is that compulsory school graduates are affected by the comparably highest unemployment rate – a trend which clearly increased in the last year of the period under observation, between 1993 and 1995 (in 1993: 93.6 %; in 1994: 94.6 %; in 1995: 90.0 %). For employed people with graduations at a higher educational level, the employment situation in general seems to be more stable, fluctuations occur only to a small extent. Among graduates with educational qualifications from secondary level II, a continuous increase of the employment rates can be found.

**Working people broken down by highest completed school education
over time (yearly averages 1993, 1994, 1995)**

School education	Workforce (in 1,000)			Employed persons (in 1,000)			Proportion of employed persons in the working population (in %)		
	1993	1994	1995	1993	1994	1995	1993	1994	1995
Compuls.	1003.8	1086.4	1086.4	939.9	1027.7	977.8	93.6%	94.6%	90.0%
Apprent.	1528.0	1520.4	1550.7	1465.3	1471.4	1499.7	95.9%	96.8%	96.7%
BMS	427.6	411.0	426.3	414.9	399.4	415.6	97.0%	97.2%	97.5%
Second.	479.6	547.6	547.6	465.4	534.3	547.3	97.0%	97.6%	99.9%
Univ.	282.6	314.9	324.8	277.8	309.1	318.5	98.3%	98.1%	98.1%

Source: Microcensus 1993, 1994 and 1995

Among those unemployed and over 25 who have no graduation at secondary level II there is a very small proportion of persons (5.9 %) who have completed only nine years of compulsory schooling without reaching a qualification. The remaining unemployed adults (94.1 %) have successfully completed lower secondary school.

Analysing the distribution of adults with completed compulsory education in the residential population (25+), the following clear trend becomes visible: The higher their ages, the higher is also the number of compulsory school graduates in the residential population. Thus, the proportion of the age group 25 to 34 makes up 14.6 %, whereas it grows continuously in the following age groups, and finally, among the 55-to-64-year-old population, amounts to 19.0 %. 33.9 % of all adults with a completed compulsory education fall into the category "persons over 64".

Of the total number of 791,128 adult working persons who have completed compulsory education as their highest educational track, 90.9 % have a job, the remaining 9.1 % are registered unemployed with the

Public Employment Service Austria. Differentiating by age cohorts in 10 year groups it can be found that among the employed compulsory school graduates there is always a similar proportion (nearly one third) in the age groups of those aged 25 to 34, those aged 35 to 44, as well as those aged 45 to 54. Unemployed people with a completed compulsory education are to their greatest part (34.6 %) between 25 and 34 years old.

Comparing the total number of working people with a completed compulsory education with the total number of non-employed people (housewives, old-age pensioners, etc.), a ratio of approximately 2:3 is found.

Table 2.3

Persons with a completed compulsory education as their highest completed school education broken down by participation in working life and ages (in 10 year groups and total)

Persons with completed compulsory schooling	Working population					Non-work
	Absolute	Proportion in residential population (25 years and older)	Absolute	Employed persons (25 years and older)	Registered unemployed people (25 years and older)	Absolute
25-34	311,646	14.6%	230,229	28.6%	34.6%	81,417
35-44	325,381	15.3%	240,972	30.7%	28.2%	84,409
45-54	366,469	17.2%	240,382	30.6%	28.2%	126,087
55-64	404,176	19.0%	75,737	9.6%	9.0%	328,439
65 and older	721,363	33.9%	3,808	0.5%	0.0%	717,555
Total	2,129,035	40.3%	791,128	90.9%	9.1%	1,337,907

Source: ÖSTAT, Population Census 1991, Public Employment Service Austria: Data on Registered Unemployed Persons in 1991

In the Austrian education system, initial and continuing vocational training is primarily imparted via the obtainment of educational certificates. Taking this fact into consideration, the following persons can be considered unqualified:

Ø *Persons who have not completed lower secondary school:*

Data in Austria does not allow an exact delimitation of the group of persons who have not completed lower secondary school. Both the Population Census and the Microcensus have as their lowest educational category graduations from general-education compulsory education. Some facts do, however, allow to draw conclusions on the groups in question. Approximately one in six persons who was looking for an

apprenticeship post in Vienna at the end of 1996 (102 persons) did not have a completion of lower secondary school, in the other federal provinces their number totalled 180.⁸⁴

Ø *Persons who do not take up a secondary school-based or vocational training after they have completed compulsory education:*

The proportion of those who – after completion of general compulsory schooling – did not attend any secondary school or vocational training was 3.4 % in relation to the residential population of the same age, i.e. approximately 3,200 young people, in the school year 1995/96. In the 1970s, the proportion of persons who did not graduate from a secondary education or training programme after completing compulsory education was 18 % and basically sank continuously over the following years.⁸⁵

Ø *School drop-outs:*

In Austria, school drop-outs are not covered statistically; therefore no reliable quantitative statements on persons can be made who take up a secondary education and training pathway after graduation from compulsory education, but drop out and leave the school system completely. Not included under this heading are those who drop out from one school form to change to another one.

Ø *Apprenticeship drop-outs:*

In the Apprenticeship Statistics of the Austrian Economic Chamber⁸⁶ a retention rate of 92 % is specified for apprentices. This means that, by the third apprenticeship year, a proportion of eight per cent have interrupted their dual training. Existing data does not permit any clear statement on the further structuring of the educational participation behaviour of apprenticeship drop-outs.

The four described categories, which here have been termed unqualified, are not one homogeneous group but rather differ considerably from each other as far as their educational backgrounds, skills, and personal life situations are concerned. According to statements made both by educational experts and apprenticeship-post seekers, school drop-outs have higher chances to find a training post than persons without a graduation from lower secondary school or compulsory school graduates who do not take up a higher education or training pathway.⁸⁷

The proportion of unqualified or poorly qualified persons who, at a later date, complete the track which they are missing or which they have interrupted cannot be identified exactly by empirical means, according

⁸⁴ Lechner, F. et al. 1997, p. 205

⁸⁵ Lechner, F. et al. 1997, p. 206

⁸⁶ Lehrlingsstatistik (Apprenticeship Statistics) 1994, p. 14

⁸⁷ Lechner, F. et al. 1997, p. 207

to an estimation by Schneeberger, however, they make up 22.1 % of the 17-to-19-year-old compulsory school graduates⁸⁸.

(ii) *Educational participation of unqualified and poorly qualified persons*

As can be gathered from the results of the Fessel+GfK study on lifelong learning, 52 % of the interviewees state that they have already attended a continuing education and training course or are at present attending one at their own initiative after or besides their school education. The socio-demographic differences are pronounced. Thus, the actual continuing education and training level continuously grows as the personal educational level (and as the educational level of their parents) increases. Among the interviewees who, apart from a completed compulsory education, do not have any secondary graduation, only 35 % are active in continuing education and training, compared to university graduates with a percentage of 84 %. In the differentiation by occupational position it is striking that the weakest participation in continuing education and training is found mainly among unqualified workers (22 %).⁸⁹

Interest and information levels on continuing education and training opportunities have close correlations to the actual CET participation. But also prior school experiences determine the later continuing education and training willingness: Persons who enjoyed learning when they were at school and received positive motivations for an independent obtainment of knowledge and skills in the course of their school-time are later more prepared to start continuing education and training activities.⁹⁰

For persons who have not completed lower secondary school there is the possibility to obtain the respective qualification externally. Preparation (or bridge) courses are offered at specified Adult Education Centres in Vienna, at the Vocational Support Institutes (BFI) in the Tyrol and Upper Austria. At selected schools, autonomous examination commissions have been established for that purpose. The number of those completing lower secondary school at a later time in their lives is not assessed statistically by the responsible Regional Education Boards or the Regional Education Authority for Vienna. According to a general enquiry carried out by the Chamber of Labour Vienna, little less than 200 candidates did their examinations in Vienna in the school year 1995/96.⁹¹

Preparation or bridge courses for the external completion of lower secondary school targeted for foreign youths are also among the offers of adult education institutions. With these late qualification measures, educational policy makers intend to promote the integration and equality of opportunity of the mentioned target group compared to Austrians.

⁸⁸ cf. Schneeberger 1994, p. 8ff

⁸⁹ Ulram, A.P, Textkommentar 1996, p. 9

⁹⁰ Ulram, A.P, Textkommentar 1996, p. 9

⁹¹ Chamber of Labour Vienna

(iii) *Participation in CET measures by different criteria*

The following does not refer to CET activities in the framework of the mentioned special forms offered at the schools and colleges for people under employment.

Continuing education and training of the Austrian workforce mostly has the character of an investment and shows a high, and probably still growing, participation. In this connection, adaptation-oriented training forms that are not closely linked to a career advancement expectations dominate over traditional CET measures motivated by wishes for career advancement.⁹² Thus, a survey carried out by Fessel+GfK in 1996 found that 58 per cent of all working people have already participated actively in continuing education and training measures; nearly half of them (47 %) have taken part in internal measures (they have completed a special training within their own company). 79 per cent of the working people expressed their intention to attend CET activities in the future.⁹³

In the differentiation by CET forms, the above-mentioned survey shows a dominance of course attendance (64 %) and reading job-specific, technical literature (61 %), where course attendance is the socially most attractive type, being accepted mainly by persons with lower educational attainments. Reading job-specific, technical literature, however, mainly attracts the higher educational levels and, moreover, farmers, persons with strong interest in continuing education and training, and persons who already during their school-time received positive learning motivation. Approximately half of the interviewees have completed or are completing seminars – in particular, the higher educational and occupational groups. 40 % have attended or are attending lectures, with working women and highly motivated people particularly often represented. Participation in internal training courses is especially pronounced in the case of working people who are in executive positions or are employed as skilled workers. Stays abroad for educational purposes are typically carried out by younger people, by persons who are still in training, and by old-age pensioners because of their great amount of free time. Audio-visual aids are used most frequently by young, highly motivated persons.⁹⁴

As far as differences between occupational statuses are concerned, there are differing CET participation rates (see table below): 80 % of managing employees and senior civil servants participate in CET activities; self-employed persons and free-lancers show a similarly high participation behaviour (78 %); the lowest participation rate is found among poorly qualified and unqualified workers (22 %).⁹⁵

⁹² Schneeberger, A. 1997, p. 2

⁹³ cf. Ulram, P.A.

⁹⁴ cf. Ulram, P.A.

⁹⁵ cf. Ulram, P.A.

As far as the high CET participation rate in the group of those employed in the Public Service are concerned, this must be seen in the context that costs accruing in connection with CET activities are – to a great extent or completely – borne by the public.

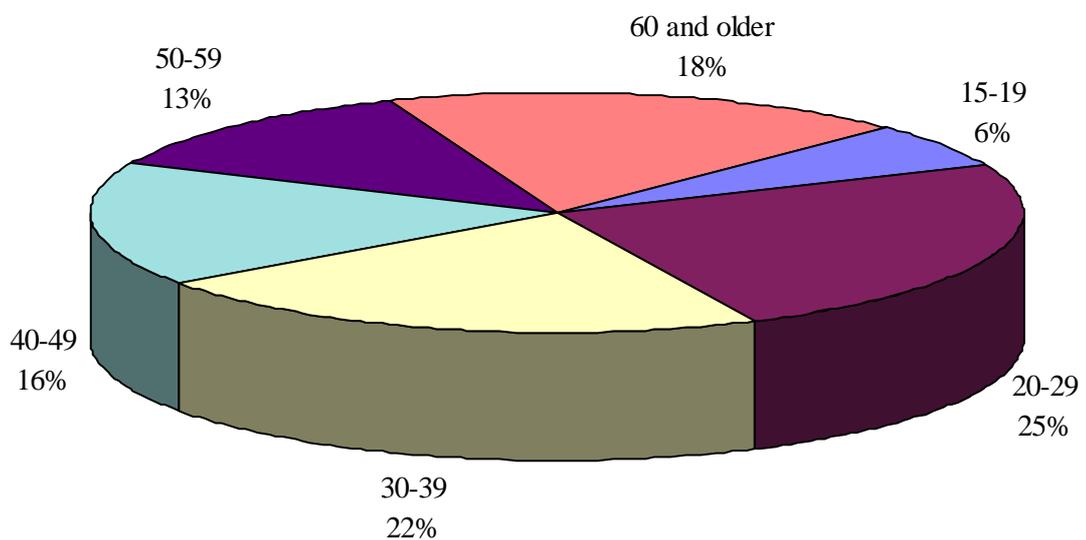
Continuing education and training participation broken down by occupational status, 1996

Occupational status	(Basis)	Active in continuing education and training
Managing employees / senior civil servants	n=261	80 %
Self-employed / free-lancers	n=174	78 %
Non-managing employees / junior civil servants	n=940	69 %
Skilled workers	n=650	51 %
Farmers	n=143	47 %
Unemployed	n=108	41 %
Unskilled / semi-skilled workers	n=302	22 %

Source: Fessel+GfK; Lebenslanges Lernen, Lifestyle 1996

Graph Fehler! Unbekanntes Schalterargument.

Use of CET institutions by age cohorts



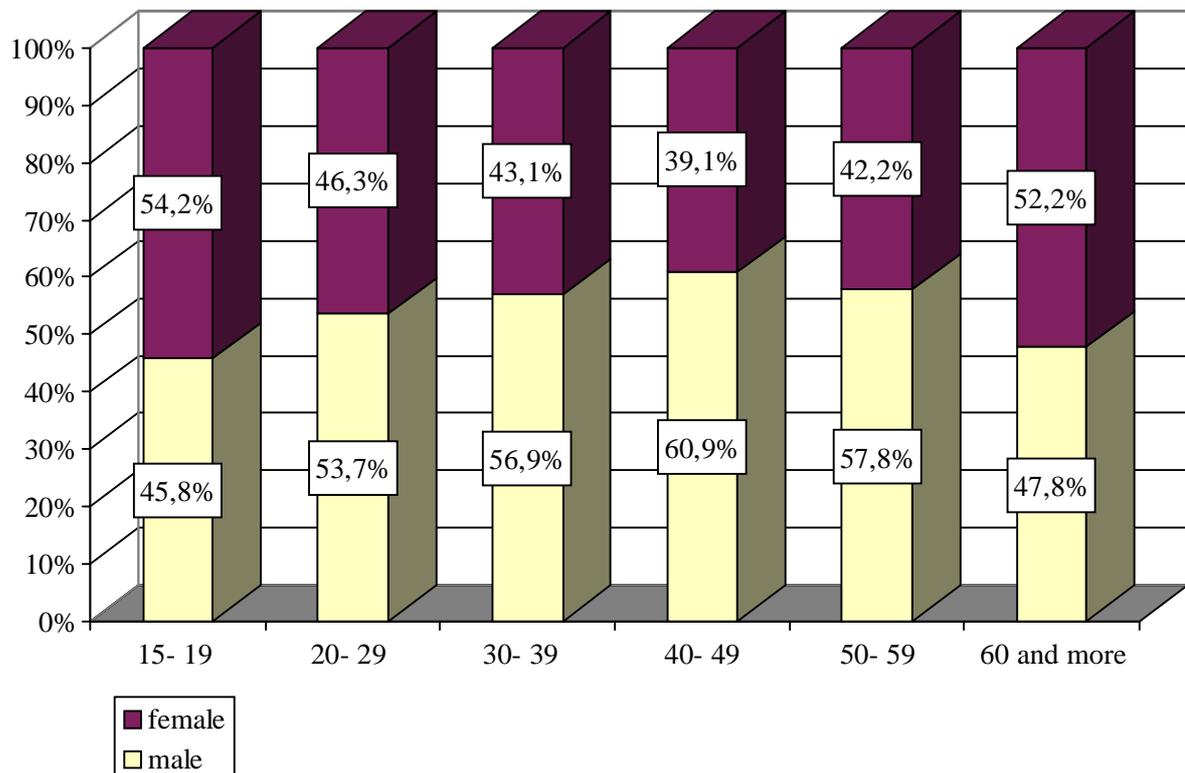
Source: Fessel+GfK; Lebenslanges Lernen, Lifestyle 1996

As shown in the graph above, which is based on the Lifestyle study 1996 (Fessel+GfK), predominantly persons in the age groups from 20 to 39 take part in measures offered in the field of adult education (participation rates: 24.4 % and 22.0 %, respectively). Among the 40-to-49-year-old population, already a slightly declining participation frequency can be observed (16.5 %), which among the 50-to-59-year-olds still intensifies (12.6 %). Persons over the age of 60, however, again use continuing education and training offers more often, which – with a high probability – can be explained by their far-reaching possibilities of free time during retirement. Finally it can be stated that among the 15-to-19-year-old population, the participation rate in CET measures is rather low (6.2 %) – a result that does not come as a surprise in the face of the Austrian educational landscape since at that age typically school forms at secondary level II are attended.

When studying the gender-specific CET participation it comes to light both for the youngest age group (15 to 19 years) and for the oldest one (60 years and older) that CET institutions are used slightly more by women. This distribution turns around in favour of men in the age group between 20 and 59, who in particular between 40 and 49 intensively make use of CET activities (60.9 %).

Graph Fehler! Unbekanntes Schalterargument.

Use of continuing education and training institutions broken down by age groups and gender



Source: Fessel+GfK; Lebenslanges Lernen, Lifestyle 1996

A still more detailed differentiation by the type of CET form shows that in-company CET is most frequently carried out in the form of course participation and reading of job-specific, technical literature (utilisation rates of 64 % and 61 %, respectively). In this connection it has to be said that course attendance is the socially most comprehensive form and is also used by persons with lower qualification levels. The measure of reading job-specific, technical literature is used by above-the average shares of persons from the higher educational levels as well as by farmers. In-company training courses are characteristic of persons in top positions and of skilled workers. Stays abroad are typical for younger persons who are still in training. The comparably lowest utilisation level is found in the cases of universities and related institutions, post-secondary courses in TVE, and correspondence courses.⁹⁶

Wishes for CET events were the subject of a study carried out on behalf of the Austrian Association of Adult Education Centres (VÖV) in 1994. The question "What is important to you personally when attending a CET event? Which demands and requirements do you make and which wishes do you have in connection with such an event? What would you expect from it?" brought the following results⁹⁷: The quality of the offer is clearly in the foreground, and expresses itself in interesting contents (40 % agreement), good teachers and trainers (40 % agreement), good teaching material (35 % agreement), high level (30 % agreement), and the ability of the teachers and trainers to meet individual interests (29 % agreement).

Also economical aspects play a key role when attending CET events. 41 % of those questioned think that reasonable course fees are essential.

In addition, time aspects must be termed decisive. They comprise both the right course times and the proximity – and thus the quick reachability – of offers. As far as the proximity of venues is concerned, however, there are remarkable differences: Whereas it is considered relevant that the venue is near from home (31 %), the distance from the place of work is comparatively unimportant (12 %). This shows that those active in CET wish to make use of offers rather from their homes than from work.

A pleasant atmosphere, which is greatly influenced by the communicative conditions in the CET events, is considered important by 33 % of interviewees.

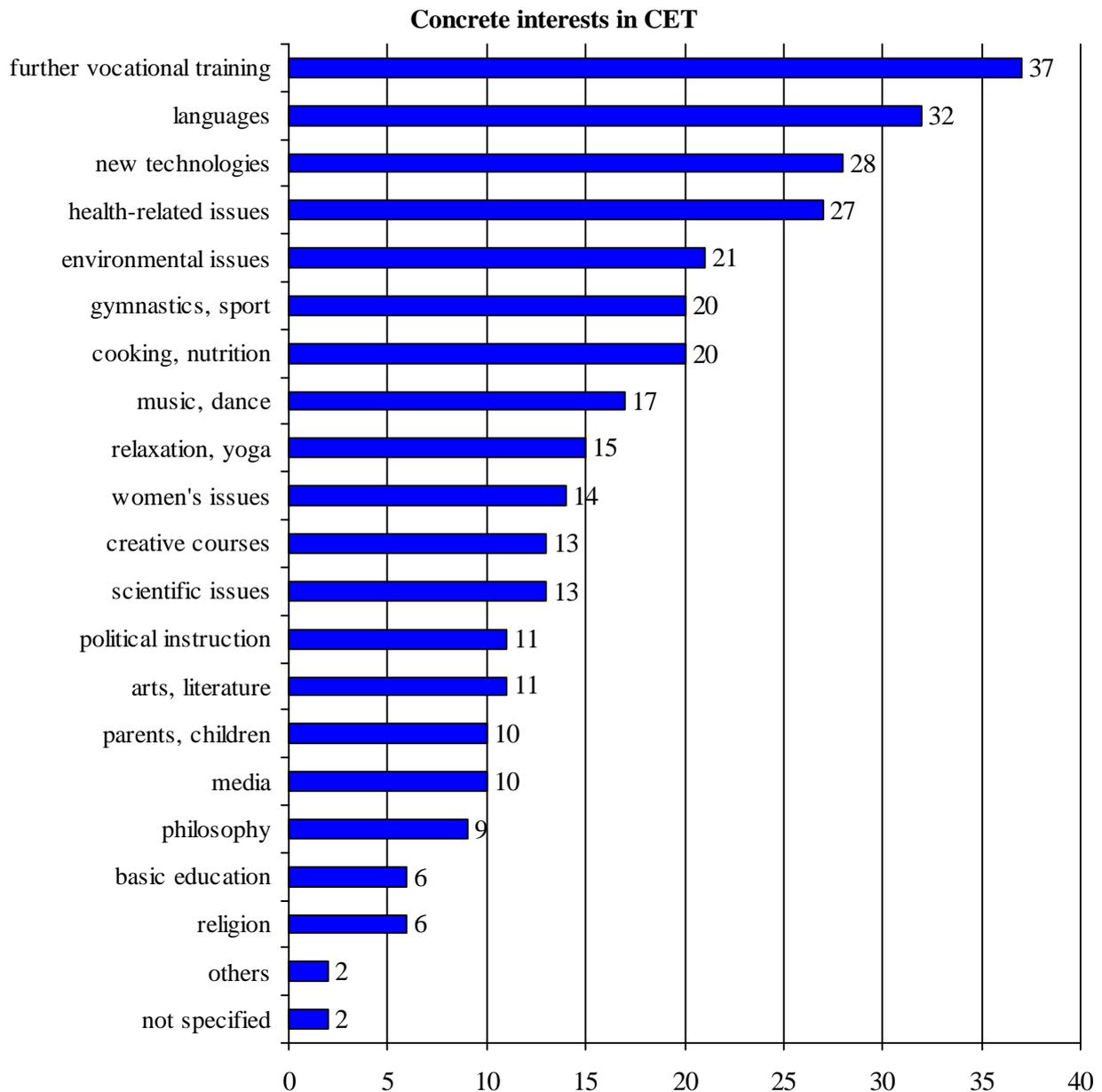
In the framework of the VÖV study also the question for CET interests was asked: "Assuming the desired prerequisites for attending a CET event are present. Which subject or field would you be interested in?" The most striking result was the clear dominance of professional and vocational topics in further training, which were named by 37 %, to which a share of 28 % can be added who expressed their interest in

⁹⁶ Ulram, A. P. 1996, p. 11

⁹⁷ Filla, W. 1995, p. 7ff

"computers and other new technologies", which can be assumed to be mostly connected with working life. Since languages, which rank second with 32 %, also have a pronounced occupational dimension and since some other CET topics have job-relevant contents as well, work-related training can be seen as the centre of the population's CET interests, which on the whole are quite diversified.⁹⁸

Graph Fehler! Unbekanntes Schalterargument.



Source: VÖV 1995, Concrete interests in CET

A relevant study from the year 1997 shows that, from the viewpoint of the economy and industry, branch-specific specialist knowledge and skills, EDP (commercial rather than technological) and marketing have

⁹⁸ Filla, W. 1995, p. 8

been the most common further training topics of the past three years. But also foreign languages and personality-related skills such as communication, staff management, etc. have often been the theme of further vocational training.⁹⁹

2.2. Estimation of graduation and CET participation gaps

The coalition parties have made some statements on issues connected with (continuing) education and training policies in their working agreements, but no quantitative aims are established for the expansion of lifelong learning. This means also that more differentiated data regarding desirable participation rates in the various vocational and continuing training paths are missing. The agreements do not clearly state the major targets to be followed, either, so that no conclusions can be deduced for the future (cf. 1.1: "Political Context"). This makes it extremely difficult to determine Austrian figures on "educational graduation gaps" in the strict sense of the project specifications. For a quantification, therefore, the target percentages applied have been proposed by the OECD in the framework of the project specifications. These target rates are defined as those graduation rates at the secondary level II, post-secondary level and adult education that can be encountered in countries with above-average graduation rates.¹⁰⁰

(i) *Secondary level II*

In the year 1981, the percentage of young people who reached a graduation at the secondary level II by the age of 20 was 72 % in Austria and increased to 74 % in the year 1991. By 1991, the share of those aged 23 who had completed an education or training track after compulsory schooling reached a total value of 79 %. This puts Austria among the leading countries in Europe, with similarly high values being reached only by Switzerland, Germany, Denmark, and Luxembourg.¹⁰¹

The high share of young Austrians who could complete an educational pathway at secondary level before their 23rd birthday is connected with a low unemployment rate among young people and young adults below the age of 25 (5.9 %¹⁰²), which is far below the EU-wide youth unemployment rate (20.9%¹⁰³). In the course of a comparative country analysis it has been found that a relatively high share in mid-range qualifications is most frequently linked to low unemployment and high economic performance.¹⁰⁴

⁹⁹ Schneeberger, A 1997, p. 3

¹⁰⁰ OECD, Lifelong Learning for All, 1996

¹⁰¹ Schneeberger, A. 1996, p. 252

¹⁰² EUROSTAT, July 1997

¹⁰³ EUROSTAT, July 1997

¹⁰⁴ Schneeberger, A. 1996, p. 241

In the international comparison it is found that the integration of young people into working life is most successful in those countries where the majority of young people are qualified in a practice-oriented way in the upper secondary level's TVE education and training. These countries are Austria, Germany, Switzerland, Denmark. It does make a difference if vocational training and integration into working life take place simultaneously, or if first basics are taught at school and only afterwards an integration into working life is attempted.¹⁰⁵

Therefore, a major aim must be the further reduction of premature leaves from school and/or vocational training without graduation as well as the maintenance of the high proportion of vocational training in the programmes after general compulsory schooling. Against this background, practical talents must neither be overlooked nor be discriminated against. This means that the variety and closeness to practice of educational offers for young people over the age of 15 must be maintained as well as that their ambitions for further vocational qualifications must be promoted.¹⁰⁶

For quantifying the graduation gap, the current percentage of teenagers and young adults with a completed educational pathway at secondary level II is used, which amounts to 79.8 %. For calculating this share, the age cohort of those between 20 and 24 is used – for two reasons: On the one hand, this cohort includes also persons at secondary academic schools (AHS) and secondary TVE colleges (BHS) who obtain their "Reifeprüfung"-Certificate or "Reifeprüfung"-Certificate and TVE Diploma at an age that lies above the "normal" age (repeaters or those who – due to their dates of birth lying in autumn or winter – started their school careers at a higher age). On the other hand there is the possibility in Austria to obtain a qualification at the secondary level II also in the framework of second-chance education (e.g. post-secondary courses in TVE, academic schools for people under employment, foreman courses, courses for building workers, etc.). Persons who in this way successfully obtain a diploma at the secondary level II are taken into consideration to a high extent within the selected age cohort.

The share of young people with a graduation at the secondary level II (79.8 %) compares to an orientation value – in the sense of a target percentage – of 90 %¹⁰⁷. As a basis for calculating the graduation gap the following age groups (cohort of those between 15 and 19) have to be used. This cohort comprises 458,689 persons. In the following table the graduation gap for secondary level II is shown to be at around 46,800.

Table 2.6a

Graduation gap - secondary level II

¹⁰⁵ Kirsch, J.-L. 1994, p. 3

¹⁰⁶ Schneeberger, A. 1996, p. 255

¹⁰⁷ Suggested by the OECD in the framework of the project specifications

Age cohort of those aged 15 to 19 in a yearly average	Percentage of young people with graduation at the secondary level II	Target percentage	Graduation gap
458,689	79.8%	90%	46,786

Source: Bevölkerungsstatistik 1995, Microcensus 1996, calculations by the study authors

(ii) *Post-secondary level*

In 1995, the percentage of those who could complete an education and training pathway at the post-secondary level between the ages of 25 and 34 was 9 %. In an international comparison this seems to be an extremely low graduation rate at first sight: In the OECD education statistics this figure is undergone only by Italy and Turkey, both states with percentages of 8 % in the age cohort of 25 to 34 who have a higher education in those countries.¹⁰⁸

In connection with Austrian university graduation rates, again the note in the Council Directive 95/43/EC of 20 July 1995 is of relevance, which states that the graduation from BHSs (secondary technical and vocational colleges) is recognised as a diploma education in the EU-area and is, therefore, treated equally to post-secondary TVE education and training programmes in other EU Member States. As a result, an Austrian graduation rate that does not include BHS-graduations cannot be compared with the respective rates of other countries.

For the economic and social development of a country, however, the formal rate of university graduations, which does not differentiate between various fields and is not defined with regard to their fields of utilisation, can only be one indicator among many. Many but not all countries with a high university graduation level boast a relatively high wealth among their populations, measured by GDP per inhabitant. There is also the reverse case, namely that a relatively low university graduation level is connected with a relatively high wealth – this applies to Switzerland, Austria, and also to Italy. Therefore it must be kept in mind that the general situation in the labour market does not correlate with the university graduation level!¹⁰⁹

The Austrian universities have to cope with a steady massive influx of students, whose total numbers at universities and at the universities for arts and music nearly quadrupled since the beginning of the 1970s.

The high university participation rate prevalent in Austria can be made transparent impressively by means of new students' proportions in the corresponding age group: In 1994, this share was already more than one

¹⁰⁸ OECD 1997, p. 38

¹⁰⁹ compare Schneeberger, A. 1996, p. 239

fifth (21 %), and an increase can be expected for the future. Around the year 2000, the projection model of Dell'Mour and Landler shows a university participation of more than one fourth of the respective age group; and by the year 2010, already approximately 30 % can be expected (cf. for more details Section 2.1.2: "Tertiary Sector").

The number of study courses successfully completed, however, does not correspond at all with the number of study courses taken up, but remains under this value to a considerable extent. In a Federal Ministry of Science and Research publication of the year 1994 "Statistiken und bildungswissenschaftliche Befunde zum Studienerfolg", graduation rates in the courses Mechanical Engineering and Electrical Engineering as well as Business Administration and the Commercial Sciences are taken as examples; they have been adjusted for "per-forma students": For Mechanical Engineering and Electrical Engineering the rate is 66.1 %, for Business Administration and the Commercial Sciences it lies at 63.6 %.¹¹⁰ Against this background it can be said that the Austrian university sector is characterised not so much by a "participation gap", but rather by a "graduation gap".

In this context it has to be noted that an increase of the participation rate in university-based pathways, which is very high anyway, must be considered problematic under the current conditions for a number of study courses since rooms and personnel resources are utilised to the maximum or are even overloaded. Against this background it seems natural to raise completion rates in order to increase the graduation rate. The question how high this should be depends on a variety of economic and social factors.

At the post-secondary level, a new type of educational pathway was created in Austria in the year 1994: the "Fachhochschule". "Fachhochschul"-courses have only limited entrance capacities so that the number of applicants for a certain study course normally exceeds the number of those who are actually accepted.

In this respect it has to be noted, however, that the "Fachhochschul"-courses – due to their high level of specialisation – have been conceived as a track with controlled access. An extension of "Fachhochschul"-course places in case the number of applicants exceeds study place contingents would, therefore, not be consistent with political intentions. In the Development Plan for the "Fachhochschul"-sector, an expansion in accordance with the specific aims is identified (cf. Section 2.5: "Dynamic Evaluation of Costs of Lifelong Learning").

To sum up the findings in connection with the field of post-secondary education it must be noted that, to the degree that the "Fachhochschul"-sector is being expanded, which is an aim that was specified in the Working Agreements from 1994 and 1996 (see section 1.1: "Political Context"), the university graduation rate will undoubtedly increase as well.

¹¹⁰ BMWF 1994, p. 24

For the post-secondary field, just like for secondary level II, target percentages for completions were used that can be found in countries with above-the-average high graduation rates. In this connection differentiation is made between "non-university tertiary programmes", "university short first-degree programmes", and "university long first-degree programmes"¹¹¹. The Austrian tertiary sector is compatible with this classification in so far as it can be said that diploma studies at universities (including those for arts and music), "Fachhochschul"-courses, studies at post secondary colleges, university courses¹¹² with a minimum duration of six semesters, provided they do not base on a diploma study, and the former non-degree programmes¹¹³ with a minimum duration of six semesters can be included under the mentioned university long first-degree programmes. For these programmes, therefore, a target percentage of 13 %¹¹⁴ would have to be used.

The classification under the heading "university long first-degree programmes" is based on Council Directive 89/48/EEC of 21 December 1989 on the general system of recognition of higher education diplomas on completion of professional education and training of at least 3 years' duration. In Article 1 (a) it is stated that a diploma is any diploma "which shows that the holder has successfully completed a post-secondary course of at least three years' duration, or of an equivalent duration part-time, at a university or establishment of higher education or another establishment of similar level and, where appropriate, that he has successfully completed the professional training required in addition to the post-secondary course"¹¹⁵.

On the basis of the Microcensus 1996, a share of 10.6 % with a graduation from a university long first-degree programmes (categories "Hochschule" and "Hochschule-related institutions of higher education") in the age cohort 30 to 34 can be calculated. It seems to be justified to use this age cohort since students often dramatically exceed official study durations due to employment, interruptions, or other personal motives, which lead to graduations being achieved at a relatively late point in their lives.

The percentage of 10.6 % in the cohort of those aged 30 to 34 boasting a graduation from a long university form must be relativised with regard to two circumstances: Firstly, the category "Hochschule related institution" – which is used in the Microcensus – includes also post-secondary forms of education with a duration of less than six semesters (former non-degree studies, university courses, post secondary courses in TVE). This leads to an overestimation of the graduation rate from long university forms, which, however, is not really important in terms of quantity since tertiary education forms with a duration of less than six semesters are offered only to a very small extent in Austria. On the other hand the category

¹¹¹ The terms "non-university tertiary programmes", "university short first-degree programmes", and "university long first-degree programmes" are given in the framework of the project specifications

¹¹² Hochschule courses and programmes were converted into university courses when the new University Study Act came into force (in August 1997).

¹¹³ The new University Study Act does not provide for short (non-degree) study programmes any more.

¹¹⁴ suggested by the OECD in the framework of the project specifications

¹¹⁵ Official Journal of the European Community No. L 19/17

"Hochschule" covers also graduations from doctoral studies, which again results in an overestimation – albeit not a considerable one – of the graduation rate of 10.6 %.

The basis of calculations for quantifying the graduation gap must be a younger age cohort. In view of the long university study durations in this country, the use of the age cohort 15 to 24 seems justified, which totals 1,045,897 persons or 104,590 persons per age group.

In the following table the graduation gap for the long university forms is shown. It is made up by 2,510 persons per age group.

Table 2.6b
Graduation gap – long first-degree university programmes

Age cohort of those aged 15 to 24 in a yearly average	Percentage of persons with graduation from a long university programme	Target percentage	Graduation gap (per age group)
1,045,897	10.6%	13%	2,510

Source: Microcensus Jahresergebnisse 1996, Bevölkerungsstatistik 1995, calculations by the study authors

For the short university forms ("university short first-degree programmes") there are equivalents within the Austrian post-secondary offer in so far as the former non-degree studies and university courses with a duration of less than six semesters could be classified in this category.

The percentage of persons with a graduation from a university short first-degree programme cannot be specified due to the insufficient differentiation of the available data.¹¹⁶ On the assumption that in Austria more than 200 university courses with about 20 participants each exist, a number of 4.000 students in short university programme can be estimated. Since the percentage of persons with graduation from a university short programme, however, is extremely limited in Austria¹¹⁷, it can be assumed that the target percentage of 30 %¹¹⁸ represents the graduation gap. As a reference value for the calculations of the age groups' achievements, the age cohort of the 20-to-29-year-olds has been used. The graduation gap quantified in this way comprises 33,849 persons per year.

Table 2.6c
Graduation gap – short first-degree university programmes

¹¹⁶ Due to the establishment of UniStG 1996 an improvement of the data acquisition can be expected.

¹¹⁷ Estimated value: 0,16%

¹¹⁸ suggested by the OECD in the framework of the project specifications

Age cohort of those aged 20 to 29 in a yearly average	Percentage of persons with a graduation from a short university programme	Target percentage	Graduation gap (per age group)
1,263,040	negligibly small	30%	37,891

Source: Bevölkerungsstatistik 1995, calculations by the study authors

Post-secondary courses in TVE (Kollegs) as well as secondary technical and vocational colleges (BHS) could be considered the Austrian non-university education and training programmes ("non-university tertiary programmes"). In accordance with Council Directive 95/43/EC, BHS diplomas count among non-university post-secondary education programmes because they are completed with a diploma examination (see above).

The current share of young adults with a graduation from a secondary TVE college (BHS) lies at 14.4 %. As a basis for calculations, the age cohort of those between 20 and 24 is used, which makes it possible to include repeaters as well as those people who complete their school education at a later point in their lives. The corresponding share of persons with a graduation from a post-secondary courses in TVE (Kolleg) is 2.5 %. Taking into consideration a target percentage for the annual increase of the proportion of BHS-graduates (by 1,8 percentage points) this gives a share of 18.7 % of persons having a non-university post-secondary graduation.

This empirically given percentage of 18.7 % of persons who have completed a non-university post-secondary programme compares to a target percentage of 25 %¹¹⁹. As a reference value for the calculations of the share of the age cohorts, as in the case of the short university programmes, the age cohort of those 20 to 29 is used. It results in a graduation gap of 7,957 persons per age group.

Table 2.6d

Graduation gap – non-university tertiary programmes

Age cohort of those 20 to 29 in a yearly average	Percentage of persons with a graduation from a non-university tertiary programme	Target percentage	Graduation gap (per age group)
1,263,040	18.7%	25%	7,957

Source: Microcensus 1996, Bevölkerungsstatistik 1995, calculations by the study authors

¹¹⁹ suggested by the OECD in the framework of the project specifications

(iii) CET

Participation in CET was last collected statistically in the framework of a special evaluation of the Microcensus 1989. Due to the fact that this study can be considered outdated, adjusted values from a Lifestyle study carried out by Fessel+GfK are used. On the basis of the results of this study it can be calculated that the current annual CET rate most likely is at 25.8 %, not including forms of further training such as participation in post secondary course, programmes, tertiary distance learning courses, etc. This rate compares to an orientation percentage of 40 %¹²⁰. The corresponding participation gap within further vocational education and training therefore comes to 543,600 persons.

Table 2.6e

Participation gap – CET

Workforce (subsistence concept)	Percentage of persons participating in CET events	Target percentage	Participation gap (per age group)
3,828,200	25.8%	40%	543,600

Source: Microcensus 1996, calculations by the study authors

2.3. Estimation of costs of closing the participation gaps

In order to be able to estimate the costs needed for closing the graduation gaps and the CET participation gaps shown in Section 2.2, two different calculation variants will be used, with one overestimating and the other underestimating the costs. The mean value between these two variants is used as the relevant additional financing need in those cases where both variants could be carried out.

Method (a):

The additional costs are calculated on the basis of the future age groups in population statistics. The disadvantage is here that repeaters and drop-outs are not taken into account, which leads to an underestimation of the expenditure necessary for closing the gaps.

Method (b):

The additional costs are calculated on the basis of the rates of increase of the percentages of graduates. The disadvantage is here that the sizes of coming age groups are not considered, which leads to an

¹²⁰ suggested by the OECD in the framework of the project specifications

overestimation of the expenditure necessary for closing the gaps in so far as the following age groups are smaller than the current and older ones.

Secondary level II

Method (a): The participation gap of 46,786 persons – calculated on the basis of the age cohort of those aged 15 to 19 – is multiplied by the average costs per student (ATS 71,600). This gives costs of ATS 3,350 million that would be required for closing the graduation gap.

Method (b): The current expenditure for the secondary level (including net expenses for in-company apprenticeship training) amounts to ATS 35,445 million. Increasing these expenses by the rate that would be necessary also for raising the numbers of graduates in accordance with OECD suggestions (from 79.8 % to 90 %) this gives a total of ATS 4,531 million for being able to close the graduation gap.

University long first-degree programmes

Method (a): Taking as a basis a study duration of 12 semesters in the case of university long first-degree programmes (diploma studies at universities, including those for art and music, "Fachhochschul"-courses, studies at post secondary colleges, university programmes¹²¹ with a duration of at least six semesters provided they are not based on a diploma study graduation, as well as the former short studies with a minimum duration of six semesters¹²²) and a graduation gap of 2,510 persons, as well as average per-capita costs for students at universities and teacher training colleges of ATS 109,000, additional financing requirements of ATS 3,289 million are calculated.

Method (b): The current expenditure for the tertiary sector amounts to ATS 14,610 million. In case of a target rate of increase for graduates of 22.6 % (from 10.6 % to 13 %) the financing volume needed additionally for closing the graduation gap comes to ATS 3,308 million.

University short first-degree programmes

Method (a): Assuming the average duration of university short first-degree programmes (former short studies with a duration of less than six semesters, university programmes with a duration of less than six semesters) is two years, additional financing requirements of ATS 6,434 million can be calculated for a graduation gap of 37,891 persons, in which connection per-capita costs for participants in short university forms are assessed with ATS 84,900.

¹²¹ Hochschule programmes and courses were converted into university programmes when the new University Study Act came into force in August 1997

¹²² The new University Study Act does not provide for short (non-degree) courses any more.

Method (b) cannot be carried out due to the lack of information on the current expenses for short university programmes.

Non-university tertiary programmes

Method (a): As an orientation figure for the calculation of the costs for closing the graduation gap post secondary courses in TVE (Kollegs) with a duration of two years are used, where the average expenditure per student is estimated at ATS 84,900. Thus, a graduation gap of 7,957 persons results in costs of ATS 1,351 million for closing the gap.

Method (b): The starting point are the current expenses for Kollegs, coming to ATS 1,228 million at present. Including the target rate of increase of graduates (from 2.5 % to 6.3 %) in the current expenditure, additional financing requirements of ATS 1.867 million are obtained.

CET

Method (a) cannot be used for this sector since, in view of the broad range of offers within further technical and vocational education and training, it is not useful to give an average price for further TVE activities.

Method (b): The current annual expenditure for CET of ATS 27,691 million (not including technical and vocational schools and colleges for people under employment) and a desired increase of the participation rate in CET of 25.8 % to 40 % together result in an additional financing need of ATS 15,241 million.

Table 2.7

Annual costs for closing the graduation gap and participation gaps

Education sector	Expenditure for closing the graduation gap and participation gaps – method (a)	Expenditure for closing the graduation gap and participation gaps – method (b)	Mean value *
Secondary level II	ATS 3,350 m	ATS 4,531 m	ATS 3,940 m
Tertiary sector			
- Univ. long forms	ATS 3,289 m	ATS 3,308 m	ATS 3,300 m
- Univ. short forms	ATS 6,434 m	-	ATS 6,430 m
- Non-univ. forms	ATS 1,351 m	ATS 1,867	ATS 1,610 m
Further vocational tr.	-	ATS 15,241	ATS 15,240 m
Total			ATS 30,520 m

* calculation of the mean value of methods (a) and b) if both methods possible and adjusted values

In this connection it must be made clear that the estimation of the graduation gaps and of the CET participation gaps as well as of the additional financing requirements are based on very simple assumptions. They can, therefore, represent an estimation of the relevant figures only.

2.4. Non-public costs

In the framework of the following section, an analysis of the private expenses for education and training is carried out, which, however, has to remain partially incomplete due to a lack of data.

(i) Secondary level II

As explained in section 4.2.1 ("Secondary Level II") no information is available on private financing for attendance of secondary level II – neither on living expenses and other payments for school attendance made by families, which are reduced with the help of the State's family allowance, nor on the resources used by private school providers (churches, non-profit organisations, commercial schools) or by enterprises in the form of (material) donations.

Only for the dual training system, differentiated statements on financing can be made. Apprenticeship training comprises company-based training and school-based education and training, where the costs for the former are borne solely by the training enterprises, not taking into account special Public Employment Service promotions (e.g. allowance for promoting trainee relationships of apprentices in accordance with section 34 of the Public Employment Service Act, special programme for the promotion of additional apprenticeship posts in apprenticeship workshops, etc.), whereas the financing of compulsory vocational schools is within the scope of responsibility of the Laender Governments, which are refunded half of the costs for the teaching personnel from the federal budget.

In the following, the costs for the company-based part of the training are subjected to an analysis, which is going to be as detailed as possible and will be based on descriptions of a current research report "Kosten und Nutzen der Lehrlingsausbildung"¹²³. First a few short statements concerning the use of terminology within educational research seem adequate: The expenses for the whole apprenticeship training period are called gross costs. Subtracting from them the proceeds made due to the apprentices' work, net costs are obtained.

Gross costs can be analysed 1. from the viewpoint of business administration and 2. from the perspective of national economics as follows:

¹²³ Schneeberger, A., Kastenhuber, B. 1997, p. 70ff

point 1.:

When employers have to decide on a continuation of the training or on additional training measures, it has proven useful for them to do a direct cost analysis where gross costs are reduced by those expenses that are not entirely linked to the training. In concrete terms these comprise the following staff costs:

- Ø employees who work as trainers or instructors only on a honorary basis, i.e. also fulfil other essential tasks in the company, such as e.g. skilled workers
- Ø administrative personnel

point 2.:

In contrast to that, full costing is an economic procedure in so far as it shows the amount which the State would have to pay for establishing a comparable vocational training apparatus.

On the basis of model calculations for 1995, gross expenses to the amount of an average of ATS 180,000 per year and apprentice can be established. In the table below, the distribution of gross costs of apprenticeship training is shown. As could be expected, the biggest share of 73.9 % falls to labour costs, which are basically equivalent to the apprenticeship remuneration. In absolute figures, direct costs relevant from a business administration point of view come to about ATS 140,000.

Average distribution of gross costs of training enterprises 1995

Variable costing	Labour costs	73.9%
	Material costs	0.7%
	Costs for full-time trainers	1.7%
Full costing only	Costs for part-time trainers	21.4%
	Equipment costs	1.6%
	Administrative costs	0.8%
TOTAL		100.1%

Source: Lassnigg/Steiner 1997, p. 25

A quantification of net costs is difficult in so far as any returns from productive activities carried out by apprentices during and after their training have to be recorded in monetary values. In this process it has to be taken into consideration that, as the duration of the employment relationship of the apprentices in the company gets longer, returns increase – from more than 30 % in the first year of training to more than 50 % in the third and fourth years.

The apprentices' productive work can be converted into quantities on the basis of two concepts:

- Ø Substitution returns: From estimates made by personalists at the training enterprises the amount is calculated that specifies to what extent additional workers would have to be recruited or extra hours would have to be done in case no apprentice is employed.
- Ø Equivalence returns: From estimates of the percentage of productive activities carried out by the apprentice in his training and the estimation of his degree of performance in comparison to a skilled worker it is calculated to which proportion unskilled or skilled workers are replaced by the apprentice.

According to a study carried out by Lassnigg and Steiner in 1997¹²⁴, the full costing method, which is oriented towards national economic standards, allows the calculation of annual net costs per apprentice of ATS 40,000 when applying the substitution model and of ATS 67,000 when applying the equivalence model. In the calculation of net costs in the sense of the business-oriented variable costing method, the substitution model gives an amount of ATS 22,300 per apprentice and year of training, the equivalence model ATS 27,400 per apprentice and year of training.

(ii) *Tertiary sector*

The Hochschule sector is, to the greatest part, financed by means of public resources from the Federal Government; Laender governments and local authorities mostly participate only in investments or place property at the disposal. An exception is the "Fachhochschul"-system, for the implementation of which a mixed financing model is laid down by the Federal Act for "Fachhochschul"-Courses (FHStG), in which, apart from the Federal Government also other public and private financial backers are supposed to participate.

As elaborated on in section 3.1.4.2 ("Incentives and Enabling Mechanisms, Governance and Co-ordination of Lifelong Learning Sectors"), an analysis of "Fachhochschul"-courses organised so far shows that participation by private financial backers can, at present, be found only to a very limited degree: In the period which the "Development and Financing Scheme" for the "Fachhochschul"-sector refers to, the Federal Government bears only 54 % of the total costs; the Laender governments (with 36 %) and local authorities (with 8 %) take over the rest of the financing, with the exception of 2 % paid by enterprises.¹²⁵

¹²⁴ Lassnigg, L., Steiner, P. 1997

¹²⁵ Pechar, H. 1996, p. 60

No information is available on private expenditure from the part of students or their families. No data can be delivered, either, on the promotion sums of enterprises and non-profit organisations (churches, clubs) for tertiary institutions and students in the form of donations, scholarships, or similar support measures.

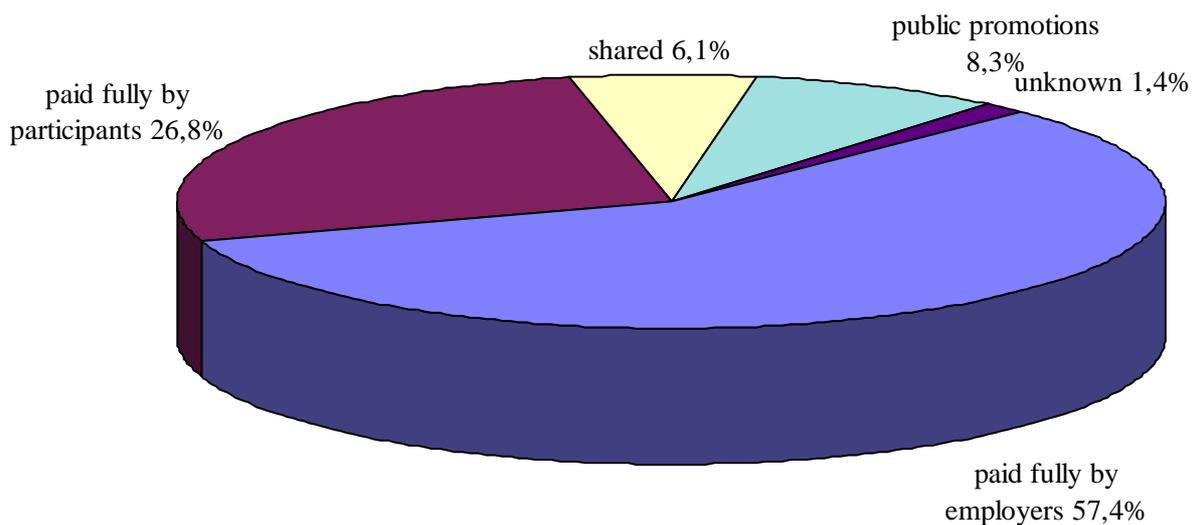
(iii) *Adult education*

In the field of adult education, private costs comprise, on the one hand, the costs accruing for individuals in case they participate in CET measures and, on the other, those accruing for enterprises where employees obtain (higher) qualifications. In both cases, both direct costs (such as course fees) and indirect costs (e.g. opportunity costs, transportation costs etc.) have to be included.

For the field of job-related CET, the following results can be presented: According to a Microcensus data collection, referring to the period 1985-1989, around 63 % of CET participation was due to the employees' own initiative and 37 % to the initiative of their employers. Course fees were paid by employees completely in 41 %, and partly in 7 % of the cases, if the motivation to attend the course came from the employees themselves. In case of participation in events of CET at the employers' initiative, financing was covered by the latter completely in 92 % and partly in 4 % of the cases. On the whole, course fees were paid fully by employers in 57 % and in 27 % fully by the participant. In 6 % of cases costs were shared, 8 % of the costs were covered by public promotions.¹²⁶

Graph Fehler! Unbekanntes Schalterargument.

Courses of continuing education and training broken down by cost unit



¹²⁶ Zeidler, S. 1991, p. 356

Source: Statistische Nachrichten

In this connection it seems important to remember that, over the past few years, both employers and employees have had to face increasing "internal investments" both as far as time and as far as financial input is concerned. According to the consumer price index, course costs in the field of further training have nearly doubled, in some areas even tripled, since 1986.

Expenses of participants in job-related continuing education and training

In order to put the estimation of expenditures for CET measures on the part of employees on an empirical basis, we can return to the Lifestyle study (Fessel+GfK), in which one of the questions was: "How much would you personally be prepared to spend on continuing education and training per year?" The extrapolation of the total volume of respective expenses is the theoretical maximum of annual educational expenditure from the part of the economically active population participating in CET in Austria and amounts to approximately ATS 6,800 million. On the average, this makes average CET costs of ATS 3,200 per working person, with significant gender-specific differences. Taking as the basis of calculation the total number of the residential population above the age of 15, this gives an estimated amount of ATS 10,900 million.¹²⁷

Rough minimum estimates on the basis of a workforce survey carried out by the ÖSTAT (Austrian Central Statistical Office) in the year 1992 place expenses of participants in continuing vocational training at a minimum of ATS 500 million, the actual total will most probably be considerably higher (according to a study carried out by Kailer).¹²⁸ In this connection it has to be taken into consideration that allowances for participation, travel, accommodation, and boarding costs are granted in the framework of labour market training in order to facilitate on-the-job measures, re-training, tutoring, work on probation, job preparation, or a further development in the occupation in question.

According to ÖSTAT, work-related CET courses attended at the workers' own initiative and financed by them in their majority fall among the course offers of the Institutes for Economic Development (WIFIs) and the Vocational Support Institutes (BFIs).

A direct comparison of educational expenses by the workforce extrapolated on the basis of the current Lifestyle study (ATS 6,800 million, see above) with the ÖSTAT-based study results from the year 1992 (ATS 500 million, see above) is impossible in so far as the figure given in the first case is a maximum, the

¹²⁷ Schneeberger, A. 1997, p. 8

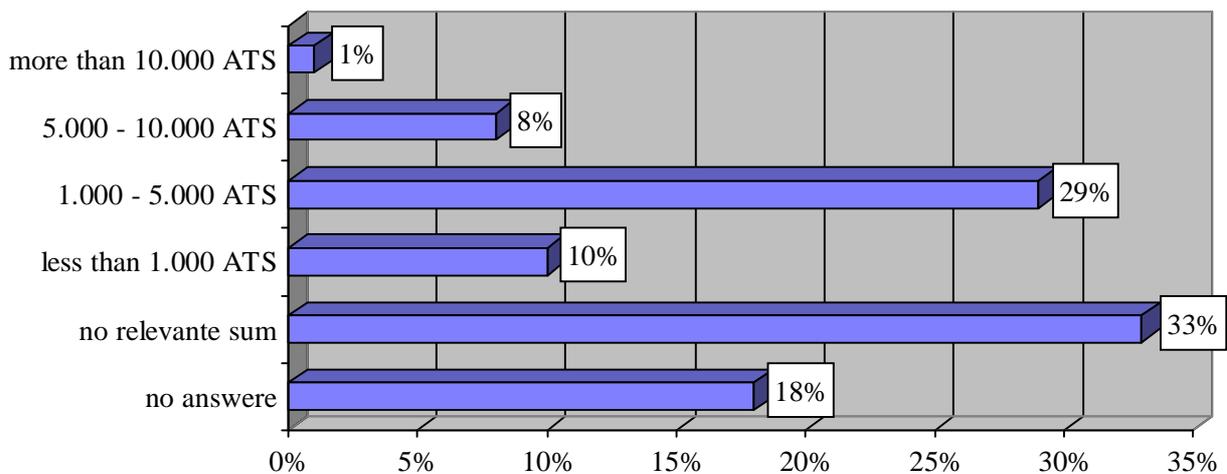
¹²⁸ Kailer, N.1991, p. 5ff

figure in the second a minimum value. Still it can be noted that the resources used for work-related CET must have increased to an extremely high degree since the early 1990s.

In a separate analysis of educational expenses for unskilled and semi-skilled workers, the following distribution can be found: 10 % of persons in this group show the willingness to spend up to ATS 1,000 p.a.; 29 % can imagine that their educational expenses lie between ATS 1,000 and 5,000. Only eight per cent of unqualified persons are prepared to take over costs of between ATS 5,000 and 10,000. Finally, only one per cent states that they want to use more than ATS 10,000 on further and continuing education activities.

Graph Fehler! Unbekanntes Schalterargument.

"How much would you personally be prepared to spend on continuing education and training per year?"



Source: Fessel+GfK, Lebenslanges Lernen

The employers' expenditure for the further training of their employees

A series of research projects on the basis of company surveys have in recent years been conducted on the issue of the employers' expenditure for the further training of their employees. In the following years of reference average expenditure per employee was as follows:

1980: ATS 800

1986: ATS 2,600

1992: ATS 4,200

In addition it was found that CET costs per employee decrease as the company's size increases. In enterprises with up to 500 employees they amount to ATS 4,600, whereas companies with up to 1,000 employees spend ATS 4,000. The reason is the higher proportion of cost-intensive external CET measures in smaller companies.¹²⁹

Educational expenses on the part of employers were also the subject of a current study carried out by Schneeberger, where an average proportion of 0.28 % for CET expenditure in the annual turnover of Austrian enterprises is calculated. This is the result of an explorative company survey conducted in early 1997. Converting the mentioned percentage on the basis of turnovers specified in official statistics into absolute figures, the further training volume comes to ATS 11,700 million.¹³⁰

For comparative purposes: On the basis of figures on educational expenditure published by Austrian medium-sized and large enterprises, Harramach estimates that direct costs alone amounted to at least ATS 10,000 million in 1993.¹³¹

Total educational expenditure (by employers and the population) based on careful estimations amount to approximately ATS 23,000 million.¹³²

2.5. Dynamic evaluation of the costs of lifelong learning

In the following section the focus will be on the question how participation rates in the various education sectors and the public funds used for them (secondary level II, tertiary level, adult education) will develop in the medium term and which consequences this will have.

(i) Secondary level II

In the field of upper-secondary schooling, two aspects are considered for the projection of the school-type specific participation rates: 1. the demographic development of the respective age cohorts and 2. the influx to the various school and training types in the recent past. As sources, the ÖSTAT publication "The Österreichische Schulwesen" ("The Austrian School System") as well as the population projections carried

¹²⁹ cf. Blumberger et al. 1995, p. 25

¹³⁰ Schneeberger, A. 1997, p. 8

¹³¹ cf. Harramach, N. 1993, p. 5ff

¹³² chneeberger, A. 1997, p. 8

out by ÖSTAT are used. On the basis of the student numbers expected at secondary level II in the future, careful estimations regarding the accruing costs can be made.

The classification for the field of foundation learning follows the categorisation into the following school types: pre-vocational school (PS - formerly called pre-vocational year), vocational school for apprentices (BPS), upper cycle of academic secondary schools (AHS), secondary schools and colleges for agriculture and forestry, secondary technical and vocational schools and colleges (BMHS).

In the course of a five-year reference period (between 1992 and 1996¹³³), the shares of students in the pre-vocational school in the age cohorts of the 15-to-16-year-old residential population were calculated (annual average) and then a linear projection was carried out. This shows the following trend: Whereas in 1992 it was still 10.2 % among all 15 or 16 year old teenagers who attended this school type, their proportion was only 9.1 % in 1996. Proceeding from the assumption that this tendency will continue uninterrupted, a projected value of 8.2 % for 2000, and for 2005 a value of 6.9 % is obtained. In absolute terms this means that a total number of 15,672 teenagers will go to pre-vocational school at the turn of the millennium. In the year 2005, a student potential of 13,196 persons can be quantified – these calculations are based on data from population projections.

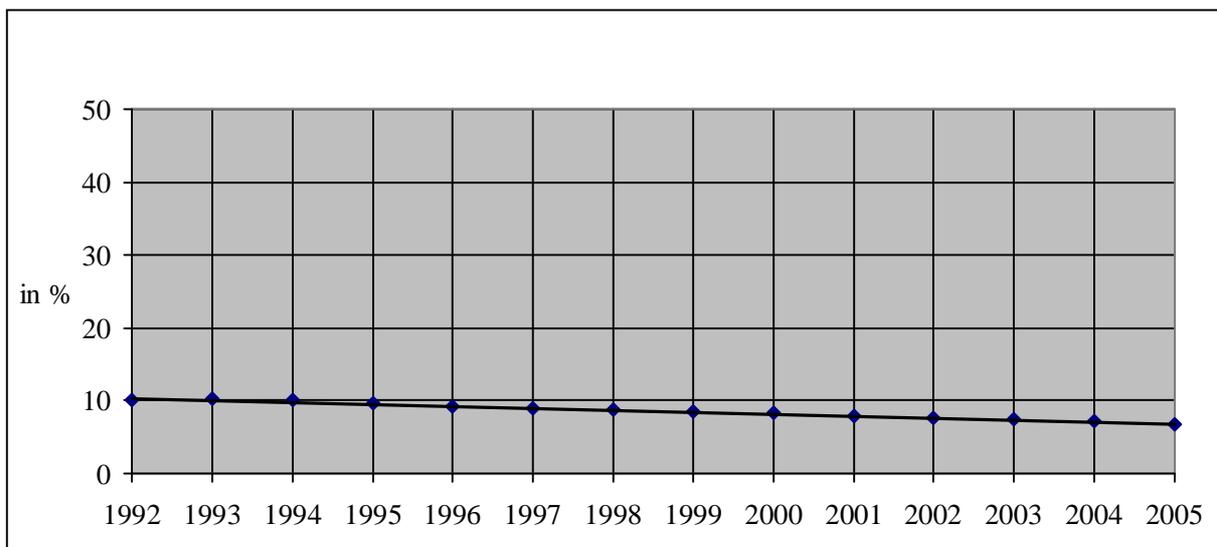
The estimation of the student numbers expected at pre-vocational school, however, has to be seen against the background of the re-structuring of the pre-vocational school as of 1 September 1997 and is, therefore, highly insecure. This means that a change of the influx behaviour due to the re-structuring of the pre-vocational year into the pre-vocational school has to be reckoned with.

In Section 3.1.1 ("Foundation Learning"), the development of public expenses per student broken down by school types is presented. For pre-vocational school, an expenditure increase between 1985 and 1995 by more than half (53.2 %) could be determined. Proceeding from the assumption that between 1995 and 2005 another rise of the same size will come about, total expenses per student of about ATS 137,700 can be expected for 2005. Converting these unit costs to the total number to be expected for 2005, total public expenses of ATS 1,817.1 million in the field of pre-vocational schooling are obtained for that year.

Graph Fehler! Unbekanntes Schalterargument.

**Development of share of pre-vocational school
students in the 15-to-16-year-old residential population**

¹³³ More up-to-date figures from the field of school education are not yet completely available.



Source: ÖSTAT, calculations by the study authors

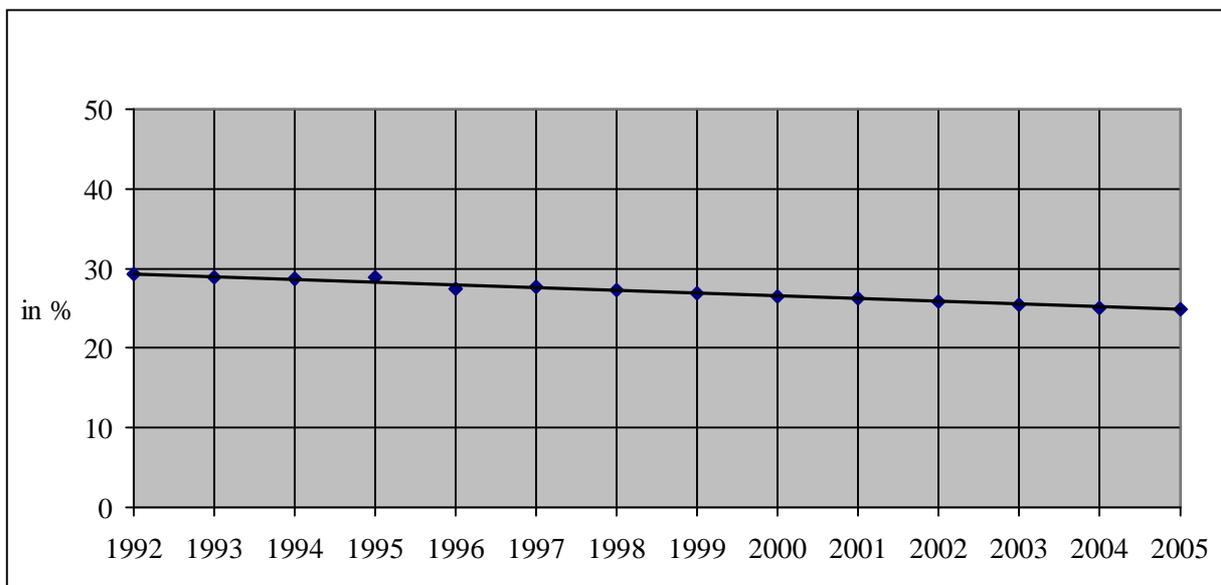
Analysing the development of the student proportions at vocational schools for apprentices (BPS) in the 15-to-19-year-old residential population, another slight medium-term decline can be found. A proportion of 29.2 % in the year 1992 was followed by a percentage of 27.5 % in the year 1996. A linear trend projection for 2000 shows that 26.5 % of the corresponding age groups will attend BPS; for 2005 a value of 24.8 % can be reckoned with. These shares can be expressed in absolute figures due to the demographic development forecast by means of the population projection (medium variant): The number of students at will, according to that procedure, be about 129,800 persons in the year 2000 and around 119,700 persons in the year 2005.

With regard to the costs to be expected mid-term for the field of vocational schools for apprentices, the following assumptions can be made: Public expenses per student increased by 73.2 % between 1985 and 1995 (compare section 3.1.1: "Foundation Learning"). Assuming an increase of the same size over the coming decade, public expenses of around ATS 77,100 per student at vocational schools for apprentices (or ATS 9,230.9 million for all such students) can be calculated for 2005.

Vocational schools for apprentices are a part of the dual system within the apprenticeship training system. The costs of company training are borne by the training enterprises (cf. also section 2.4: "Private Costs: secondary Level II"), whereas the above discussed financing of the vocational schools for apprentices is incumbent on the provincial governments (cf. Section 4.2.1: "Financing by Sectors – Secondary Level II").

Graph Fehler! Unbekanntes Schalterargument.

Development of the share of students at vocational schools for apprentices in the 15-to-19-year-old residential population



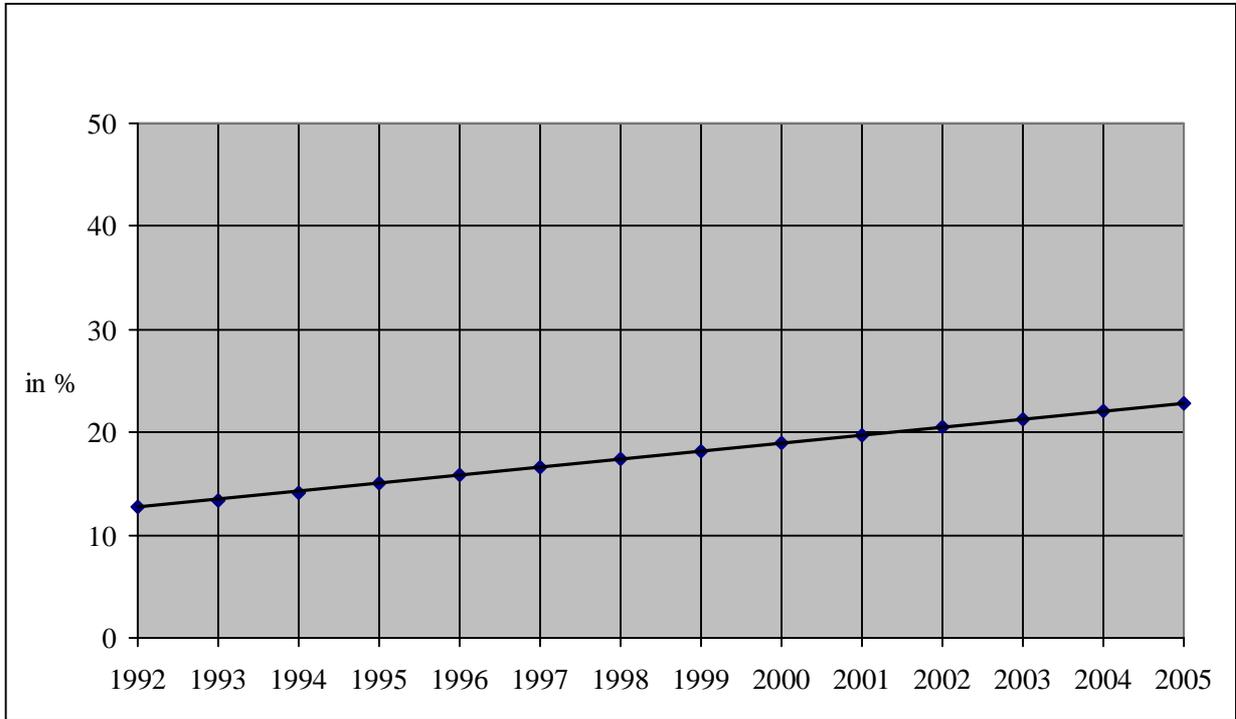
Source: ÖSTAT, calculations by the study authors

For the upper-cycle of academic secondary schools (AHS) an upward development regarding total student figures is found where between 1992 and 1995 both a relative and an absolute growth took place. For the years 2000 and 2005 it can be expected that 18.9 % and 22.9 % of all 15-to-19-year-old pupils will attend the upper cycle of academic secondary school. If these percentages are transferred to the corresponding values of the population projection, a number of approximately 92,500 persons is obtained for 2000. For 2005, a potential of 110,200 students is calculated.

For public expenses for the AHS field, a rise of the unit costs by around a third (31.9 %) can be observed between 1985 and 1995. If the same increase is assumed for the following decade, per-student expenses to be borne by the State will reach ATS 107,400 in 2005. Total public costs for the upper cycle will amount to ATS 11,840.6 million.

Graph Fehler! Unbekanntes Schalterargument.

**Development of share of students at academic secondary schools
(upper cycle) in the 15-to-19-year-old residential population**



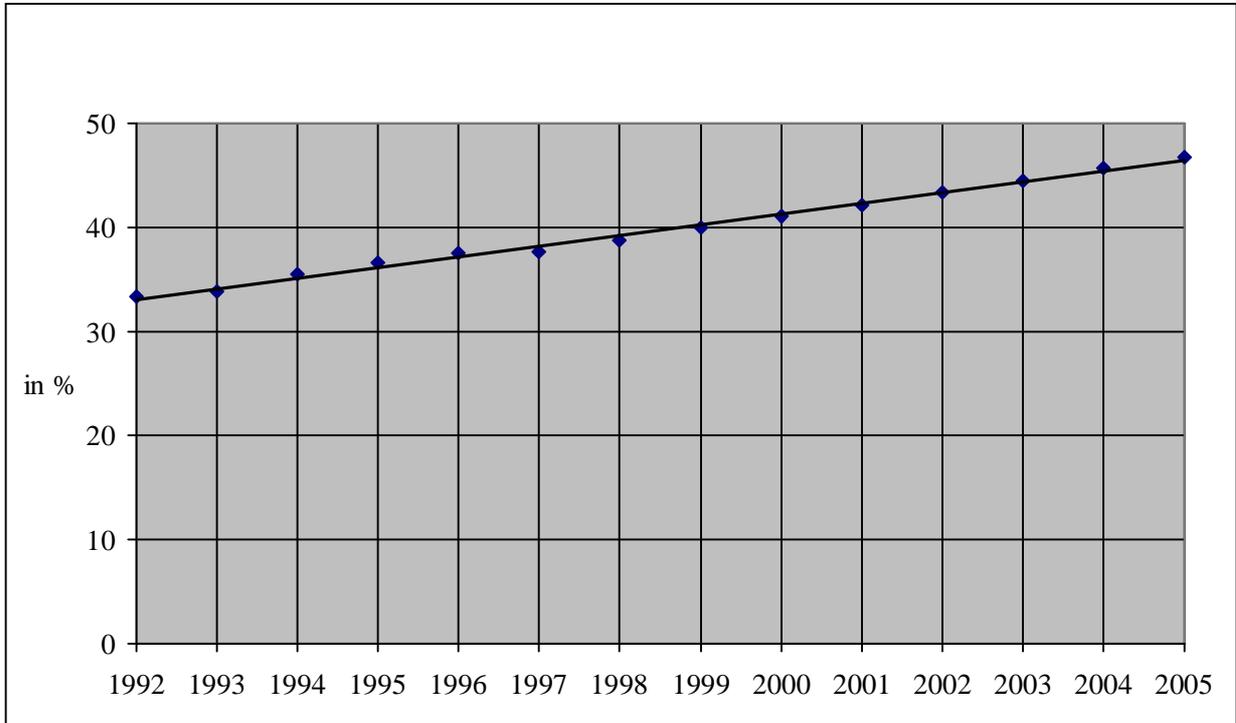
Source: ÖSTAT, calculations by the study authors

Secondary technical and vocational schools and colleges (BMHS) experienced the strongest growth rate in the period under observation. Whereas the share of BMHS students among persons between 15 and 19 was exactly at one third already in 1992, it increased to 37.6 % in the year 1996. On the basis of the linear projection, an increase of this proportion to 41.1 % can be anticipated for 2000, and to 46.8 % for 2005. In absolute figures this means that in the year 2000 total student figures at secondary TVE schools and colleges will be 200,700 persons. For 2005, this gives a student potential of 225,600 persons.

Regarding public expenses for the BMHS field, in the more recent past the following increasing tendency is found: Public expenditure per student grew between 1985 and 1995 by 25.6 % (compare section 3.1.1: "Foundation learning"). Proceeding from the assumption that the same increase will be found in the next decade, public expenses of around ATS 106,600 per student or ATS 24,045.2 million for all students at secondary technical and vocational schools and colleges are obtained for 2005.

Graph Fehler! Unbekanntes Schalterargument.

Development of share of students at secondary technical and vocational schools and colleges in the 15-to-19-year-old residential population



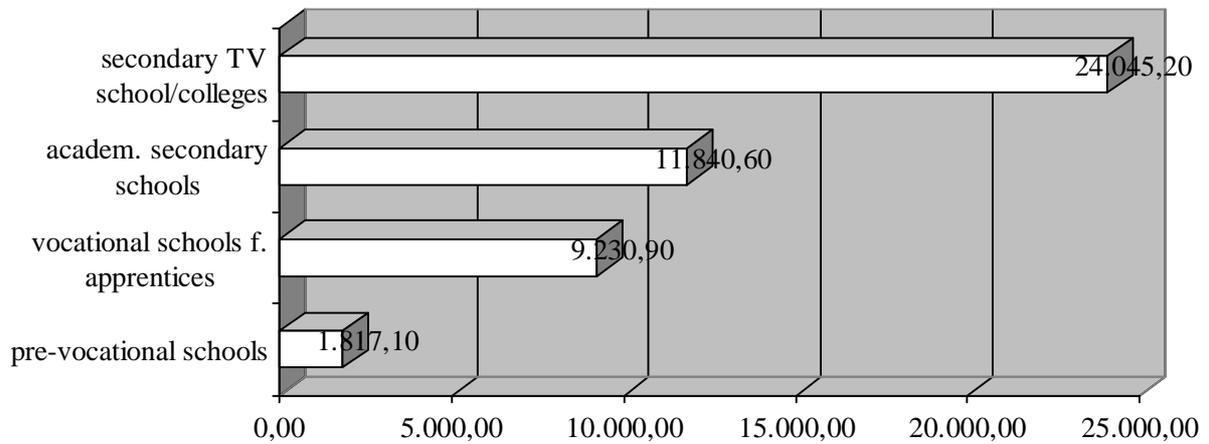
Source: ÖSTAT, calculations by the study authors

Transferring the school-type specific growth rates of public expenses between 1985 and 1995 to the following decade and basing on the linear projection of the school-type specific development of student figures it can be calculated that the biggest share of expenses in the year 2005 will be used for secondary technical and vocational schools and colleges (more than ATS 24,000 million). Around ATS 11,800 million will – in accordance with the assumptions made – go to the various upper cycles of academic secondary schools, whereas about ATS 9,200 million will be used for vocational schools for apprentices. With ATS 1,800 million for pre-vocational schools state expenses to be expected for the year 2005 have significantly smaller dimensions in comparison to the other school types at the foundation learning level.

In this context it is explicitly stated that the above figures are based on calculations that keep the allocation and dimensions of public resources that were used for secondary level II between 1985 and 1995 at a constant level and project them to the following decade. They must, therefore, be relativised with respect to their realisation probability.

Graph Fehler! Unbekanntes Schalterargument.

Public expenses to be expected for the year 2005, broken down by school type at secondary level II (in ATS million)



Source: ÖSTAT, calculations by the study authors

(ii) *Tertiary sector*

As already shown in the above quoted development projections for the university sector by Landler and Dell`Mour, the number of "Reifeprüfung"-holders – who have to be seen as the biggest target group of the post-secondary sector – will increase until 2010 without ever showing downward tendencies. Whereas for 2000 about 37,200 "Reifeprüfung"-holders are expected, their number will be approximately 43,600 by 2010.

Due to the fact that transfer rates will, in general, remain at the same level and that the number of "Reifeprüfung"-holders will increase, it must be concluded that the influx to Austrian universities will continue to rise as well. At the same time, however, also changed framework conditions, such as drastic saving measures at universities, worsening study conditions due to the "overload", extra-long study times, and also the creation of an alternative pathway of education and training at the post-secondary level ("Fachhochschul"-courses) must be considered so that statements on mid-term university participation and public expenses in this respect can be put on an empirical basis only with difficulty.

In contrast to the Austrian university sector, which is characterised by a detailed legal fixation and can, therefore, be termed a top-down model, not only central political decisions are important for the establishment of the "Fachhochschul"-sector, but also initiatives of potential providers of study courses from the bottom-line ("bottom-up model"). In the Federal Act for "Fachhochschul"-Courses related financing modalities are mentioned; nevertheless the use of federal resources, which is regulated in the "Development and Financing Scheme" decided on by the Council of Ministers on 22 March 1994, has always been clear. This plan provides that the Federal Government will promote up to 10,000 study places by 2000. In this connection the Federal Government will participate with 90 % in the unit costs, i.e. running costs such as personnel costs, expenses for building operations, running investment costs, as well

as other operational costs per study place. This amounts to a total of ATS 80,000 for economic and ATS 95,000 for technical study courses; mixed forms are subsidised with ATS 84,000 per place.

The table below compares the number of study places calculated in the "Development Scheme" with the number of study places actually promoted by the Federal Government per academic year. The figures prove clearly that the expansion of the "Fachhochschul"-sector until the year 1997/98 has progressed from the "Development Scheme" without larger deviations – the maximum deviation occurred in the academic year 1995/1996 and amounted to 246 study places.

Comparison of academic years 1994/95 to 1999/2000: Number of study places established in the "Development Scheme" and actually subsidised number of study places

Academic year	Number of study places subsidised by the Federation as established in the "Development Scheme"	Actual number of study places subsidised by the Federation
1994/95	500	695
1995/96	2,000	1,754
1996/97	4,000	3,756
1997/98	6,000	5,769
1998/99	8,000	-
1999/2000	10,000	-

Source: Federal Ministry of Science and Transport, dept. I/B/14

A comparison of the federal budget established in the "Development Scheme" for the "Fachhochschul"-sector with the promotion resources actually used shows a steady trend for the budget years 1994 until 1998: expenses really accrued fall considerably below those originally estimated, in particular in 1997 and 1998 – the differences are ATS 87 million and ATS 85 million respectively.

Comparison of the budget years 1994 until 1999: amount of promotion established in the "Development Scheme" and amount of promotion actually used

Budget year	Amount of promotion as established in the "Development Scheme" (in ATS million)	Amount of promotion actually used (in ATS million)
1994	23.75	15.3
1995	118.75	89
1996	285	234
1997	475	388
1998	665	580

Source: Federal Ministry of Science and Transport

Starting with the academic year 2000/2001, another "Development and Financing Scheme" for the "Fachhochschul"-sector becomes effective (1999/2000 to 2004/2005). It is at present being elaborated; no differentiated information is available yet, however. In the White Paper on Higher Education in Austria (Weißbuch zur Hochschulbildung in Österreich) it is stated that the "Fachhochschul"-sector will take up approximately 25% of first-year students by the end of this planning period.¹³⁴ Compared to 1997/1998 the number of persons taking up a study in this sector amounted to about 10 % of the total amount of first-year students.

In the White Paper on Higher Education in Austria, the points of main focus of the future development in the "Fachhochschul"-sector are described:¹³⁵

- Ø Providers will undergo changes in legal entities and merge, leading to some providers soon reaching a size and institutional structure necessary for the use of synergies. In a parallel development, the granting of the "Fachhochschul"-status will be effected to some course providers.¹³⁶
- Ø In the course of the evaluation of the first "Fachhochschul"-courses it is being ascertained in how far the aims that had been planned to be met with the establishment of the "Fachhochschul"-sector could actually be achieved and in which areas it seems useful to change the direction.
- Ø The focuses of the development of offers lie in a widening of the subject-specific offers and in the intensification of target group specific study courses. The main question is if and in how far parts of the colleges (for social work, nursing and specialist paramedical courses) can be integrated into the "Fachhochschul"-sector.
- Ø The "Development Scheme II" will provide for measures increasing the proportion of women in the "Fachhochschul"-field.

(iii) *Adult education*

For the field of adult education it is extremely difficult to carry out well-founded trend analyses due to the lack of statistically recorded data. Further detailed research activities are necessary to be able to make differentiated statements on future CET behaviour and resulting interactions.

¹³⁴ Einem, C. 1998, p. 46

¹³⁵ Einem, C. 1998, p. 48

¹³⁶ The prerequisites for being granted the status of a "Fachhochschule" are the provision of a minimum of two FHS study courses and an expansion plan which clearly establishes the achievement of 1,000 study places within three years' time (see FHStG section 15).

With high probability it can be said, however, that intensified CET participation can be reckoned with in Austria due to the fact that the education and training level will increase in the future – which can empirically be proven by the uninterrupted growth of "Reifeprüfung"-holders and university graduates.¹³⁷ Both the CET activities actually carried out and CET intentions depend, as has already been discussed, on the current educational level in so far as the number of activities increases with the level of the initial vocational training track previously completed. The table below clearly proves the following tendency: Participation in further training is highest among university degree holders (84 %), just as continuing education and training intentions, which show a percentage 93 % for persons with a completed university study.

Actual participation in CET and CET intentions by highest completed education or training pathway

Highest completed education or training	Actual participation in CET	CET intentions
Primary school / HS	35%	59%
Voc. school for appr. / BMS	49%	77%
"Reifeprüfung"-Examination	73%	82%
University or related institution	84%	93%

Source: Fessel+GfK, Lebenslanges Lernen (Life-Style) 1996

2.6. Characterisation of lifelong learning needs by worker type

The current fast and dramatic changes in the labour market, the increasing unemployment figures and the simultaneous decline in job offers, as well as the enhanced exchange processes require by the economically active population to adapt quickly and find efficient problem-solving strategies. In this adaptation process, various groups are at a disadvantage due to their higher ages, their lower educational levels, their gender, their longer exclusion from work processes, etc., which can, at least in part, be compensated for by taking up CET activities. It has to be kept in mind that even though the promotion of such problem groups is a task in terms of the national economy, and therefore a public task, the orientation of CET is in principle a market-oriented one.

In times of declining job vacancies, mainly unqualified persons have to face longer and longer periods of job-hunting, which can have demotivating effects and can lead to severe impairments of their self-confidence. The causes for a lacking lower secondary school graduation or for the dropping-out from a training or education pathway frequently lie in bad marks, in a lacking command of German, or in

¹³⁷ f. Landler, F., Dell`Mour, R. 1995/96, p. 136ff

unrealistic ideas about career aims. Some parents force their children to attend a certain school type against their will or reject their job wishes and career aspirations. The result is often school failure, connected with the feeling of not being able to meet demands made on them. Another reason for the lack of qualifications can be financial need, which prevents them from attending a secondary education pathway after general compulsory schooling and makes their immediate entry into working life necessary. Early partnerships and the founding of a family are mainly a motive among women for not starting a vocational training programme.

Basic financial support for paying their living expenses are indispensable prerequisites for many persons with educational deficits so that they are able to participate in qualification measures at a later point in their lives. An exception are unqualified teenagers, who in most cases are still supported by their parents.

In the case of people with personal and social problems, which are mostly phenomena linked with financial problems, assistance by social workers is required. Since it takes these persons' full attention to cope with everyday life, a lack of qualifications is not perceived as a deficit by them.

2.6.1. Identification of problem groups in labour market

In the Fessel+GfK study on lifelong learning, among other factors, barriers to CET activities have been determined. It has been shown that those persons who have not taken part yet in CET measures after receiving initial vocational training justified their non-participation most often with "lack of time". In an above-the-average number of cases, a general lack of time was stated by working persons (mainly women), furthermore by middle-aged persons, by self-employed people and free-lancers, by (managing or senior) white-collar workers and civil servants, by farmers, and last but not least by persons with higher educational levels. The educational barrier "lack of time for family reasons" was significantly often mentioned by housewives and working women. As the reason for their non-participation in CET measures, working persons (mainly men), persons of younger ages, qualified white-collar workers and civil servants, as well as skilled workers stated "lack of time for professional reasons" in an above-the-average number of cases. "Cost reasons" prevented especially women and persons in the lower income brackets from participating in related activities. The arguments "no interest", "it makes no sense", "no use on the job" were characteristically given by working persons and persons with negative school experiences. As can be expected, mainly elderly people, pensioners, and housewives gave "age, retirement, and illness" as reasons for their non-participation in CET measures.¹³⁸

Negative school experiences can lead to reservations against CET measures, mainly in so far as an authoritarian teacher-pupil-relationship is anticipated. A positive memory of school life, in contrast to that,

¹³⁸ Ulram, A. P 1996, p. 8

motivates people to take part in further and continuing education activities. The following hypothesis can be confirmed empirically by means of the "Lifelong Learning" study carried out by Fessel+GfK: those who enjoyed learning at school will also later do something for their education and training; those who received positive stimuli for continuing education and training in the course of school instruction, will be more likely to put these ideas into practice also at a later time in life.¹³⁹

The following problem groups in labour market are currently target groups for orientation, qualification and employment measures or related measures:

- Ø Physically and mentally disadvantaged people
- Ø Persons unemployed due to lay-offs
- Ø Long-term unemployed people
- Ø Woman
- Ø Young people
- Ø Working students

2.6.2. Identification of specific needs and barriers to lifelong learning

In the following, individual problem groups in the labour market are analysed by specifying their barriers to and needs for CET:

(i) *Physically and mentally disadvantaged people*

In order to combat employment problems of disadvantaged persons, the Public Employment Service organises a series of measures, e.g. priorities on labour market courses for the attainment of occupational qualifications, on the creation and securing of employment opportunities with employment contracts of limited and unlimited duration, as well as the expansion of labour market (or job) centres. Since 1989 Public Employment Service special programmes have been available as instruments of the Act on the Recruitment of Disadvantaged People, comprising the promotion of investment costs, of socio-pedagogic accompanying measures, and of the wage costs for the disadvantaged. In the framework of the programmes for the promotion of the labour market, a total of 11,519 persons with disabilities were promoted in 1997.

Apart from the AMS there are, in particular, also measures of the Federal Offices for Social Affairs and Handicapped People (BSB). In the framework of the National Action Plan for Employment, a further expansion of handicap-specific programmes and projects is provided for until the year 2002. Another

¹³⁹ Ulram, A.P. 1996, p. 9

special focus is on qualification measures for disadvantaged people in the Centres for Job Rehabilitation. Primarily, the expansion plan regarding work assistance for disadvantaged persons in cooperation with the respective provincial BSB has to be mentioned. In this connection also a new form of measures for handicapped people can be observed, which is provided for in the Unemployment Insurance Act of August 1998. According to this Act a disadvantaged person who is entitled to draw unemployment benefit can prolong this period if he/she participates in a measure organised by an institution for vocational rehabilitation that is recognised by a regional Public Employment Service office.

(ii) *Persons unemployed due to lay-offs*

This problem group is supported by means of work foundations and regional re-integration measures. Work foundations are a relatively new instrument of active labour market politics. They are a model of organisation and financing both for occupational orientation and for re-qualification provided a considerable reduction of personnel has already taken place or is taking place. The advantages of work foundations can be summarised as follows:

- Ø bundling of proven measures of labour market politics to re-integrate unemployed persons into the work process, such as active job hunt, support in the founding of enterprises, and intensive assistance for older persons;
- Ø social safety for unemployed people during the comprehensive re-qualification process by means of prolonging the times they receive unemployment benefit and scholarships;
- Ø qualification measures tailored to the individual needs as well as labour market and regional requirements;
- Ø keeping the schedule and sticking to the correct procedure in the case of plant closures, company rescues, and restructuring measures.

The success rate of work foundations is traditionally very high and currently amounts to 70 % to 90 %¹⁴⁰, which means that between 70 % and 90 % of all foundation participants could be re-integrated into the labour market.¹⁴¹ More details on this matter can be found in Section 5.3 ("Case Study 2: Work Foundations – 'Good Practice' in the Mobilisation of Resources for Lifelong Learning").

(iii) *Long-term unemployed people*

In order to achieve a successful placement of long-term unemployed people, this group is offered a varied and tailor-made range of orientation, qualification and employment measures.

¹⁴⁰ as per late 1998

¹⁴¹ Piskaty, G. 1997, p. 59

(iv) *Employment of women*

By means of targeted counselling as well as promotions both in the vocational and in the continuing education and training areas, it is aimed at changing career choices and, thus, at bringing about a long-term general equality of opportunity between men and women and, in particular, at improving their income situations. In addition to that, basic measures, such as the granting of child care allowances and the promotion of the establishment of child care institutions, are of major importance.

(v) *Employment of young people*

In the framework of the prevention of youth unemployment, especially measures to support career decisions and occupational orientation are promoted. In this connection – deviating from the limitation to secondary level II which, in the rest of the present country report, has been strictly adhered to within initial vocational training – attention is drawn to the compulsory practical instruction in the subject Vocational Guidance provided for in the secondary academic school curricula and in the lower secondary school curricula for grades 7 and 8.

Starting in 1996, also the promotion of apprenticeship contracts in enterprises and training institutions as well as the creation of additional training places at apprenticeship workshops is expanded.

In this connection also measures to combat youth unemployment staged in the framework of the National Action Plan for Employment of April 1998 are underlined (for more details cf. section 1.2: "Economic Context"). For the two academic years 1998/99 and 1999/2000, a respective safety net for about 4,000 persons seeking an apprenticeship post is created, which comprises approximately 2,500 places in courses¹⁴² and approximately 1,500 places in foundations for apprentices (section 30 institutions)¹⁴³.¹⁴⁴ For financing this safety net, Federal funds provided include:

	1998/99	1999/2000
Section 30 foundations	ATS 500 m	ATS 500 m
Training places	1,500	1,500
Courses	ATS 400 m	ATS 400 m

¹⁴² Courses are in this connection one-year events organised by provider organisations (e.g. bfi, WIFI, private associations, etc.) for acquiring basic knowledge and skills in an apprenticeship trade (1st year) or a group of "related" occupations. Participation in a course is taken into account and recognised towards an apprenticeship training, when transferring, in accordance with certain criteria.

¹⁴³ Foundations for apprentices are training programmes in promising trades that are organised on the basis of section 30 BAG by private providers who are not entitled to train apprentices in accordance with section 2 BAG.

¹⁴⁴ Beilage 1 of the National Action Plan for Employment

Training places	2,500	2,500
SUM TOTAL	ATS 900 m	ATS 900 m

Source: Annex to the National Action Plan for Employment

A special problem group are teenagers and young adults who have only compulsory schooling. The number of undisclosed cases is very high since a registration at the Public Employment Service Austria is often not carried out due to lacking entitlements to benefits or because they are still supported by their parents.

For unqualified young people, the Vocational Support Institute (BFI) runs skilled workers' intensive training courses in the fields of wood, electronics, metal, tourism, and office work. Another measure of labour market politics which has to be mentioned here is the increased expansion of external courses with contents from lower secondary school as well as the provision of tailor-made career information and work preparation courses.

The project "Sintegra" is oriented towards young unemployed migrants and refugees. Some integrated parts of this project are: analysing their current personal situation; stabilising their social circumstances; as well as providing for an elementary education.

Also in the National Action Plan for Employment the target group of unqualified youth is taken into special consideration. An amount of ATS 50 million is made available for measures for youth below the age of 18 to complete compulsory schooling in the years 1998 and 1999.

(vi) *Working students*

Equality of opportunity in the access to higher education is not guaranteed solely through free access to university and free of charge study courses. The tertiary education system prevalent in Austria only very marginally takes into consideration the working students' needs. Only a small number of lectures is held in the evenings; the office hours of university administrative offices do not take into account at all the daily routine and resulting time limitations of working people; studies de facto do not include any elements of distance learning; furthermore there is a lack of child-care institutions for studying mothers and fathers. In addition, taking up a study course often results in time-related bottlenecks, which lead to difficulties at the workplace or financial problems due to a partial withdrawal from the world of work.¹⁴⁵

The improvement of access to the post-secondary sector can be achieved by means of intensifying the flexibilisation of the teaching offer, i.e. the widening of distance-learning elements, the modularisation of

¹⁴⁵ Einem, C. 1998, p. 7

university studies, the introduction of tutorial systems oriented to working people in particular, etc. Related measures at non-university level, such as the establishment of additional child-care institutions, are further possibilities to overcome barriers to university participation.¹⁴⁶

Chapter 3:

¹⁴⁶ Einem, C. 1998, p. 7

Raising the return to lifelong learning

3.1. Costs and benefits of lifelong learning

The following section deals with the cost structure and the development of the major cost components in the fields of lifelong learning: at secondary level II, in adult education and training, and in the tertiary sector. In the centre there are the public costs and approaches for reducing them. The major cost component in the education system is constituted by the salaries for the personnel, instructional staff, and administrative personnel. Moreover - as far as the data basis permits - current material expenses, equipment investments and location-related expenses are differentiated between.

3.1.1. Foundation Learning

Secondary level II comprises a wide range of school types, differing as far as their targets, durations, and types of financing are concerned. The costs of this education sector are paid nearly exclusively by the public (the federal government, the Laender governments and the local authorities). In the centre of discussions there are the educational expenses to be paid per student. The development of these expenses between 1985 and 1995 is analysed by splitting up the total expenses into various cost factors and then examining their individual changes. The basis for cost determination is the Federal Financing Act of the respective years. The following school types are taken into account in the determination of the cost structure: the pre-vocational school (PS), the vocational schools for apprentices (BPS), the upper cycle of the secondary academic schools (OAHS), secondary technical and vocational schools and colleges (BMHS). It is not possible to include the secondary schools and colleges for agriculture and forestry fully in the analysis because of the specific problems in the availability of data.

The methodical procedure of cost determination is in the main based on the study by Pechar/Kainz/Schramm¹⁴⁷. In this study, the expenses of the federal government, the Laender governments, and the local authorities for general-education compulsory schools, vocational schools for apprentices, secondary academic schools, and secondary technical and vocational schools and colleges are recorded on the basis of the federal budgets and the financial handling overviews of the regional and local authorities for the years 1980 until 1992. This record is extended with a few minor modifications to the year 1995.

In the following, problems in connection with cost determination and the utilised cost categories are discussed.

¹⁴⁷ Pechar/Kainz/Schramm 1994.

(i) *Building and Investments Costs*

In the study by Pechar/Kainz/Schramm, expenses are categorised into the cost types "building and investment costs", "permanent material expenses" and "personnel expenses". Identification problems occur, however, with the investments. With regard to the general-education compulsory schools (primary schools, lower secondary schools, pre-vocational schools) and the vocational schools for apprentices, Pechar, Kainz and Schramm as well as Martinschitz¹⁴⁸ refer to the data in the extraordinary financial handling of the Laender governments and the local authorities, which they interpret as investments. This is problematic, however. The inclusion of an extraordinary financial handling is merely an optional type, and there are regional and local authorities, including also the Municipality of Vienna, which only have an ordinary financial handling. Furthermore, the extraordinary financial handling refers more to the form of financing; it is possible that even in regional and local authorities that have an extraordinary financial handling investments are included also in the ordinary financial handling. Also with regard to federal schools, building investments cannot easily be verified. The founding of the Federal Real Estate Corporation (Bundesimmobiliengesellschaft) has made matters even more complicated, and it is difficult at the level of budget statements to differentiate between rents, maintenance and renovations of buildings, and investments.

For these reasons, no difference is made between "permanent material expenses", "investments for equipments" and "building investments" in the case of general-education compulsory schools and vocational schools for apprentices - they only speak of material expenses. For federal schools (academic secondary schools, secondary technical and vocational schools and colleges), the cost category "location-related expenses" is used, comprising building investments, rents and expenses for the maintenance and renovations of buildings. Since school room rents and building expenses are included in the budget only for the federal school sector as a whole, these expenses were allocated to the individual school types by means of a key that orients itself by the number of school-classes¹⁴⁹.

(ii) *Personnel expenses*

In the sector of federal schools, no distinction can be made between expenses for instructional staff and non-teaching personnel, at least if the annual financial statements of the federal budgets are used as a basis, because the personnel expenses for civil servants are not broken down by employment groups. Although

¹⁴⁸ Martinschitz 1996.

¹⁴⁹ Teacher training colleges and colleges for the training of vocational teachers are not counted among schools of secondary level II, they belong to the tertiary sector.

expenses for non-teaching personnel in the compulsory school sector could have been determined¹⁵⁰, this was not done, because federal schools make up the predominant share in the schools at secondary level II.

Personnel expenses include: basic salary, additional pays, allowances, remunerations for overtime and employers' contributions for civil servants¹⁵¹ and for state employees employed on the basis of private law, but also payments to instructional staff who are not in an employer-employee-relationship with public school providers: for religious instruction teachers and teachers at private schools, for whom the federal government pays the salary costs according to the section 19 of the Private School Act, and also for trainee teachers, exchange teachers, and similar employees.

(iii) Administration costs

All those expenses are considered administration costs that accrue in the school administration outside the individual schools. The following expenses are used:

- Ø expenses of the Zentralstelle (Central Office) of the Federal Ministry of Education and Cultural Affairs (Budget Estimates No. 1/120) with the exception of the positions for school room procurement and rents (which are included under "location-related expenses") and of "subsidies" (Budget Estimates No. 1/12006),
- Ø expenses for school development (taken from the Budget Estimates No. 1/1220 "General pedagogical requirements"),
- Ø expenses for school supervisory authorities (Budget Estimates No. 1/1260), and
- Ø expenses for school psychology and educational counselling (Budget Estimates No. 1/1261).

These expenses are allocated to the individual school types by means of a key that orients itself by the number of teachers¹⁵².

(iv) Estimation of expenses for the pre-vocational school (PS)

Basing on the federal budget and the financial handling overviews of the Laender governments and the local authorities, merely the expenses for the complete sector of general compulsory schools can be determined; they include the expenses for the pre-vocational schools which are of interest here. Since personnel expenses make up the biggest share in the total costs (approximately 80 % in the sector of secondary level

¹⁵⁰ This could have been done if those personnel re-payments from the federal government which are made merely for the instructional staff had been subtracted from the total of personnel expenses.

¹⁵¹ The actual personnel costs are distorted insofar as payments for retirement pensions are not included among the employers' contributions for civil servants.

¹⁵² Also here, teacher training academies and academies for vocational school teachers were considered as cost factors.

II), PS-expenses were estimated on the basis of the share of the permanent teaching posts of this school type in the permanent teaching posts of the complete sector of general compulsory schooling. This is possible because guidelines have been decided on jointly by the federal government and the Laender governments in several steps since 1979 to determine the number of permanent posts¹⁵³.

(v) *Estimation of expenses for the secondary academic schools' upper cycle (OAHS)*

Basing on the federal budget, merely expenses for the complete field of secondary academic schools can be determined. The estimation of costs for the upper cycles was carried out with the help of the teaching personnel information system (UPIS). This system was introduced in 1983/84; it has the function of calculating the permanent posts necessary for the field of federal schools on the basis of the so-called "Werteinheiten" - i.e. the time values of school lessons of different subjects¹⁵⁴. For this report, the office responsible for UPIS carried out a special calculation, from which lesson time values for the upper cycles were deduced. Expenses for the upper cycles (OAHS) are then separated with their share in the total lesson time values from the expenses for the total secondary academic schools.

(vi) *Estimation of expenses for secondary schools and colleges for agriculture and forestry*

There are several reasons why determination of costs is difficult in this area. For secondary schools, material costs, building and investment costs as well as expenses for administration personell are covered completely by Laender governments, teacher salaries half; teachers, however, have the additional duty to do advisory service for various authorities of the agriculture and forestry administration. The secondary colleges for agriculture and forestry are financed completely from the federal budget, but costs for research and public scrutinies as well as cost for boarding schools are included in the available data and cannot be separated. It follows from this that a precise determination of the costs for education and training would cause an enormous effort. The amount of expenses indicated in the following are based on a well-informed estimation of the competent office of the Federal Ministry of Agriculture and Forestry. A detailed analysis of the cost structure and cost development, however, is not feasible on these conditions.

(vii) *Subsidising of private schools and indirect costs*

Apart from expenses for public schools, for teachers of denominational private schools with public access (the so-called living subsidies) and the payment of personnel costs for religious instruction teachers, there are additional subsidies for private schools from the part of the federal government. This subsidising mainly has the function of being used for purchasing teaching resources and modernising equipment.

¹⁵³ cf. Pechar/Kainz/Schramm 1994, p. 36, where the respective data was taken from; for the school year 1994/95, however, data from 1993/94 was used because no later figures have been published so far.

¹⁵⁴ cf. Pechar/Kainz/Schramm 1994, p. 44-45.

In addition to that, there is a series of expenses with which education and school attendance are promoted. Among these indirect costs there are supports and promotions for students, expenses for the management of students' homes and for additional educational offers in the cultural, civics-related and sports fields (the "Weeks in Vienna", which are organised for pupils and students from the other federal provinces to visit their national capital; international youth activities; school sport events; management of federal school hostels in the country). Furthermore, indirect costs include State expenses for school textbooks, free school trips and grants for school trips of students, which are paid from the Familienlastenausgleichfonds (Family Equalisation Fund).

For the year 1995, also subsidies for private school providers and indirect educational costs are shown.

a) Per student expenditures

In the year 1995, public total expenses per student amount to ATS 71,600¹⁵⁵ for the sector of secondary level II. Apart from the vocational schools for apprentices, which take a special position due to their part-time character, and the secondary colleges for agriculture and forestry, it can be found that the various school types only differ slightly from each other as far as expenses per student are concerned.

Table 3.1
Public expenditure per student for upper secondary education 1985 and 1995
(in ATS 1,000 constant prices 1995)

Type of schools	1985	1995	change (in %)
Pre-vocational schools	58.7	89.9	53.2
Vocational schools for apprentices	25.7	44.5	73.2
Academic secondary schools - upper cycle	61.7	81.4	31.9
Secondary schools for agriculture and forestry	54.1	85.1	57.3
Secondary colleges for agriculture and forestry	93.0	101.9	9.6
secondary technical and vocational schools and colleges	67.6	84.9	25.6
Secondary level II - SUM TOTAL	49.6	70.6	42.3

With the help of the GDP-deflator, the educational expenses calculated for 1985 were brought to the price level of 1995 in order to be able to carry out a cost comparison. It shows that expenses per student increased by 42 per cent in real terms in the period between 1985 and 1995. The cost increases differ noticeably between the school types (according to the classification made here): The increase is relatively low in the case of academic secondary schools (32 %), secondary technical and vocational schools and colleges (26 %) and secondary colleges for agriculture and forestry (10 %), whereas vocational schools for

¹⁵⁵ cf. Table 3.1

apprentices and secondary schools for agriculture and forestry have rates of increase far above the total value (73 % and 57 % respectively)¹⁵⁶.

b) Major cost components

Because of the lack of differentiation of the available data, one can differentiate only between personnel expenses and material expenses for the complete sector of secondary level II; material expenses include also expenses for investments; only for federal schools the data basis is slightly better.

Table 3.2
Expenditure by resource category in public and government-dependent private schools (in % of total expenditure)

Type of school	Year	Staff compensation	Other expenditure	of which			
				current	capital for equipment	for school buildings	for administration
Pre-vocational schools	1985	80.1	19.9				4.5
	1995	82.4	17.8				2.5
Vocational schools for apprentices	1985	78.4	21.6				2.0
	1995	74.6	25.4				1.1
Academic secondary schools - upper cycle	1985	75.4	24.6			12.9	3.1
	1995	83.2	16.8	4.6	0.9	9.2	2.0
secondary technical and vocational schools and colleges	1985	73.0	27.0			12.3	2.9
	1995	81.0	19.0	6.6	1.6	9.0	
Secondary level II	1985	74.9	25.1				2.7
	1995	79.6	20.4				1.7

Personnel expenses make up the biggest share in the expenses; their share in the year 1995 was slightly less than 80 per cent, an increase by five per cent compared to 1985¹⁵⁷. Personnel costs thus grew stronger than material expenses. Administration costs sank in the period under observation - not only as far as their share

¹⁵⁶ On the interpretation of the various cost increases cf. further below.

¹⁵⁷ cf. Table 3.2

was concerned (from 2.7 % to 1.7 %), but also in absolute figures. It cannot be assessed here if this decrease is in accordance with a general trend or can be traced back to a special situation in the year 1985¹⁵⁸. Location-related costs of federal schools - adjusted for inflation - did not rise in the observation period, their share in the total expenses decreased from 13 to 10 per cent due to the increase of the total expanses.

c) *Evolution of teacher salaries*

Teachers' salaries are laid down by law; they are negotiated on between the government and the Union. Their amounts are coupled to the teachers' education and employment categories (groups of use). Due to the fact that since the expansion of the education system during the 1970s the predominant part of teachers has reached the qualification deemed optimal for their employment category, those two "groups of use" are picked out here as examples which the majority of teachers belongs to: L2a2 and L1. The criteria for the teachers' salaries in the compulsory school sector are the "Reifeprüfung"-Examination and completion of a teacher training college; if these conditions are met, they are paid according to the employment category L2a2. Teachers with university graduation who teach at secondary schools are paid according to the employment category L1.

Table 3.3

Upper secondary teacher salaries, 1985 and 1995

	Laender teachers (L2a2)		Federal teachers (L1)	
	1985	1995	1985	1995
Starting salary	183,946	268,002	207,480	301,686
Maximum salary	406,742	607,229	497,000	750,995
Ratio of starting salary to per-capita GDP	1.0	0.9	1.2	1.1
Ratio of maximum salary to per-capita GDP	2.3	2.2	2.8	2.7
Ratio of maximum to starting salary	2.2	2.3	2.4	2.5
Years from starting to maximum salary	34	36	36	40
Average yearly growth rate (in %)	2.4	2.3	2.5	2.3
Index of collective salaries (1985 = 100)	144.5		145.4	
Index of consumer prices (1985 = 100)	130.6		130.6	
Increase in real wages 1985 - 1995 (in %)	10.6		11.4	

Table 3.3 lists monthly starting and maximum salaries for the two most important employment categories L2a2 and L1 for the years 1985 and 1995. The given annual salaries were calculated on the basis of their

¹⁵⁸ In the annual financial statement from the budget year 1985 (in the Budget Estimates Application 1/12008), a high amount appears as expenses for a data processing installation (ATS 848.5 million) - an amount which is missing (nearly the same quantity) in the annual financial statement 1995.

respective monthly basic salaries (multiplied by 14); they do not include additional pays, allowances, overtime remunerations and employers' charges for social insurance.

The ratio of the salaries to the gross domestic product is of interest in comparison between different countries and can be regarded as an indicator for the status of an occupational group¹⁵⁹. The salaries of the Federal and Laender teachers show a drastic difference: This difference amounts to approximately 13 per cent in the case of the starting salaries and increases to 23 per cent in the maximum salaries. The ratios of maximum salaries to starting salaries lie between 2.2 and 2.5, and had increased by 1995 compared to 1985 in both teacher groups even slightly more; it has to be taken into account, however, that the number of years in the course of which the maximum salary can be reached was raised (from the age of 34 to 36 for Laender teachers and from 36 to 40 years for federal teachers). Thereby the average annual increase of the salaries was reduced from 2.4 to 2.3 per cent for Laender teachers and from 2.5 to 2.3 per cent for federal teachers. The negotiated wage index of federal teachers increased slightly more than that of Laender teachers (to 145.4 and 144.5 respectively); adjusted for the development of consumer prices, this results in a real wage increase of 11.4 and 10.6 per cent respectively. Thus, teachers' salaries lagged noticeably behind the general negotiated wage index (156.3 with 1985 = 100) and the average real wage increase of 19.6 per cent.

d) Location-related expenses

Expenses for school buildings (building investments, maintenance and renovations of buildings, rents) did not increase in the study period. Their share in the total expenses sank in the case of the academic secondary schools and the secondary technical and vocational schools and colleges slightly. Due to a lack of available information, no statements can be made about the reasons for this favourable development of location-related expenses.

e) Factors of the evolution in costs

In the following, the evolution of costs at secondary level II is analysed. The basis of the analysis are the real expenses that have been brought to the 1995 price level by means of the GDP-deflator. The cost size to be analysed are the expenses per student, which increased by 42 per cent in real terms in the period 1985 until 1995. In the analysis of the development of costs, the procedure is as follows:

Ø The total expenses per student (e_s) are broken down into the two elements "material expenses per student" (g_s) and "personnel expenses per student" (c_s) ($e_s = g_s + c_s$) and the share of the two elements in the cost increase is calculated.

¹⁵⁹ cf. OECD 1995, p. 187.

Ø The further analysis concentrates on the element "personnel expenses per student". They are split up by means of the method "identical breakdown" into the following factors:

§ personnel expenses per teacher (c_t),

§ ratio "number of teachers to number of classes" (t_{cl}),

§ ratio "number of classes to number of students" (cl_s).

Personnel expenses per student can be written down as the product of these three factors ($c_s = c_t \times t_{cl} \times cl_s$). Each of these factors can be interpreted in a cost-relating useful way. Personnel expenses per teacher reflect the influence of the teachers' salaries on the evolution of costs; negotiated wage development, overtime, ratio of actually held instructions hours and additional activities as well as age structure are decisive for their amount¹⁶⁰. The two ratios "number of teachers to number of classes" and "number of classes to number of students" together give the ratio "number of teachers to number of students". This variable, which is often in the centre of interest, is here divided into two factors, which show different aspects of the development of school organisation. The ratio "teachers to classes" indicates the intensity of assistance and support students receive within the class community; this intensity is determined by curriculum related conditions (number of compulsory and elective compulsory subjects, possibilities of attendance of elective subjects) and didactic measures (partitioning numbers for parallel instruction in groups). The ratio "classes to students" is the reciprocal value of the numbers of students per class, which are regulated by maximum permissible numbers and influenced by the development of the student numbers.

Ø The analysis of the development of personnel expenses per student is carried out by means of a calculation of the growth rates of the three cost factors in the period 1985 until 1995. If "continuous" growth rates¹⁶¹ are used, the increase of the personnel expenses can be represented as the sum of the three factors: personnel expenses per teacher, the ratio "teachers to students", and the ratio "students to classes", and those shares in the total size can be calculated with which the individual factors are involved in the increase of personnel expenses per student.

Ø The analysis becomes more detailed when the increase of personnel expenses per teacher between 1985 and 1995 is divided into two components: into the factor of real wage increase in this period and into a residual factor, which expresses other causes of the cost increase. Since the instructional staff at secondary level II consists of federal and Laender teachers, the calculation of the real wage increase is simplified and carried out with the help of the negotiated wage index for civil servants; the negotiated wage index is deflated by means of the consumer price index.

¹⁶⁰ cf. Riedel 1994, p. 104-105 concerning this situation and the following points.

¹⁶¹ A continuous growth rate w_v of a variable v in a period $t_1 - t_2$ is calculated as follows: If $v^{(t_1)}$ is the value of v at the time t_1 and $v^{(t_2)}$ at the time t_2 , w_v is the logarithm \ln of the ratio $v^{(t_2)}/v^{(t_1)}$, i.e. $w_v = \ln(v^{(t_2)}/v^{(t_1)}) = \ln v^{(t_2)} - \ln v^{(t_1)}$.

On the whole, therefore, the following additive breakdown by cost factors results for the continuous growth rate of the personnel costs per student:

Personnel expenses per student	Real wage growth	Residual factor of personnel expenses per teacher	Ratio "teachers to classes"	Ratio "classes to students"
$W_{c/s}$	W_c	$W_{r(c/t)}$	$W_{t/cl}$	$W_{cl/s}$

Ø The total amount of personnel expenses per teacher is influenced by the relation between full-time and part-time teachers. Since this ratio could have changed in the course of the ten years between 1985 and 1995, the use of "capita numbers", as given in the school statistics, would distort the results. An increasing number of part-time teachers would lead to a reduction of the contribution of the teachers' salaries to the increase of total costs in the calculation. Such a mistake can be avoided by using permanent post numbers. For academic secondary schools as well as secondary technical and vocational schools and colleges, these figures can be found in the post plan of the respective budget years. For the pre-vocational school, weekly lesson calculations were used that were carried out on the basis of the guidelines jointly agreed upon by the federal government and the Laender governments. For vocational schools for apprentices, however, no figures could be found, so that the "capita numbers" from the school statistics had to be used. Because of this, the calculations become slightly inaccurate - to an extent that depends on the change of part-time employment in these school types in the years between 1985 and 1995. The share of teachers at these school types in the total number of teachers at secondary level II makes up approximately 25 per cent; assuming that part-time employment has increased, it can be said that the contribution of the teachers' salaries to the cost increase is slightly underestimated.

Table 3.4 shows the size of the cost factors in the years 1985 and 1995 which have been included in the analysis. Values are expressed in ATS at price level from 1995. Table 3.5 includes - always in the first line of each school type - the (discrete) growth rate of the various cost factors.

In 1995, material expenses per student were ATS 14,600 in the secondary school sector; compared to 1985, they increased by 17 per cent in real terms. In 1995, personnel costs per student amounted to ATS 57,000, thereby increasing by 53 per cent. Per teacher personnel expenses grew by 33 per cent. In the vocational schools for apprentices where no permanent post numbers but capita numbers were used as the basis of the calculation, personnel expenses per teacher differ noticeably from the other school types. In the vocational schools for apprentices, personnel expenses per teacher are extremely high; one reason to explain this could be a high degree of overtime work in this school type.

Table 3.4

Cost factors 1985 and 1995 (Values at constant prices 1995)

School type	Year	Per student (in 1.000 ATS)		Personnel expenses per teacher (in 1.000 ATS)	Ratio "students per teacher"	Ratio "teachers to classes"	Students per class
		Material expenses	Personne l expenses				
Pre-vocational schools	1985	11.7	47.1	282.6	7.9	2.9	23.1
	1995	15.8	74.1	491.5	6.6	3.2	21.0
Vocational schools for apprentices	1985	5.6	20.1	604.1	39.6	0.7	27.3
	1995	11.3	33.2	947.0	28.5	0.8	23.7
Academic secondary schools - upper cycle	1985	15.2	46.5	461.3	13.1	2.2	28.4
	1995	13.6	67.8	824.8	12.2	1.9	23.5
Secondary technical and vocational schools and colleges	1985	18.3	49.3	456.8	12.2	2.2	27.2
	1995	16.1	68.8	812.8	11.8	2.0	23.5
Schools on Secondary level II -total	1985	12.5	37.2	441.6	15.6	1.7	27.1
	1995	14.6	57.0	772.9	13.6	1.7	23.4

The evolution of personnel expenses per teacher depends among other things on the results of the wage negotiations. Real wages for civil servants increased by eleven per cent between 1985 and 1995. Additional factors caused an increase of the personnel expenses per teacher to the extent of 22 per cent. This percentage is approximately the same in all school types - with the exception of the vocational school teachers, here it is considerably lower: it lies at eight per cent.

The negotiated wage development for civil servants stayed noticeably behind compared to the general wage development in the observation period (the increase of real wages calculated according to the general wage index lies at 19.8 % compared to 11.0 % for civil servants) and, therefore, does not represent a factor of cost increase that would need any explaining. In the case of the remaining salary-relevant factors, which increased by 22 per cent in real terms, the increase of the average age of the teachers and the connected rise in the salary group are the major reasons. As has already been shown, the salary system comprises a wide margin between starting and maximum salaries. On the basis of the existing age structure of teachers at academic secondary schools and secondary technical and vocational schools and colleges, Riedel carried out a calculation of the effects on the teachers' salaries in the period between 1987 and 1994¹⁶²; according

¹⁶² cf. Riedel 1994, p. 113.

to this calculation, the age structure is the reason for the increase in the salary of the AHS-teachers by 17 per cent in real terms, in the salary of the BMHS-teachers by 21 per cent. These figures fit well to the results of 24.5 and 23.9 per cent for the period 1985 until 1995 that have been calculated here¹⁶³. According to the study by Riedel, other factors do not play a role: there was no increase of overtime (furthermore, extra hours are not more expensive for the employers than normal working hours), and the share of additional activities in total work time even decreased slightly¹⁶⁴.

Table 3.5
Discrete and continuous growth rates of the cost factors between 1985 and 1995 (figures in %)

School type	Growth rates	Personnel expenses per student	Real wage civil servants	Remaining personnel expenses per teacher	Ratio "teachers to students"	Ratio "teachers to classes"	Ratio "class to students"
Pre-vocational schools	discrete	57.4	11.0	20.8	19.4	8.4	10.1
	continuous	45.4	10.5	17.2	17.7	8.0	9.7
Vocational schools for apprentices	discrete	65.0	11.0	7.8	38.8	20.5	15.1
	continuous	50.1	10.5	6.8	32.8	18.7	14.1
Academic secondary schools upper cycle	discrete	45.7	11.0	24.5	7.5	-11.0	20.7
	continuous	37.7	10.5	20.0	7.2	-11.6	18.9
Secondary technical and vocational schools and colleges	discrete	39.5	11.0	23.9	3.3	-10.9	15.9
	continuous	33.2	10.5	19.5	3.3	-11.5	14.8
Secondary level II	discrete	53.0	11.0	21.7	15.3	-0.4	15.8
	continuous	42.5	10.5	17.8	14.2	-0.4	14.7

The ratio "students per teacher" of the year 1995, calculated over the complete sector of secondary level II, was 13.6. Broken down by school types, the ratio looks completely different: it is lowest in the pre-vocational school (6.6) and highest in vocational schools for apprentices (28.5); in academic secondary schools, and secondary technical and vocational schools and colleges, the student-teacher-ratio is of a similar quantity (12.2 and 11.8 respectively). All school types show the same decreasing tendency in the period 1985 until 1995, in the vocational schools for apprentices it is particularly pronounced¹⁶⁵.

¹⁶³ cf. Table 3.5.

¹⁶⁴ cf. Riedel 1994, p. 104.

¹⁶⁵ cf. Table 3.5, where the growth rates of the reciprocal value "teachers to students" are specified.

In the framework of this analysis, the ratio "teachers per student" is broken down into the two ratios "teachers to classes" and "classes to students". The ratio "teachers to classes" is 1.7 for the complete sector of secondary level II; broken down by school types there are, however, considerable differences. The major factor influencing the ratio is the degree of class-internal differentiation of instruction. Differentiation possibilities are established for the school types by means of the school-related legislation and regulations by the Ministry of Education¹⁶⁶:

- Ø The pre-vocational schools are run in three achievement groups in the compulsory subjects German, Mathematics and a "living foreign language"; apart from the compulsory subjects, there is group of elective compulsory subjects, within which students can select from between four alternative seminars and a series of other subjects; in addition to that, there is an offer of elective subjects, "voluntary" exercises as well as remedial instruction; and last but not least, students of non-German mother-tongue are offered additional instruction in German. This big differentiation of instruction with relatively small schools and class sizes can explain the high ratio of "teachers per class" of 3.2 (in the year 1995) in the pre-vocational school. Compared to 1985, it has risen slightly (by approximately eight per cent).
- Ø The ratio "teachers per class" is lowest in the technical and vocational schools (0.8 in the year 1995), although also here there are certain differentiation possibilities. In individual subject-theoretical and management-relating subjects, instruction is carried out in two achievement groups (in a "standard group" and an "intensive group", in which students of better capabilities are intended to be supported); furthermore, technical and vocational schools offer also elective subjects (e.g. foreign languages, P.E.) and remedial instruction - although it seems as if only little use is made of these possibilities. Compared to 1985, the ratio "teachers per class" increased by 20 per cent, which is most probably due to the introduction of the elective compulsory subject "job-related living foreign language" for all students of a technical and vocational school in the year 1990.
- Ø In the secondary academic schools and the secondary technical and vocational schools and colleges, instruction is carried out without any performance-oriented differentiation; there are, however, partitioning numbers of different sizes in many subjects. In the technical and vocational schools, particularly practice-oriented subjects (workshop, laboratory, kitchen) are taught in small groups. Furthermore, there is a series of elective compulsory subjects and elective subjects. The ratio "teachers per class" is of similar size in both school types (1.9 in AHS upper cycle and 2.0 in BMHS), and it sank noticeably in both school types (by eleven per cent) in the period 1985 until 1995. The reason for this development were the austerity measures introduced from the part of the Government, which since the beginning of the 1990s have led to a more restrictive allocation of "lesson time values" (see above) at schools. Saving measures can be introduced by individual schools mainly as far as their offer of

¹⁶⁶ The following data have been taken from the Eurydice data bank of the Federal Ministry of Education and Cultural Affairs.

elective subjects is concerned, but also by reducing elective compulsory subjects and group instruction. The exact fields of instruction where saving measures are carried out could have been identified only by means of a more detailed study. It can be assumed that reductions in the elective subjects are in the foreground; however, it must not be overlooked, either, that the possibility of parallel instruction decreases as class sizes shrink, because partitioning numbers are not achieved and the number of students per class in secondary academic school as well as in secondary technical and vocational schools and colleges decreased considerably between 1985 and 1995 (from 28.4 to 23.5 in AHS upper cycle, and from 27.2 to 23.5 in BMHS; in other words by 21 and 16 % respectively).

For the total sector of secondary level II, the ratio "teachers per class" remained constant in the observation period: its increase in the pre-vocational schools and in the vocational schools for apprentices is compensated by its decrease in the secondary academic schools and in the secondary technical and vocational schools and colleges.

Table 3.6
Contributions of cost factors to the increase of total expenses per student (figures in %)

School type	Material expenses per student	Real wage development	Remaining personnel expenses per teacher	Ratio "teachers to classes"	Ratio "class to student "	Total
Pre-vocational schools	13.2	20.0	32.9	15.4	18.5	100.0
Vocational schools for apprentices	30.5	14.5	9.5	25.9	19.6	100.0
Secondary academic schools - upper cycle	-7.9	30.0	57.2	-33.3	54.0	100.0
Secondary technical and vocational schools and colleges	-12.5	35.5	66.0	-39.1	50.1	100.0
Secondary level II	9.6	22.3	37.8	-0.9	31.2	100.0

The numbers of students per class decreased from 27 to 23 between 1985 and 1995; this tendency applies to all school types; the decrease was by 16 per cent in the period under observation. The number and distribution of school locations limit the possibility to maintain class sizes in spite of declining student numbers; moreover, service law (employment contracts which cannot be terminated by the government) and lack of alternative employment possibilities for teachers make it difficult to adapt class sizes to the development of student numbers. From a pedagogical point of view it has to be taken into account that these circumstances facilitate an improvement of studying conditions and an expansion of the educational offers.

The transition towards continuous growth rates facilitates, as has already been described, an additive breakdown of the increase of personnel expenses per student. Table 3.5 lists the continuous growth rate of each school type. If, moreover, it is taken into consideration that also material expenses per student contribute to a certain extent to the cost development, it becomes possible to calculate the shares that are contributed by the individual cost factors to the development of the total costs per student. The results have been summarised in Table 3.6.

The biggest share in the development of costs per student is contributed by the development of the personnel expenses per teacher. They contribute a share of 60 per cent to the increase of the costs at secondary level II: 22 per cent fall to real wage development and 38 per cent to other salary-effective factors, i.e. mainly to the increase of the average age of the instructional staff. The increasing number of teachers per student has led to a rise in personnel expenses per student between 1985 and 1995 by approximately 30 per cent; this cost increase is, as long as one refers to the whole secondary level, completely due to the decreasing numbers of students per class, because the changes in the ratio "teachers per class" between the school types counterbalance each other. The increase of material expenses per student has had an effect of slightly less than ten per cent on the increase of the total expenses per student.

The sizes of cost-increasing contributions of the different factors differ considerably depending on the respective school type. Academic secondary schools and secondary technical and vocational schools and colleges show a pattern of cost evolution which noticeably differs from the other school types. In the first-mentioned school types, material expenses per student as well as the costs influenced by the ratio "teachers per class" were considerably reduced in the period under observation; the cost increase concentrated on personnel expenses and the decreasing numbers of students per class. The pattern of the cost increase in the pre-vocational schools and vocational schools for apprentices is characterised by a strong decrease of the student numbers¹⁶⁷: Material expenses per student increased, and the ratio "teachers per student" rose by a factor many times higher than in the case of AHS upper cycle and BMHS¹⁶⁸. The relatively stable teacher employment could not only be kept at the current level (by means of a reduction of the numbers of students per class), but was increased by means of an expansion of the subject offer (elective compulsory subjects, elective subjects, remedial instruction) and group differentiation (achievement groups, parallel instruction).

The results of the study on the cost development can be summarised as follows:

- (1) The expenses per student in the sector of the secondary level II increased by 42 per cent in real terms between 1985 and 1995; in the secondary academic schools and the secondary technical and vocational

¹⁶⁷ The decrease in these school types amounts to 39 and 23 per cent respectively according to the order given above and lies considerably above the decrease in AHS upper cycle and BMHS with 8.5 and 0.5 per cent respectively.

¹⁶⁸ cf. Table 3.5

schools and colleges, expenses increased less markedly (32% and 26% respectively) than in the pre-vocational school and vocational schools for apprentices, where growth rates were between 50 and 80 per cent.

- (2) The personnel expenses per student increased considerably stronger than material expenses per student (53% compared to 17%).
- (3) The development of real wages due to negotiations with teachers' unions (with 11 per cent) lies noticeably lower than the average of the increase in wages with 20 per cent.
- (4) A big influence on personnel expenses is exerted by the increase of the average age of the instructional staff and the connected advancement in the salary structure; this influence lies 22 per cent in the decade between 1985 and 1995.
- (5) The ratio "teachers per student", which serves as an indicator for the class-internal differentiation of instruction, remained constant in the total sector of secondary level II and, therefore, did not exert any influence on the costs. There were, however, differences between the school types: in AHS upper cycles and BMHS, the ratio decreased (-11%), in vocational schools for apprentices it clearly increased (21%).
- (6) The numbers of students per class decreased in all school types (by approximately 16% in the total sector of secondary level II), which thus had a cost-increasing influence.
- (7) The contributions made by the individual cost factors to the development of expenses per student can be quantified as follows:
 - § real wage development: 22 per cent,
 - § age structure effect: 38 per cent,
 - § ratio "teachers per student ": -1 per cent,
 - § decreasing numbers of students per class: 31 per cent,
 - § material expenses: 10 per cent.

f) Introduction of innovative pedagogical methods to reduce costs

An effective reduction of the educational expenses can be achieved only through measures that relate to the personnel costs because these costs make up 80 per cent of the total expenses. The efforts of the government to reduce the personnel costs relate to the salary policy, saving measures when allocating resources, increase of the achievement requirements on teachers, and efficiency increase by means of organisational measures. The introduction of innovative pedagogical methods does not play any role in the

cost discussion. Computers are - according to a new report¹⁶⁹ - used at Austrian schools mainly to train people in computer literacy; this is done either in the form of a general computer science instruction in compulsory, elective compulsory and elective subjects or in a subject-specific way (e.g. computer use in accounting, in machine engineering, electronics, etc.). Computer-assisted learning is of marginal importance but is seen as something that is going to influence the field of education in the next ten to twenty years¹⁷⁰. The obstacle seen at present is lack of software. Peer-group tutoring and correspondence courses do not play a part in the pedagogical discussions about secondary level II.

The reduction of lessons to be held according to the curricula is mentioned as one measure in the Working and Coalition Agreements of the coalition parties. Such measures were already carried out in the previous years at secondary technical and vocational schools and colleges; furthermore, since the school year 1992/93, a more restrictive allocation of lessons according to the curricula ("lesson time values") has been in force, which has led to a reduction in the offer of elective and elective compulsory subjects. In the future, savings can be expected through the setting of priorities at schools in the wake of the expansion of school autonomy¹⁷¹.

g) Measures to improve information on costs

The main difficulties of cost control in the field of the public school system are found, on the one hand, in the complex separation and interrelatedness of the competences between federal government, the Laender governments and the local authorities and, on the other hand, in the fact that no cost accounting (in the meaning it has in business administration) is carried out; the resources are allocated and administrated according to budgetary views.

Even though the federal government has to pay for the expenses for the instructional staff in the field of compulsory schools (at secondary level II, this refers to the pre-vocational schools and the vocational schools for apprentices), the recruitment of instructional staff is carried out by the Laender governments (Laender teachers). In order to bring the development of the demand for teachers under control, the federal government has been setting initiatives since the end of the 1970s and enforced the elaboration of plan post guidelines for the field of the general-education compulsory schools¹⁷². In these guidelines, different criteria for the determination of the demand for teachers are laid down (number of students and classes, achievement group instruction, additional pays and allowances for administrative work, remedial instruction, substitutions, school pilot projects, specialised topics, mother-tongue instruction, special uses). It was not before the year 1989 that an agreement was reached between the federal government and the

¹⁶⁹ cf. Jansche 1996.

¹⁷⁰ cf. Astleitner 1996.

¹⁷¹ cf. 3.1.4.3.

¹⁷² cf. Pechar/Kainz/Schramm 1994, p. 36.

Laender governments to facilitate the observance of plan post guidelines. Since then, some checks have been carried out, which have brought divergences to light and have led to conflicts¹⁷³. For the vocational schools for apprentices, no plan post guidelines were agreed upon with the argument that the Laender governments carry half of the teacher costs and are therefore interested in an economical use.

In order to make the planning of plan posts for the federal schools (AHS upper cycles, secondary technical and vocational schools and colleges) more transparent, in which not only the individual schools themselves, but also the Laender school authorities participate, a teaching personnel information system (UPIS) was created in the middle of the 1980s, which is connected to the general personnel information system of the federal government and is installed in the Federal Computing Office¹⁷⁴. With the help of this system, "lesson time values" can be calculated for the different school types of AHS upper cycles and secondary technical and vocational schools and colleges and can be broken down by school locations; in these calculations, current regulations on the teaching load, revalorisation factors for special circumstances (e.g. evening school, school pilot projects, all-day schools) and partial payments for additional work are taken into account.

At secondary technical and vocational schools and colleges, there is a "business ratio model" for allocating financial resources in a needs-oriented way. In addition the budgetary instrument of earmarking in the financial handling has been introduced to increase cost consciousness.

One programme for safeguarding the quality of instruction is at present in the development phase. No statements can be made so far about effects on an improvement of the effectiveness of instruction.

h) Reallocation of costs

Changes in the financing or distribution of costs between the private and public sector have not taken place in the sector of secondary level II.

3.1.2. Tertiary sector

The most dominant field in Austria's tertiary education sector are the universities. Their share in the total number of students of the tertiary sector made up approximately 90 per cent in the study year 1994/95, and 70 per cent, respectively, when the number of new students is taken as reference size¹⁷⁵. Among the institutions of tertiary education that can be completed with a university degree, there

¹⁷³ cf. Pechar/Kainz/Schramm 1994, p. 43.

¹⁷⁴ cf. Pechar/Kainz/Schramm 1994, p. 44-45.

¹⁷⁵ The difference between 70 and 90 per cent expresses the considerably longer study durations at universities. The share of those studying at universities is overestimated when looking at these figures, if it is taken into consideration that a part of the people enrolled at a university never take up a study course and if one parted

are, in addition to that, the colleges for arts and music (two per cent of university students) as well as "Fachhochschul"-courses (non-university institutions in higher education) since the study year 1994/95, which still have small, but rapidly growing student numbers. Furthermore, there is a number of tertiary institutions without university graduation: post-secondary colleges (slightly less than four per cent of the university students), post-secondary courses in technical and vocational education (TVE, *Kollegs*) and special courses (two per cent), colleges for the higher medico-technical services (one per cent), as well as a series of vocational colleges (e.g. for the training of vocational teachers, for the training of religious instruction teachers, and for social work).

In the following, first of all cost structure and evolution of costs of universities, of the colleges for arts and music, teacher training colleges and colleges for the training of vocational teachers between 1985 and 1995 are described. For the costs of post-secondary courses in TVE, special courses, and the colleges for the higher medico-technical services no separate data is available; per-capita expenses for these institutions were already covered in Section 3.1.1, they can be taken as an estimation also for these institutions. In the following, the reform activities in the sector of universities and related institutions since the beginning of the 1990s is elaborated on, because these reforms are closely connected with an increase in performance and quality, and - in the case of the "Fachhochschul"-courses- are the start of a new form of financing. Effects and successes can, however, not yet be assessed, since the reform process is still being carried out¹⁷⁶.

a) *Per student expenditures*

At the beginning, some remarks have to be made on the procedure taken in connection with the calculation of instruction-relevant costs. As source of information on expenses, the budget parts on the Chapters "Science" and "Education" of the Federal Finance Act are available. With this data as a basis in connection with the university reports and the school statistics, only an estimation of the size of instruction-relevant expenses per university student can be carried out. However, some circumstances have to be taken into consideration and some assumptions have to be made.

Universities. The resources which are placed at universities' are for both function: research and instruction. The first task therefore consists of separating the expenses for these two functions. The Austrian Statistical Office annually calculates the expenses of the federal government for "research"¹⁷⁷ in the framework of the drawing up of the budget; universities and the colleges for arts and music are set out

from full-time equivalents in the case of university students. These issues are treated below in the discussion on the calculation of per-capita costs. Cf. BMWVK 1996, p. 100 and 102.

¹⁷⁶ Schools and colleges for people under employment, Fachhochschule study courses for people under employment, the University Centre for Further Training (Danube University Krems) and correspondence study courses are dealt with under Section 3.1.4.

¹⁷⁷ cf. Supplement T in the respective explanatory notes on the Federal Finance Act.

as separate positions. The basis for the calculation of research expenses are surveys of the use of working hours, which is carried out every three years for the university personnel: the use of resources for research is determined by means of the time needed by the personnel. For the year 1985, 40 per cent of the expenses for universities are counted among research, for the year 1995, this percentage lies at 43 per cent. Since only the two above-mentioned purposes "research" and "instruction" exist for resources of universities (administrative activities are also split up between these two categories), the instruction-relevant share is calculated by determining the remaining percentage to 100 per cent, it thus amounts to 60 and 57 per cent of the expenses.

A second problem when calculating the per-capita costs is the university student number, which instruction-relevant expenses have to be related to. The number of university students who become cost-effective for instruction has to be taken into consideration. This number is not identical with the number of persons enrolled at a university; studies show that a part of the people enrolled at universities never takes up a study course¹⁷⁸ and another part of them does not fully pursue their studies due to employment¹⁷⁹. The problem is treated here in accordance with Pechar¹⁸⁰. Pechar estimates the share of those people enrolled at universities who never start to study to be 25 per cent, and the full-time equivalent among the actual university students two thirds. On the whole this shows that half of the people enrolled at universities are the relevant reference size for the calculation of per-capita costs.

Table 3.7
Expenses per university student at universities, the colleges for arts and music, the post-secondary colleges for teacher training and the post-secondary colleges for the training of vocational teachers, 1985 and 1995 (figures in ATS 1,000, at prices from 1995)

Kind of institution	1985	1995	Growth (in %)
Universities	107.2	109.2	1.8
Colleges for arts and music	183.5	254.7	38.8
Teacher training colleges	136.0	157.3	15.6
Colleges for the training of vocational teachers	118.2	163.5	38.3

Colleges for arts and music. At the colleges for arts and music, research expenses make up a considerably smaller share in the total expenditure than at universities. For the year 1985, the Federal Finance Act includes a share of five per cent, for 1995 a share of seven per cent. Moreover, the teaching system of the colleges for arts and music differs from the teaching at universities in the principle of selective acceptance

¹⁷⁸ Until the academic year 1995/96, a reason for enrolling at university was that university students were entitled to certain financial benefits (family allowances, allowances for public transportation).

¹⁷⁹ cf. BMWF 1993, p. 43.

¹⁸⁰ cf. Pechar 1996, p. 91-92.

of students, the master school principle, and the stricter obligation of university students to be present. For these reasons, the calculation of per-capita expenses for instruction relates the expenses to the total number of university students. The number of students increased only slightly between 1985 and 1995. The number of Austrian and foreign "ordinary" (full-time) students increased from 6,028 to 6,837 - an increase by 13.4 per cent.

Table 3.7 shows the development of per-capita expenses at the various educational institutions of the tertiary sector between 1985 and 1995 at constant prices 1995¹⁸¹. The amounts of expenses show a relatively wide dispersion; for the year 1995, expenses at universities are lowest (at ATS 109,000), at the teacher training colleges and colleges for the training of vocational teachers they amount to approximately ATS 160,000, and at the colleges for arts and music they reach ATS 255,000 per student. Also growth rates of per-capita expenses show big differences: at universities, they remained relatively constant at 1.8 per cent, at the teacher training colleges they increased by 15.6 per cent, and at the colleges for arts and music and the colleges for the training of vocational teachers, the growth of per-capita expenses was most marked with more than 38 per cent.

b) Major components of costs

Table 3.8a shows the cost structure in the four educational institutions of the tertiary sector. The biggest cost factor at all institutions is the personnel expenditure per university student, its share in the total expenses varies considerably though. The lowest share becomes visible in universities, with 56.5 per cent in the year 1995; the share of the running material expenses lies at approximately one quarter of the total expenses. In the other institutions, personnel expenses are noticeably more in the foreground, they lie at a level between 75 and 80 per cent at the colleges for arts and music and at the colleges for the training of vocational teachers, and are highest at the teacher training colleges with 87.3 per cent in the year 1995. Similar variations can be seen in the case of the other cost factors.

Table 3.8b gives information on changes of the cost factors in the period between 1985 until 1995. Also here, very different tendencies become visible:

Ø Personnel expenses: In contrast to the other institutions, personnel expenses per student decreased by 2.1 per cent in the university sector; this led to a reduction of their share in the total expenses from 58.7 to 56.5 per cent. In the case of the colleges for arts and music, a below-average increase of personnel expenses also led to a clear reduction of their share in the total expenses. In the colleges, however, the share of personnel expenses in the total expenses noticeably increased.

¹⁸¹ Cost adjustment was carried out with the help of the GDP-deflator.

- Ø Running material expenses: They stand out in case of the teacher training colleges with a decrease by 16.7 per cent and at the colleges for arts and music with a increase by 79.2 per cent. At the teacher training colleges, this led to a decrease of the share of material expenses in the total expenses, but at the colleges for arts and music to an increase. There is, however, no information available on the reasons for these changes. Universities and the colleges for the training of vocational teachers lie between the two extremes, with an increase of material expenses by 1.8 and 13.3 per cent respectively.
- Ø Investments: Investments more than doubled at universities and the colleges for arts and music in the period under observation and led to a conspicuous increase of their share in the total costs. Investments per student in the colleges for the training of vocational teachers showed significant increases (by 48.1 %); this development can be traced back to a decrease in the numbers of students, but not to an rise of the expenses. The situation at the teacher training colleges is different: investments per student sank to half of their amount; the reason is an increase in the number of students and an decrease in the expanses.
- Ø Location-related expenses: They decreased in all educational institutions of the tertiary sector. This decrease, however, could just as well be connected to changes in the financing mode in the field of the administration of public buildings.

Table 3.8a
Expenditure by resource category in tertiary sector (in percentages of total expenditure)

Kind of institution	Year	Expenses per university student for				
		personnel	material expenses	investments	rooms	sum total
Universities	1985	58.7	26.9	3.9	10.5	100.0
	1995	56.5	26.9	9.4	7.2	100.0
Colleges for arts and music	1985	79.3	12.3	2.9	5.5	100.0
	1995	75.6	15.9	4.6	3.8	100.0
Teacher training colleges	1985	81.6	10.3	1.6	6.4	100.0
	1995	87.3	7.4	0.6	4.7	100.0
Colleges for the training of vocational teachers	1985	74.1	15.1	3.6	7.2	100.0
	1995	79.2	12.4	3.9	4.5	100.0

Table 3.8b
Growth rates by resource category in tertiary sector 1985 and 1995

Kind of institution	Expenses per university student for				
	personnel	material expenses	investments	rooms	sum total
Universities	-2.1	1.8	144.3	-28.8	1.8

Colleges for arts and music	32.4	79.2	122.9	-3.4	38.8
Teacher training colleges	23.6	-16.7	-54.1	-16.5	15.6
Colleges for the training of vocational teachers	47.9	13.3	48.1	-13.0	38.3

"Fachhochschul"-Courses

"Fachhochschul"-courses are new institutions of the tertiary sector, the legal regulation and form of financing of which will be discussed in more detail below. On costs and cost structure, more detailed statements cannot be made due to the lack of available material. The federal government promotes "Fachhochschul"-course places according to a standard share in the costs (norm costs), of which it takes over 90 per cent; these are ATS 95,000 for technical study fields, ATS 80,000 for commercial fields¹⁸². In the first study year, ten study courses were accredited and 690 study places were promoted; in the second year, the number of promoted study places rose to 1,931.

From the part of the providers, cost calculations are available for the first ten study courses, which were attached to the accreditation and promotion applications¹⁸³. After that, providers reckon with costs of approximately ATS 130,000 per study place and year.

c) Evolution of teacher salaries

As in the case of the teachers of the primary and secondary school sectors, also the salaries of teachers are established by law; they are negotiated on between the Government and the Union. In Table 3.9, the characteristics of the salary structures of university assistants and assistants at related institutions, full university professors and professors at related institutions, as well as teachers at the teacher training colleges are described. The given annual salaries were calculated on the basis of their monthly basic salaries (multiplied by 14); they do not include any additional pays, allowances, remunerations for examinations, additional lecture fees, remunerations for teaching assignments, overtime remunerations, and employers' contributions to the social insurance.

Table 3.9
Salaries of instructional staff, 1985 and 1995

	Assistants	Full university professors	Teacher training college teachers
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¹⁸² cf. BMWVK and BMUKA, p. 18.

¹⁸³ cf. Pechar 1996, p. 80.

	1985	1995	1985	1995	1985	1995
Starting salary	207,480	301,686	421,596	591,864	209,538	328,776
Maximum salary	497,000	695,618	690,354	961,632	570,136	854,553
Ratio of starting salary to per-capita GDP	1.2	1.1	2.4	2.1	1.2	1.2
Ratio of max. salary to per-capita GDP	2.8	2.5	3.9	3.4	3.2	3.0
Ratio of maximum to starting salary	2.4	2.3	1.6	1.6	2.7	2.6
Years from starting to maximum salary	36	34	20	20	36	40
Average yearly growth rate (in %)	2.5	2.5	2.5	2.5	2.8	2.4
Index of collective salaries(1985=100)	145.4		140.4		156.9	
Index of consumer prices (1985 = 100)	130.6		130.6		130.6	
Increase in real wages 1985-1995 (in %)	11.3		7.5		20.2	

The salaries of full university professors at universities and related institutions are clearly above the salaries of assistants and teachers at colleges: in the year 1985, they are double as high, in the year 1995 they are 96 per cent above the assistants' salaries and 80 per cent above the salaries of teachers at colleges. The ratio of the maximum salary to the starting salary of assistants and teachers at teacher training college lies between 2.3 and 2.7, with professors at universities and related institutions it is 1.6; with the latter, however, the maximum salary is reached already after 20 years. The average annual increase of the salaries is approximately the same in all groups (2.5 %). The negotiated wage index (calculated on the basis of the starting salaries) of teacher training college teachers (156.9) increased noticeably more than the index of assistants with a value of 145.4 and the index of professors at universities and related institutions with 140.4. Adjusted for the development of the consumer price, this gives a real wage increase for the three employee groups of 20.2, 11.3 and 7.5 per cent respectively. The real wage increase according to the general negotiated wage index of 19.6 per cent is therefore reached only by teacher training college teachers.

d) Evolution of capital costs

The strong growth of investments per university student in the sector of the colleges for arts and music and universities is due to the expansion programme that has been taking place since the early 1990s and which aims at an improvement of the university facilities (lecture halls, laboratories, EDP-equipment)¹⁸⁴. No information is available on the background of the development in the case of the teacher training colleges.

¹⁸⁴ cf. BMWF 1993, p. 14.

e) *Factors of the evolution in costs*

Universities

Personnel expenses for instruction include both expenses for the instructional staff (university professors, assistants, scientific civil servants, federal teachers, lecturers) and the salary share of the administrative personnel that can be attributed to the maintenance of instruction. Three quarters of the teaching-relevant personnel expenses are spent in the form of salaries, one quarter comprises remunerations, additional lecture fees, and examination remunerations (cf. Table 3.10). The salary share declined from 77 per cent in the year 1985 to 72 per cent in the year 1995. The increase of the university student numbers in the period under observation is expressed most conspicuously in the growth of examination remunerations by 123 per cent in real terms. The over-proportional increase of additional lecture fees and remunerations is due to the fact that assistants and external persons have been involved more intensively into the teaching process: The share of assistants in the scientific personnel increased from 78.4 to 80.3 in the study period, whereas the share of university professors fell from 21.6 to 19.7 per cent.

The development of personnel expenses per university student (PE/St) can be broken down into a price factor and a quantity factor. The price factor are the personnel expenses per semester weekly lessons (PE/WL); this is an average size which is the result of the combination of additional lecture fees, remuneration, remunerations for examinations and salaries. The quantity factor is the number of semester weekly lessons offered per university student (WL/St). The ratio applies: $PE/St = PE/WL \times WL/St$.

The analysis of the continuous growth rates of these factors shows that the decrease of per-capita costs for teaching by 2.1 per cent is completely due to the fact that the teaching offer did not increase to the same extent as university student numbers. Semester weekly lessons per university student decreased by 10.4 per cent between 1985 and 1995. Personnel expenses per semester weekly lesson, however, increased by 8.3 per cent in real terms.

Table 3.10

Structure of personnel expenses for instruction, 1985 and 1995 (figures in % of personnel expenses)

Kind of personnel expenses	1985 in %	1995 in %	Growth (in %)
Additional lecture fees	6.8	8.2	69.7
Remunerations	11.8	12.7	50.6
Remunerations for examinations	4.4	6.9	123.1
Salaries	77.0	72.2	31.6
TOTAL	100.0	100.0	40.4

Table 3.11
Structure of personnel expenses for apprenticeship training, 1985 and 1995
(figures in % of the personnel expenses)

Kind of personnel expenses	1985 in %	1995 in %	Growth (in %)
Additional lecture fees	4.3	3.5	22.2
Remunerations	30.2	22.9	13.8
Remunerations for examinations	2.2	1.9	30.6
Salaries	63.3	71.7	70.1
TOTAL	100.0	100.0	50.2

Personnel expenses per university student at the colleges for arts and music rose by 32.4 per cent in real terms between 1985 and 1995. A detailed analysis of this development cannot be carried out on the basis of the available data¹⁸⁵, there are, however, some indications that the cost increase was caused by prices and not by an expansion of the teaching offer. In the study period, there was the tendency at the colleges for arts and music to recruit external lecturers in an employer-employee-relationship; the number of scientific personnel doubled (from 633 to 1,248 persons), there was a three-fold increase of assistants and teachers (from 257 to 845 persons), but also the non-scientific personnel was increased by 75 per cent (from 335 to 595 persons)¹⁸⁶. The conversion of teaching assignments into employer-employee-relationships is also expressed in changes of the structure of personnel expenses: The share of remunerations decreased from 30.2 to 22.9 per cent, the share of salaries increased from 63.3 to 71.7 per cent (cf. Table 3.11). The same tendency becomes apparent in the below-average growth rates of remunerations and additional lecture fees in the period between 1985 and 1995.

Teacher training colleges

Personnel expenses make up the biggest share in the expenses per student at the teacher training colleges. This share increased from 81.6 per cent in the year 1985 to 87.3 per cent in the year 1995, whereas the shares of the other cost factors decreased (cf. Table 3.8a). Personnel expenses per university student are the only cost type that rose during the study period. The increase was 23.6 per cent in real terms. The breakdown of personnel expenses into a price factor (personnel expenses per employee in employment¹⁸⁷) and a quantity factor (employees per student) shows that the cost increase is completely due to the real wage development: Personnel expenses per employee in employment grew by 27.9 per cent, whereas the

¹⁸⁵ In the university reports, there are no figures on the number of weekly lessons per semester at colleges for arts and music.

¹⁸⁶ It is, however, not known if these figures are full-time equivalents.

¹⁸⁷ Employees are: instructional staff plus other personnel, in full-time equivalents.

ratio "employees to student" fell by 6.7 per cent. In contrast to the other sectors of the public education system, the increase of personnel expenses is in the first place due to the increase of negotiated wages and only in the second place to the increase of the average age of the personnel and the connected rise in the salary structure.

Colleges for the training of vocational teachers

The evolution of the cost structure at the colleges for the training of vocational teachers is characterised by the strong decreasing number of students by 27.6 per cent. Since the personnel figures did not sink to the same extent (-8,5%), personnel expenses per student grew by 47.9 per cent, and their share in the total expenses increased from 74.1 to 79.2 per cent (cf. Table 3.8a). A salary increase of 15.7 per cent is clearly more moderate in comparison to the post-secondary colleges for teacher training, the decrease of university student numbers led, however, to an increase of the ratio "employees to university students" by 23.5 per cent and contributed considerably to the growth of per-capita expenses.

f) Introduction of innovative pedagogical methods to reduce costs

The following remarks apply only to universities, because no information is available on the other institutions of the tertiary sector. In the first half of the 1990s, a series of reforms were carried out in the university sector, whose common trait lies in the deregulation of the activities of the universities and in the decentralisation of decision-making competences from the Science Ministry to the universities. The reforms relate to the University Organisation Act, the study laws and the university teachers' Service Law. With them it is intended to introduce an "organisation similar to companies" to increase structural possibilities of the universities with regard to the use of resources and curricula, and, in this way, to boost quality and efficiency¹⁸⁸. No information is available on the distribution and cost saving potentials of computer-assisted learning and peer-group tutoring. Correspondence study courses are provided in Austria since 1979 in co-operation with the Open University Hagen (North Rhine-Westphalia).

The reform of the study law and the service law is expected to bring about far-going quality improvements of the studies and efficiency gains in the future (cf. further below).

g) Reallocation of costs

There have not been any changes in the financing or distribution of costs between the private and public sectors at universities, the colleges for arts and music, the teacher training colleges and the colleges for the training of vocational teachers. A new system of accreditation, management and financing was introduced with the "Fachhochschul"-Course Act. With this act, the federal government regulates criteria and

¹⁸⁸ cf. Federal Ministry of Science and Research BMWF 1993, p. 11.

procedures of the accreditation of "Fachhochschul"-courses, but opens the doors for all private legal personalities to manage such study courses. A development plan decided on by the federal government sets criteria and amounts of financial promotion from the federal budget as well as the number of study places, which are promoted only until the year 2000. In this way, also private funds are planned to flow into the "Fachhochschul"-sector. An analysis of the previous study courses shows, however, that private financing takes place within narrow limits: Even though it is true that during the complete contract period until the year 2000 the federal government bears only 54 per cent of the total costs; the Laender governments with 36 per cent and the local authorities with eight per cent make up the second half of the financing with the exception of two per cent, which are paid by enterprises¹⁸⁹.

h) Measures to improve information on costs and quality of education programmes

At universities, improvements of the information on costs as well as quality improvements of the instruction are expected to come about by means of a comprehensive reduction of legal regulations and expansion of autonomous activity possibilities¹⁹⁰. It is intended to extend the reformations to the colleges for arts and music.

3.1.3. Adult Education and Training

The report in hand is based on publications on the topic of adult education and training, work reports, and various other material from organisations of adult education and training as well as on an evaluation of parts of the Federal Finance Act and of financial handling overviews of the regional and local authorities.

The sector of adult education and training is characterised by a wide range of activities and offers. An analysis of the cost development is further complicated by the fact that, without any cost accounting, an allocation of expenses to the individual fields of activity can be estimated only. Offers comprise courses in the framework of second-chance education; courses in the framework of job-related continuing education and training and for acquiring additional qualifications; vocational retraining; general educational offers (on cultural, political, social, health-related, scientific topics as well as language courses and personality development); in addition to that, there is, however, a series of events that do not have a training character, such as visits of exhibitions, film shows, educational trips and projects in which groups themselves start initiatives and are supported by institutions and the know-how of adult education and training.

The providers of adult education and training can be classified according to their legal status into the following groups:

¹⁸⁹ cf. Pechar 1996, p. 60.

¹⁹⁰ cf. a more detailed discussion in Section 3.1.4.3.

- ∅ public education system (schools, universities and university-related institutions),
- ∅ non-profit institutions, whose providers are mainly interest groups, local authorities and churches,
- ∅ commercial providers,
- ∅ enterprises (organising and carrying out their own continuing education and training activities), including also the institutions for continuing education and training of the federal government and the Laender governments for their civil servants and employees (e.g. Administration Academies).

Before discussing in greater detail the cost structure and development of costs of the individual parts of the adult education and training sector, promotion as well as CET activities by the federal government, the Laender governments and the local authorities are described¹⁹¹. The following activities can be distinguished between:

- ∅ The federal government runs schools for working people;
- ∅ the Ministry of Education runs a Federal Institute for Adult Education, which has the function of providing vocational training as well as continuing education and training to teachers in adult education and training, and also runs promotion offices in several federal provinces, which provide counselling and information to adult education and training organisations, support them in the organisation of activities, and promote the co-operation between them and give stimuli for innovations;
- ∅ the Ministry of Education runs and finances in-service teacher training colleges, which have the task of providing continuing education and training to teachers of all school types, and gives out promotions to external institutions for continuing education and training activities of teachers;
- ∅ the Federal Chancellery carries out vocational and continuing education and training programmes for civil servants in the framework of the Administration Academy (Verwaltungsakademie)¹⁹²;
- ∅ the federal government finances "Fachhochschul"-courses for people under employment, the University Centre for Continuing Education and Training (Danube University Krems) as well as correspondence study courses;
- ∅ the Ministry of Education gives out earmarked promotions (e.g. for the recruitment of personnel, for development projects, for scientific studies) and so-called basis subsidies to adult education and training associations, libraries and other organisations;
- ∅ the Public Employment Service orders courses from continuing education organisations.

¹⁹¹ cf. more details in Forstner 1991, p. 15-20.

¹⁹² Vocational and further education and training activities take place also in the areas of other ministries (to a greater extent e.g. in the Ministry for the Interior and the Ministry for Defence); however, no respective figures are given in the federal budget.

On the basis of the information available on federal institutions of adult education and training¹⁹³, it is not possible to calculate per-capita expenses, cost structures and evolution of cost structures. Therefore these institutions cannot be taken into considerations within this section, but are treated together with public subsidising of adult education and training in section 4.2.

In the following sections, the results on cost structure and development of costs from three fields of adult education and training are presented: general adult education, training of unemployed persons, and continuing education and training for employees. For lack of information it is not possible to give a complete overview of the expenses for basic literacy programmes and participants as demanded in the report guidelines. In Austria, however, courses with the function of obtaining the lower secondary school graduation at a later time in one's life could be subsumed under "basic literacy programmes". Such courses are offered by adult education and training organisations, but the organisations included in this report could not make any more detailed statements or give more precise figures. These courses usually have to be paid by the participants themselves; only the Public Employment Service pays for the participation of unemployed people in such courses. In the Social Reports, however, there is no information on this matter. In the study year 1995/96, the Federal Ministry of Education and Cultural Affairs made 3,672.000 ATS available to the Vocational Support Institutes of Vienna and the Tyrol to carry out such bridge courses for socially disadvantaged persons (number of participants: 119; apart from these courses the Adult Education Centres also run such courses, yet without additional funding by the Federal Ministry of Education and Cultural Affairs). These financial means of the Federal Ministry of Education and Cultural Affairs were subsidies for the teaching personell. The Public Employment Service bore the costs for the social workers, supplementary payments for the teachers, material expenses as well as allowances for the living costs of the participants.

In the course of realizing the National Action Plan for Employment, the Federal Ministry of Education and Cultural Affairs has at its disposal 50 million ATS for each of the years 1998 and 1999 to promote lower secondary graduations. This amount enables young persons under 18 years of age to attend bridge courses free of charge. It is planned to prolong these measures for a period of five years in all.

The following description is based on a study by three big organisations of adult education and training, whose cost and financing structures are considered paradigmatic for three fields: for general adult education, for the training of unemployed persons and those threatened by unemployment, and for continuing education and training activities for employees. These three organisations and associations are: the Verband Österreichischer Volkshochschulen (VÖV, the Association of Austrian Adult Education

¹⁹³ A breakdown of costs could be carried out only for the Federal Institute for Adult Education.

Centres) and the Verband Wiener Volksbildung (Association of Viennese Adult Education)¹⁹⁴; the Vocational Support Institutes (BFI); and the Institutes for Economic Development (WIFI)¹⁹⁵. It is explicitly stressed that the following analysis does not compare the adult training organisations involved, but the cost structure and cost development of the three types of training. These three types differ significantly in the number of training units, in the number of participants per course and in the requirement of equipment.

Data and information were supplied by the associations in writing (activity reports, financial handling overviews) and in the form of oral information. As common report year of the three associations, the year 1995 was established; it was unfortunately not possible to co-ordinate the figures supplied by the associations to such an extent that also a common earlier reference year could jointly be agreed upon. Due to lacking figures, an analysis of the development of costs is possible only to a limited extent.

The price increase rate of job-related continuing training courses between 1989 and 1995 amounts to - according to official information - 86.9 per cent; the increase rate of English courses, that can be taken as indicator for courses of general adult education and training, is 26.7 per cent. In the following the price evolution is analysed on the basis of the information given by providers of adult education and training courses.

General remarks on cost analysis and financing

The adult education organisations and/or their associations receive subsidies from the federal government, the Laender governments, and the local authorities; apart from that, they have yields from fees for courses and other activities. The degree to which yields from courses compensate costs is, in the following, termed rate of cost-covering contribution. Payments from the Employment Service for courses show up as yields. With the help of the rate of cost-covering contribution, the amount of expenses contributed by the public sector can be calculated.

Table 3.12 lists the costs per participant as well as their allocation to various cost factors. Values were brought to the 1995 price level with the help of the GDP-deflator. Moreover, the table includes the rates of cost-covering contribution of the adult education and training organisations.

Table 3.12

Costs per participant and cost structure, various years (figures in ATS at constant prices 1995)

¹⁹⁴ The Viennese Adult Education Centres, which are associated in the Association of Viennese Adult Education, are a part of the Association of Austrian Adult Education Centres. This association has only fragmentary data on its members due to the loose form of their association. In order to make up for this deficit, the Association of Viennese Adult Education was included in the study.

¹⁹⁵ Our sincerest thanks go to the associations and their managers for their willingness to make available information on their financial handling.

Subsector of adult education and training	Year	Expenses per participant for						rate of cost-covering contribution
		instructional personnel	other personnel	total personnel	material expenses	investments	sum total	
General adult education	1989	*	*	*	*	*	1,113	52.9
	1995	*	*	*	*	*	1,475	55.1
General adult education	1989	435	714	1,149	533	19	1,701	58,5
	1995	449	832	1,281	707	42	2,030	64.7
Ed. & tr. for unemployed persons	1989	*	*	3,608	1,724	2,484	7,816	92.7
	1995	6,153	971	7,124	2,852	2,086	12,062	84.1
Ed. & tr. for employees	1992	1,659	822	2,481	1,695	475	4,651	*
	1995	1,638	932	2,571	1,636	461	4,668	*

Note: The differences in the cost per participant express differences in the characteristics of the three types of training (cf. the comments in the text). The design of the courses for unemployed which have the greatest costs and increase of costs follows labour market requirements and demands which are formulated by the Public Employment Service. In this connection, the great amount of instruction units per course, the considerably larger requirements for equipment (machinery, workshops) and the reduction of the minimum number of participants have to be stressed.

* Data not available.

Due to problems with the data collection, the analysis faces the following difficulties and imperfections:

- Ø For the Vocational Support Institutes, the analysis can be carried out only incompletely, because they did not supply any figures on the number of instruction units for the year 1989. The comparison between 1989 and 1995 is affected by radical measures of organizational restructuring in 1991.
- Ø Data made available by the Institutes for Economic Development refer to the years 1992 until 1995 and are, therefore, not in co-ordination with the survey period of the other associations (1989 and 1995). Furthermore, their figures on financing are incomplete so that rates of cost-covering contribution and shares of public financing cannot be calculated.
- Ø For the Association of Viennese Adult Education, expenses for the course activities had to be approximated by means of estimation procedures. The Association offers a very wide range of activities. With the support of the manager of the Association and of the Administration Committee, expenses and the number of personnel for the area of Adult Education Centres could be calculated.

Another difficulty is that the Association of Viennese Adult Education Centres carries out a series of projects, which do represent a very innovative branch of adult education centre activities, whose performance, however, cannot be measured simply by instruction units, participant numbers, or courses. The projects listed separately in the income and expense account have not been included in the analysis. And, last but not least, Adult Education Centres themselves carry out a series of traditional activities which are of great importance as educational events, but cannot be counted among training activities in the narrower sense of the word (individual events, educational trips, visits of exhibitions or film shows). It has been attempted to exclude expenses for these activities. On the whole it has been tried to limit the costs of the VWV (Association of Viennese Adult Education Centres) to their course programme, in order to safeguard comparability with the programmes of the other associations.

- Ø For the VÖV (Association of Austrian Adult Education Centres) no figures on the costs are available, but merely on the revenues. This association can, therefore, be included only partly in the analysis. Under the plausible assumption that the Adult Education Centres' balances are in equilibrium, income and expenses can be equalised, and costs per instruction unit and per participant can be calculated.

3.1.3.1. General adult education and training

a) Per participant costs

The costs per participant in the Association of Austrian Adult Education Centres are noticeably lower than in the Association of Viennese Adult Education. In the comparison of the years 1989 and 1995, however, the difference between them decreased from 34.6 to 27.3 per cent. The cost difference is most likely connected mainly with the lower degree of professionalisation of the VÖV (high share of honorary co-workers). In the year 1995, costs per participant were ATS 1,475 (VÖV) and ATS 2,030 (VWV). Public subsidies per participant for 1995 lie at ATS 660 in the VÖV, in the VWV at ATS 720.

b) Main components of costs

On the cost structure, only data from the VWV is available. The biggest share in the costs per participant are personnel expenses with approximately two thirds. The share of expenses for instructional staff, who as a whole work on a service contract basis, makes up merely one quarter of the total expenses. Expenses for material expenses make up approximately one third of the total expenses. Material expenses and investments experienced above-average increases between 1989 and 1995, whereas the personnel expenses, in particular for lecturers, increased moderately.

Table 3.13

**Cost structure in the VWV and change of expenses per participant
(1989 - 1995) (figures in per cent)**

Cost factors	Cost structure 1989	Cost structure 1995	Change of the expenses per participant (in %)
Instructional staff	25.6	22.1	3.2
Other personnel	42.9	41.0	16.5
Total personnel	67.5	63.1	11.5
Material expenses	31.3	34.8	32.6
Investments	1.2	2.1	21.1
TOTAL	100.0	100.0	19.3

c) *Other public costs*

No information is available on other public costs.

d) *Private costs*

In principle, participants have to pay all costs for general continuing education and training themselves. These costs are reduced by promotions which adult education and training organisations receive from the public sector or other providers. No information is available on the full amount of the costs for participants in the study period.

e) *Evolution of public costs*

The rate of cost-covering contribution increased in both associations: from 52.9 to 55.1 per cent at the VÖV and from 58.5 to 64.7 per cent at the VWV. Thereby, subsidies of the public sector grew less markedly than the costs. At the VÖV, costs per participant increased by 32.5 per cent, public subsidies per participant by 26.3 per cent; at the VWV, costs per participant rose by 19.3 per cent, public subsidies per participant by merely 1.6 per cent.

A more detailed analysis of the development of the costs per participant can be obtained by breaking them down into the factors "expenses per instruction unit", "instruction units per course", and "participants per course". The amount of expenses per instruction unit depends on the costs for instructional staff (fees or salaries), other personnel (pedagogues, administration, cleaning, etc.), material expenses, and on investment requirements. The factor "instruction units per course" gives the number of lessons or hours which make up a course (course duration). The factor "participants per course" indicates the average course size. These three factors give, by multiplication, costs per participant. They increase as the number of lessons or hours increase and as the course size decreases. With a transition to continuous growth rates - analogous to the procedure already applied in the case of secondary level II -, an analysis of the evolution of costs can be carried out.

Table 3.14**Cost factors in VWV and VÖV, 1989 and 1995 (Values in ATS at prices from 1995)**

Association	Year	Expenses per		Instruction units per course	Participants per course
		participant	instruction unit		
VWV	1989	1,701	894	22	11.7
	1995	2,030	1,026	23	11.4
VÖV	1989	1,113	704	21	13.3
	1995	1,475	865	21	12.4

In these two associations, costs per instruction unit are the factor that most influenced the increase of costs per participant. In the VWV, approximately 80 per cent of the cost increase are due to this factor, in the VÖV this proportion is approximately 70 per cent. The second most important factor is the decrease of average participant numbers per course; its contribution to the cost increase in the VWV lies at approximately 17 per cent and in the VÖV at 25 per cent. Of considerably less importance is the increasing number of lessons per course (3 and 5 % respectively).

In the case of the VWV, the development of costs per instruction unit can be examined in greater detail - i.e. of the factor that is most responsible for the increase of costs per participant (with 80 per cent). This shows that expenses for the instructional staff per instruction unit remained constant between 1989 and 1995 (ATS 228 at prices from 1995); material expenses and investments (they increased by 27.5 %) as well as expenses for other personnel (they grew by 12.3 %) are responsible for the increase of the costs per instruction unit. The growth of these two factors can be explained by the fact that the innovation and diversification pressure (offer of new courses and expansion of course programmes to new fields) as well as requirements on marketing increased. In the Association of Viennese Adult Education, educational work in the form of projects gained in importance over the past few years, apart from the expansion of technical and vocational courses; educational activities include projects with a limited duration that are oriented towards one specific target group with certain targets (e.g. intercultural learning of Austrian and foreign students, educational work with mentally and physically disadvantaged people), for the preparation and realisation of which financial backers are needed. Projects often have an innovative effect on the traditional work of Adult Education Centres. A future-oriented form of adult education and training is the work with citizens' initiatives, for which Adult Education Centres make available their infrastructure (from rooms to radio stations) and offer their experience. Material expenses and investments are on the increase due to the enhanced use of personnel computers.

f) *Introduction of innovative pedagogical methods to reduce costs*

Computer-assisted learning and telelearning are still in the development phase, according to information provided by the adult education and training organisations. In the sector of general education, they are considered as being of minor significance only. The desire to have direct social contact plays an important role for the learners. It is assumed that telelearning can constitute only a part of courses in which social phases of learning dominate. It is not expected that telelearning will make courses cheaper, because, first of all, expenses for the purchase of the systems and for the training of personnel would be needed and, after that, costs for buying new learning software and for the servicing of the systems would always be required. In the field of Adult Education Centres, the provinces of Vorarlberg and Upper Austria are already testing telelearning in practice.

g) *Reallocation of costs*

No information is available on this point.

3.1.3.2. Retraining programmes for the long term unemployed

As an example for costs and the development of costs in the field of the training of unemployed persons, the Vocational Support Institutes can be named. They are specialised in orders by the Public Employment Service; in the year 1995, 72 per cent of their course revenues were attributable to these orders; looking at it from the other side, slightly less than half of the expenses of the Public Employment Service is used for training measures at the Vocational Support Institutes.

a) *Per participant costs*

The amount of costs per participant in the year 1989 was ATS 7,816 (at prices from 1995) and rose until the year 1995 by 54 per cent to ATS 12,062 (cf. Table 3.15). The rate of cost-covering contribution is high, it decreased, however, from 92.7 per cent in the year 1989 to 84.1 per cent in the year 1995. Since the Public Employment Service commissions the courses for unemployed persons, it can be assumed that the federal government bears the full costs of courses.

b) *Main components of costs*

Table 3.15

Cost structure of the Vocational Support Institutes (BFIs) and change of expenses per participant (1989 - 1995) (figures in per cent)

Cost factors	cost structure 1989	cost structure 1995	change of the expenses per participant (in %)
Instructional staff		51.0	

Other personnel		8.1	
Total personnel	46.2	59.1	97.5
Material expenses	22.0	23.6	65.4
Investments	31.8	17.3	-16.0
TOTAL	100.0	100.0	54.3

Although personnel expenses have the biggest share in the expenses per participant (46.2 % in the year 1989 and 59.1 % in the year 1995), investments play a considerably bigger role than in the sector of the general adult education and training (31.8 % in the year 1989 and 17.3 % in the year 1995). Expenses per participant increased by 54.3 per cent in real terms in the period under observation. A strong increase of expenses per participant can be observed regarding personnel expenses: they nearly doubled between 1989 and 1995. Also the running material expenses increased relatively strongly (65.4 %). Investments however, which made up a high share in the total expenses in the year 1989 (31.8 %), decreased by 16.0 per cent and represented a share of only 17.3 per cent in the total expenses in the year 1995. The relatively high share of personnel expenses can be explained by the specific manpower policy Vocational Support Institutes pursue: a significantly higher share of teacher is in a salaried employment status than in other adult education organisations.

The cost level of courses for unemployed persons is not determined by higher expenses per instruction unit as rather by the high number of instruction units per course, higher material expenses and greater requirements for equipment (machinery, workshops). This is an important contrast to the other types of training (general adult education, training for employees) as a comparison related to the year 1995 shows (cf. tables 3.13, 3.15, 3.17 and 3.18). The amount of expenses per instruction at the BFI exceeds the level determined for VWV, but remain 16 percent under the level determined for WIFI. The number of instruction units per course at the BFI is four times higher than the respective figure at the VWV and two times higher than the respective figure at the WIFI. The same is true for material expenses per participant. Differences in investments are even larger.

c) *Other public costs*

The Public Employment Service does not only take over the training costs that accrue in connection with continuing education and training organisations, but also pays in many cases amounts to cover living expenses of course participants and increased expenses which are created due to the participation in train-

ing activities (e.g. travel costs, kindergarten places). These payments exceed by approximately 20 per cent the bare training costs and make up an average of ATS 16.500 per person¹⁹⁶.

d) *Private costs*

No information is available on this point.

e) *Evolution of costs*

Table 3.16
Cost factors of the Vocational Support Institutes (BFIs), 1989 and 1995
(Values in ATS at prices from 1995)

Association	Year	Expenses per		Instruction units per course	Participants per course
		participant	instruction unit		
BFI	1989	7,816	-	-	13.1
	1995	12,062	1,342	92	10.3

The causes of the development of costs can be discussed only to a limited extent because the Vocational Support Institutes have supplied only fragmentary figures and for the year of comparison 1989 expenses per participant cannot be broken down fully into cost factors (cf. Table 3.16). It can be seen from the data supplied by the Vocational Support Institutes that the decrease of the average course size (number of participants per course) is a major reason for the cost increase: more than 50 per cent of the increase of costs per participant between 1989 and 1995 are due to this factor.

f) *Introduction of innovative pedagogical methods and use of assets*

With regard to the introduction of computer-assisted learning and telelearning, the statements made already under 3.1.3.1 apply also for the Vocational Support Institutes.

No information is available on the topics peer group tutoring and shortening of the duration of courses.

The capacities of the Vocational Support Institutes are fully utilised, there is even a shortage of rooms and facilities. Additional rooms and equipment are rented mainly from public. They do not share buildings or equipment with other continuing education and training organisations.

¹⁹⁶ Calculated on the basis of figures of the "Social Report" 1995; cf. Federal Ministry of Labour and Social Affairs BMAS 1995.

g) *Reallocation of costs*

There have not been any changes as far as the public financing of the training of unemployed persons is concerned.

3.1.3.3. *Job-related training for employed workers*

As an example for costs and the development of costs in the field of continuing education and training of the workforce, the Institutes for Economic Development can be named. They are institutions of the Economic Chambers, are in close contact with the entrepreneurial sector and offer courses for individuals and companies.

a) *Per participant costs*

Costs per participant were ATS 4,651 in the year 1992 (at prices from 1995), they remained constant until the year 1995 (ATS 4,668; cf. Table 3.17). No statements can be made, due to fragmentary data, on the rate of cost-covering contribution, the amount of public promotions, and therefore the share of costs paid by the public sector.

b) *Main components of costs*

Approximately 55 per cent of the total costs fall to personnel expenses, 35 per cent to expenses for instructional staff, who in the Institutes for Economic Development nearly completely are employed on the basis of contracts for work and services rendered. Running material expenses make up a relatively high share in the costs (with 35 per cent), expenses for investments lie at 10 per cent. The cost structure hardly changed in the three years between 1992 and 1995.

Table 3.17

Cost structure of the Institutes for Economic Development (WIFIs) and change of expenses per participant (1992 - 1995) (figures in per cent)

Cost factors	Cost structure 1992	Cost structure 1995	Change of the expenses per participant (in %)
Instructional staff	35.7	35.1	-1.3
Other personnel	17.7	20.0	13.4

Total personnel	53.4	55.1	3.6
Material expenses	36.4	35.0	-3.5
Investments	10.2	9.9	-2.9
TOTAL	100.0	100.0	0.4

c) *Other public costs*

No information is available on public costs.

d) *Private costs*

In principle, the participants and/or the employers who order courses from the Institutes for Economic Development have to bear the costs themselves. These costs are reduced by subsidies the Institutes receive from the public sector as well as by subsidies from the Economic Chambers. In the year 1995, subsidies granted by the Chambers made up approximately 30 per cent. This gives average private costs per participant of ATS 3,270. On other participant costs (lost income, travel expenses, etc.) no information is available.

e) *Evolution of costs*

Table 3.18

**Cost factors of the Institutes for Economic Development (WIFIs),
1989 and 1995 (Values in ATS at prices from 1995)**

Association	Year	Expenses per		Instruction units per course	Participants per course
		participant	instruction unit		
WIFI	1992	4,651	1,537	49	16.0
	1995	4,668	1,601	44	15.2

The analysis of the evolution of costs is carried out by breaking down the costs per participant into the factors "expenses per instruction unit", "instruction units per course" and "participants per course"¹⁹⁷. Though the increase of expenses per instruction unit by 4.2 per cent and the decrease of the average course size by 5 per cent caused an increase of costs per participant, this tendency was compensated by a reduction of the average number of lessons per course by 10.2 per cent. For the increase of expenses per instruction unit, mainly cost increases for the administrative personnel were decisive, whereas the fees for lessons paid to the instructional staff were kept at a constant level.

¹⁹⁷ cf. also remarks in 3.1.3.1e)

f) *Introduction of innovative pedagogical methods and use of assets*

With regard to the introduction of computer-assisted learning and telelearning, the statements made already under 3.1.3.1 apply also for the Institutes for Economic Development.

No information is available on the topics peer group tutoring and shortening of the duration of courses.

The Institutes for Economic Development have sufficient room capacities at their disposal and they are well equipped. They rent rooms and equipment.

g) *Reallocation of costs*

No information is available on this point.

3.1.4. Other cross-cutting factors affecting costs

Only fragmentary information is available on the questions to be covered in this section. More detailed answers to these questions would require additional investigations, which, however, could not be carried out in the framework of this report.

3.1.4.1. Innovative learning technologies and practices

Questions concerning the introduction of new teaching and learning methods have already been dealt with in the sections on the various fields of lifelong learning. The results can be summarised as follows:

- Ø At secondary level II, the introduction of new pedagogical methods does not play any role in the discussions on costs. The marginal importance of computer-aided learning in pre-vocational schools, vocational schools for apprentices and upper cycle of secondary academic schools has already mentioned above¹⁹⁸. Lack of adequate software is, at present, considered a hindrance. Peer-group tutoring does not play a major part in the pedagogics-related discussions about secondary level II.
- Ø At the secondary technical and vocational schools and colleges, computer-aided instruction is of major importance (e.g. media competence as key qualification, business transactions with training firms via e-commerce, use of 3-D CAD for exercising design, use of programmable control, use of e-mail and the internet for school projects on a national and international level). The Federal Ministry of Education and Cultural Affairs supports model projects (e.g. computer-based training) and promotes the elaboration of concepts for the integration of the media and telematic services into class instruction, taking over a model function as pilot user. In the field of the technical and vocational schools and

¹⁹⁸ cf. 3.1.1 f)

colleges for people under employment, classes in combination with forms of distance learning are already held.

- Ø In the tertiary sector there are institutions entitled to run correspondence courses. In this field, innovation processes are under way or their basis is just being formed. The section relating to correspondence courses (open universities) in the new University Study Act (article 8) allows universities to replace lectures where students have to be present with correspondence courses. Furthermore there is the possibility to offer lectures at universities as correspondence courses. Austria is planning to participate in co-operations for the development of teaching aids and material for correspondence courses; the ministries responsible for economic and educational matters are preparing a multimedia platform to promote the development of media-assisted instruction material with an annual amount of ATS 10 million. At universities it is intended to improve the willingness for and the knowledge and skills in connection with the use of new media. The Austrian Council responsible for "Fachhochschul"-courses is at present elaborating an expertise on the quality assurance in the development and use of open universities or correspondence courses in co-operation with the Centre for Correspondence Courses. Nothing is known, however, on cost-saving effects to be achieved in this way.
- Ø In the field of adult education and training, computer-assisted learning and telelearning are just being discussed at the moment. These technologies are considered as being of only restricted importance as didactic means. As mentioned in section 3.1.3.1 f) it is seen as more important to have a direct social contact between learners and teachers. It is not expected that courses will become cheaper due to telelearning. It is expected that telelearning will be able to reach new sections of the society with adult education and training (e.g. in peripheral regions). In diverse Adult Education Centres, telelearning is being tested in practical.

3.1.4.2. *Incentives and enabling mechanisms*

+ 3.1.4.3 *governance and co-ordination of lifelong learning sectors*

In the following points, all information concerning developments and initiatives to reduce and save costs is summarised. The two Sections 3.1.4.2 and 3.1.4.3 are treated as one topic, since it does not seem useful to differentiate between the questions as provided for in the project specifications.

(a) Secondary level II

One regulation which can contribute to the development of a cost consciousness in the individual schools and to a limitation of expenses came with the granting of school-autonomy with the 14th School

Organisation Amendment in the year 1993 and the accompanying modifications of the School Act and the regulations on curricula¹⁹⁹. These decision-making competences - which have the status of a discretionary clause – provide schools with the opportunity to choose between special focuses of their curriculum and to determine opening and partitioning numbers for courses. These competences allow schools to develop a specific profile as well as to facilitate the application of more up-to-date pedagogical methods (e.g. project instruction or team teaching). Since the Schulgemeinschaftsausschuß (School Community Committee) or the Schulforum (School Forum) are the institutions responsible for taking decisions in the school-autonomous field, these new regulations can be regarded also as a contribution to the development of school democracy, involving both parents and students.

In literature on this subject, the expansion of the design- and decision-making competences is termed "pedagogical autonomy", it is, however, possible to analyze these competences from an economic point of view, too. Focussing on certain curricular topics opens up the possibility of saving costs, since the variety of offers of elective compulsory subjects and optional subjects and, therefore, also the number of groups to be instructed and the number of required teachers is reduced. With the help of opening and partitioning numbers for classes and groups, costs in the individual schools can be controlled. School autonomy thus enables a decentralised administration of resources that are allocated by a central body; in this way, the provision of pupils and students with the legally stipulated minimum offer can be guaranteed, and any additional offers can be kept variable. The Government expects a simplification of administration procedures and a reduction of applications for school pilot projects, the execution of which necessitates administrative accompanying measures. The willingness of the government to keep costs at a certain limit can be deduced also from the fact that a project called "Schule in Bewegung" ("School in Motion") is carried out, in which the use of staff-related and financial resources at 24 federal schools was analysed²⁰⁰. Certainly, the reduction of the weekly amount of lessons by six teaching units at secondary level aimed to reduce the strain of the pupils, but it causes a reduction of costs at the same time.

First steps in the direction of an economic autonomy have already been taken. The introduction of the partial legal capacity for federal schools, the instrument of the "earmarking of financial handling" and the "business ratio model" in the field of the secondary technical and vocational schools and colleges has already been mentioned above²⁰¹. Furthermore, the secondary technical and vocational schools and colleges have the possibility of setting priorities in their acquisitions autonomously.

Judging by the Coalition Agreements from 1990, 1994 and 1996, further steps in the autonomisation of school decisions can be expected. They go in the direction of an expansion of the financial competences. A

¹⁹⁹ On the following please cf. more details in: Sertl/Natter 1996; Bachmann et al. 1996; Altrichter/Posch 1996.

²⁰⁰ cf. Bachmann et al. 1996, p. 32.

²⁰¹ cf. 3.1.1 g)

heated debate is going on concerning the topic of staff autonomy (recruitment of teachers, appointment of head teachers).

(b) *Tertiary sector*

In the first half of the 1990s, a series of reforms regarding the university sector were carried out, which all aim at a deregulation of the activities of universities and at the decentralisation of the decision-making competences away from the Ministry of Science to the individual universities. The reforms concern the University Organisation Act, the Study Laws and the University Teachers' Service Act. With their help, a "company-similar organisation" is intended to be introduced, by means of which quality and efficiency of universities are to be increased and a cost truth is to be enabled²⁰². Furthermore, the "Fachhochschul"-Course Act has established an additional type of university study in Austria, whose legal regulation, financing, and management obey completely different principles from the traditional university sector. The major points of the reform, the efficiency of which cannot be assessed up to now, will be sketched in the following.

University Organisation

The Austrian university sector is traditionally run in a strictly centralistic way by the minister of science and the ministerial bureaucracy. This applies to all of the sector's main fields: the allocation and administration of financial resources and posts, the regulation of the study courses (curricula) and their management, as well as personnel decisions.

Although the University Organisation Act from 1975 subjected the relations between the Ministry and the universities to certain procedures, its main emphasis is also on regulating intra-university relations. It has brought a "de-feudalisation" (by means of a limitation of the powers of full professors) and a democratisation, in that all university groups (professors, assistants, students, and administrative personnel) have received rights of participation, and manifold decision-making bodies have been introduced²⁰³. It was the aim of the Act, which was decided on at the beginning of the university-expansion process, to increase acceptance of decisions, commitment, and co-operation²⁰⁴. As the universities' sizes expanded as far as staff numbers and the number of students was concerned, criticism concerning the organisational structure became louder, stating:

Ø The decision-finding process was considered too time-consuming and inefficient as collegial boards were responsible for all matters;

²⁰² cf. BMWF 1993, p. 11.

²⁰³ cf. Bodenhöfer 1990.

²⁰⁴ cf. BMWF 1993, p.19-20.

- Ø since all matters were decided on by the Ministry after all and since universities merely had the "right of application" to the Ministry, there was the tendency at universities towards a "cabinet policy", i.e. to avoid the university bodies and to get accepted individual interests through direct contacts to the Ministry;
- Ø central decision-making processes were too tedious and lacked flexibility and led to a suboptimal use of resources.

In the late 1980s and early 1990s, some small expansions of the universities' scopes of action were carried out (administration of the material expenses, travel allowances and excursion resources, of investment resources for scientific equipment and EDP-equipment, of the lecture contingents for remunerated lectureships, appointment of visiting professors). With these decentralisation processes, positive experiences have been made: The administration processes could be accelerated; universities themselves decide on the urgency of acquisitions.

After a longer phase of debates, a new University Organisation Act was passed in the year 1993 (UOG'93). The major new points can be summarised as follows²⁰⁵:

- Ø Introduction of a National University Board, which has an advisory function for the Science Minister in matters relating to university-encompassing development plans and the allocation of staff and budget means;
- Ø universities receive a greater autonomy with regard to staff recruitment, use of budget means (limited opportunities of re-allocation) as well as inner structuring and decision-making procedures (statutory right);
- Ø differentiation between guideline competences and strategic decisions made by collegial bodies, and operative leadership of the so-called monocratic bodies;
- Ø establishment of University Advisory Boards filled with representatives of territorial and regional authorities, of the social partners, and of graduates, and have an advisory function regarding development plan as well as inner-university staff and budget distribution;
- Ø allocation of resources to universities by the Minister according to published criteria and according to an inner-university needs planning process;
- Ø extension of opportunities to conclude service contracts at universities according to private law;
- Ø periodical evaluation of research and instruction activities for the purpose of quality assurance and as a basis for development planning and allocation of resources.

²⁰⁵ cf. BMWF 1993, p. 29-32.

Law concerning university studies

Until 1997, the Allgemeine Hochschulstudiengesetz (AHStG, General University Study Act) put into force in the year 1966 regulated the studies at universities; in the year 1997 it was replaced by a new act, the Universitätsstudiengesetz (UniStG, University Study Act). It is a particular feature of the Austrian universities that drop-out rates are high (at approximately 50 per cent) and the length of studies students actually need is excessively long. Furthermore, one quarter of Austria's university students changes their branch of study at least once, and, in addition to that, this change is carried out relatively late; this phenomenon points at a lack of orientation of many students. In order to face these problems, it was made compulsory at the beginning of the 1990s (in the framework of an AHStG-amendment) to introduce a "study entrance phase": According to respective regulations, universities are obliged to point out to students certain lectures with an introductory character to make them familiar with the specifics of the study course in question. Furthermore, a detailed description of subjects offered must be placed at the students' disposal²⁰⁶.

A major problem of the former study acts is seen in their high density of regulations²⁰⁷. There are four regulatory bodies in which - on the basis of AHStG provisions and via special study acts - university regulations and study curricula are enacted in a deductive way. These procedures make the organisation of study courses inflexible: The concrete development of study courses is carried out at universities, their introduction, however, makes a long procedure from the top necessary.

The main aim of the introduction of the new UniStG was the acceleration of the adaptation process of study offers to changing needs in society²⁰⁸. For this purpose, a reduction of legal regulations has been carried out and the competences of universities in the design of study courses have been increased. The UniStG provides only framework conditions on minimum study durations and numbers of lectures and establishes the aims and objectives of the individual branches. The numbers of lectures to be passed have been reduced drastically, and the obligation to combine certain subjects has been abolished and replaced by the introduction of elective compulsory subjects. The decision which study courses are established at the individual universities, is done by the science minister. Universities have been given the right to put emphasis on special fields, thereby developing their own profile. This profile and its applications in the employment system have to be pointed out to the students. The corresponding practical fields have to be included in the study design. Students are given the opportunity to compile so-called "individual" diploma studies according to their own interests, which however have to fulfill special criteria.

²⁰⁶ cf. BMWF 1993, p. 44-45.

²⁰⁷ cf. BMWF 1993, p. 56-57.

²⁰⁸ cf. BMWVK 1996, p. 30-32.

For the area of instruction, the UOG'93 provides evaluation measures which serve the purpose of quality assurance and the planning of offers for the whole university system. The introduction of the office of "study deans" is meant to give weight to a rational management of the study practice.

Service law

University assistants are the group among university teachers whose position according to service law has again and again led to conflicts. The main points of these conflicts are their transition into an employment contract of unlimited duration as well as their takeover into a definitive employment. In the year 1988, this issue was newly regulated, thereby creating a bigger legal safety. In the following years, teaching activities of university assistants were in the centre of negotiations, which led to a comprehensive amendment of the University Teacher Service Act in the year 1997. This Act mainly focuses on the point that teaching activities are included in the duties of university teachers. For the different groups among university teachers, the amount of teaching load was determined and their salaries newly regulated. The agreement was made under the pressure of austerity measures of the federal government (Strukturanpassungsgesetz) in 1996, in the framework of which expenses for lectureships had been drastically cut (reduction of the remuneration by 17%, of the lectureship contingent by 10%, and of the examination remunerations by 13%, abolition of the social insurance of lectureships for federal employees); these austerity measures have facilitated an inexpensive solution for the takeover of teaching activities into the service duties. Furthermore, this regulation is relatively flexible, since the amount of teaching loads has been made variable and payment varies with the number of lectures actually held. This regulation in connection with other provisions of the amended service law (as far as instruction is concerned, readers - or "Dozenten" - and professors receive equal treatment; in case of drastic changes of needs, they can be transferred to other universities) offers new liberty in the scope of action regarding the organisation of teaching practice and the personnel politics at universities, which can be used as cost saving measures.

(c) Adult education and training

The field of adult education and training is - as has already been discussed - a very heterogeneous field as far as the providers' legal status is concerned. In the present study, the following institutions have been included: the technical and vocational schools and colleges for people under employment, which are run by the Federal government; the "Fachhochschul"-courses for working people, the University Centre for Continuing Education and Training (Danube University Krems), the centres for open universities (correspondence courses) as well as non-profit institutions. A description of incentives and mechanisms for a limitation of the costs, therefore, has to differentiate according to providers.

Technical and vocational schools and colleges for people under employment

In the Ministry of Education, there have been efforts for many years to put the continuing education and training offers at federal schools (technical and vocational schools and colleges for people under employment, special post-secondary courses, foreman courses, master craftsman courses as well as various other courses and programmes) onto a new legal basis and to organise them according to the private law pattern provided by the "Fachhochschul"-Course Act²⁰⁹. With the Amendment to the School Organisation Act on the 9th January 1998 a new regulation has come about in this field: master craftsman courses, special post-secondary courses as well as other courses have been removed from the special programmes of the secondary technical and vocational schools and colleges, but the partial legal capacity allows schools to make arrangements that have legal personality and, in this framework, to carry out or organise programmes for third parties, programmes that are in accordance with the respective School's or College's area of responsibility²¹⁰. In accordance with that, special post-secondary courses can be offered in the framework of this partial legal capacity and money charged for them. These courses would thus not be free of charge any longer, in this way relieving the federal government's budget from paying for them. On top of that, schools can offer courses for the whole sector of adult education and training.

It cannot be assessed at present if this regulation will bring impulses for a further privatisation of the offers of the secondary technical and vocational schools and colleges for people under employment nor can be said in how far public schools will push into the field of the traditional adult education and training organisations.

"Fachhochschul"- courses for working people

The new form of financing regarding the "Fachhochschul"-courses (unit cost model) and its implications for a limitation of federal assistance have already been discussed at length. This model applies also to those courses or institutions that have been conceived for people under employment.

University Centre for Continuing Education and Training

On the issue of financing: compare above.

Open universities (correspondence courses)

Nothing is known about cost limitation measures.

²⁰⁹ This information is based on the report of a working group of the General Directorate II of the Federal Ministry of Education from the year 1995.

²¹⁰ cf. section 128c subsection 1 sub-paragraphs 2 and 3 of the Amendment.

Non-profit organisations

In the talks with representatives of the four associations included in the study it has been attempted to find out recent developments in the field of adult education and training and strategies of cost limitation. The major results are briefly summarised in the following.

The interview partners described the current situation of adult education and training as dynamic: They say that demand has increased; over the past few years new providers (commercial institutes, universities, schools and colleges) have pushed on the market. Thereby, competition between the providers has increased and is leading to a crossing of the traditional borders between general and job-related continuing education and training. Examples are: the Viennese Adult Education Centres are increasingly attempting to offer vocational courses; the Institutes for Economic Development try to provide a compact programm of wellness courses and have started to offer bridge courses for the "Reifeprüfung" and TVE-Diploma Examinations; the Vocational Support Institutes expand their offers of management courses. Competition and the general tendency towards a deregulation have had the result that in the future tenders will be solicited also for those courses commissioned by the Public Employment Service, so that other providers will get a chance, too.

The dynamic development in the field of adult education and training has an influence on the cost structure. The innovation and diversification pressure as well as the professionalisation have become growing cost factors. The use of personal computers in education and training is steadily increasing; demands on operating systems and software (business games, simulation programmes, networking) are on the rise; and maintenance costs grow as well.

An urgent problem in adult education and training is the availability of rooms - with the exception of the Institutes for Economic Development, which have sufficient room capacities at their own disposal. The interview partners see the autonomisation at schools as one factor that drastically could increase room costs, since schools have discovered the renting of locations as a new source of income. Partial legal capacity has been used, however, by few schools only until now. Additionally, schools have instructions to charge only prime costs to non-profit organisations' account.

The development of fees for the teaching personnel is not seen as a problem by the interview partners so far. They argue that the offer of instructors, trainers, and teachers is high enough so that no cost pressure arises from this side. But the innovation and diversification pressure in their opinion increases the requirements made on continuing education and training and - in the technical and vocational field - on the training of instructors on new equipment and machines. All organisations included in the study spend considerable amounts for the continuing education and training of their instructional staff (the Institutes for Economic Development spent approximately seven million ATS, the Association of Viennese Adult Education ATS 1.3 million in the year 1995). As one factor that will raise the costs for teaching staff

considerably and at once, all of our interview partners see the introduction of the social insurance obligation for so-called "dienstnehmerähnliche Werkverträge" (contracts for work and services rendered that are similar to employment contracts) and "freie Dienstverträge" (free service contracts).

Over the past few years - also in this point all our interviewees agree - the readiness to promotions from the part of public institutions has decreased due to budgetary austerity measures; from the part of the provider organisations the pressure has increased to raise the coverage of expenses by income. The associations do not agree on which mode of public promotion is optimal. The Institutes for Economic Development advocate an extension of subsidization measurements with the element of subsidy of individuals in order to develop the CET market and the competition between providers. The Vocational Support Institutes and Adult Education Centres are of the opinion that a subsidization of individuals would not help to develop the infrastructure and to recruit more and better qualified staff, and therefore they support target-oriented development-promoting subsidies from the part of the public.

Co-operation between the associations - this is the impression from the talks - is still cautious and concentrates on selected points only. In some individual cases, Vocational Support Institutes and Adult Education Centres jointly carry out events.

Inside the organisations there is a great number of initiatives to increase efficiency. One strategy stated by all interview partners is the improvement of the co-operation within the associations. There is a regular exchange of experiences and it is attempted to use synergy effects in the planning and development of courses. At the Institutes for Economic Development, additional efforts are mentioned with which the logistics (acquisitions) of the individual institutes is co-ordinated to achieve better prices. The Association of Viennese Adult Education pin their hopes on a special combination of centralism and decentralism: Their headquarters are staffed with a professional team of employees who are responsible for market research, public relations and the continuing education and training of the instructional staff, as well as elaborate the bases in the framework of development projects; the individual Adult Education Centres can decide autonomously on their collaboration in the practical execution of projects and on the course programme they offer. In this way - such is the idea - an optimum of creativity and flexibility can be achieved in the adaptation to changing requirements, since it is virtually impossible to change a bigger system by means of centralised instructions to draw up new course offers.

The Associations of Adult Education Centres focus their attempts on a professional education management: Analyses of their own organisational and personnel-related structure²¹¹ and detailed market studies²¹² are

²¹¹ cf. Filla/Löderer 1995.

²¹² cf. Bisowsky 1995.

carried out, and a guideline for the development of technical and vocational courses has been elaborated, which contains information on demand analysis, planning and organisation²¹³.

All associations are active in the field of quality assurance. Course evaluations by course participants have been made for a longer period already. The Institutes for Economic Development have had their course offers certified according to ISO 9000. The Vocational Support Institutes' courses and programmes are partly certified according to ISO 9000. The Association of Austrian Adult Education Centres adapts its courses for which there are internationally recognised standards (e.g. language courses) to the respective regulations and has elaborated their own recommendations on quality assurance and management.

3.1.5. Assessment of cost savings on affordability

a) Secondary level II

The measures aiming at the enlargement of school autonomy can be expected to strengthen the cost consciousness in the area of federal schools. No statements can be made on the size of the efficiency increase, however, as the measures are still too recent and no relevant studies have yet been carried out. It depends on the government's budget policy whether the saved resources are utilised to expand access to the secondary level II; at present, the austerity measures introduced by government serve the function of reducing the budget deficit.

b) Tertiary sector

The intention of the reform of the university organisation does not lie in the reduction of the costs per student, but in the better use of existing resources, in the extension of the adaptability of universities to social developments and in a quality improvement of instruction. When planning the reform, the Public Administration anticipated additional costs to the amount of approximately ATS 200 million p.a.²¹⁴.

Cost saving effects can be expected from the reforms of the service law and of the study law. Independent of these reforms, savings have been achieved through a series of measures in the framework of the Structural Adjustment Act (reduction of the research allowance for professors and assistants by 13 per cent, reduction of the expenses for lectureships by 27 per cent, abolition of the social insurance obligation for lecturers, reduction of the remunerations for examinations). With the help of the new service law, savings are obtained because the lecturing activities have been taken over into the duties of assistants and readers and because the payment for this work, in contrast to the previous strategy, is not fully

²¹³ cf. VÖV 1997.

²¹⁴ cf. Hochschulbericht 1993, Vol. 1, p. 32.

compensated. No information is available as yet on the size of the savings, since the new service law came into effect only as of 1st October 1997.

It can be expected that saving effects of the new study law come from the reduction of the compulsory number of lessons to be held and the general introduction of "single" study courses. There is no information on the size of the savings there.

It is not known which policy the federal government is following with regard to the savings. Possibilities would be: their use for budget consolidation or for the financing of a wider access to universities and related institutions, compensation for the additional costs that have already accrued for the "Fachhochschul"-courses, compensation for the additional costs caused by the reform of university organisation.

c) *Adult education and training*

The granting of the partial legal capacity to federal schools has created an additional source of income for them. Some representatives of adult education and training organisations which depend on the use of school classrooms fear an increase of the rents and, in the following, that offers in the field of adult education and training will become more expensive. It is intended that some parts of the education and training offers currently provided free of charge by the technical and vocational schools and colleges for people under employment will, in the future, be charged for - using their partial legal capacity. The actual development can, however, not be assessed, as the respective legal innovations have been introduced just recently.

"Fachhochschul"-courses for working people and the University Centre for Continuing Education and Training are forms of continuing education and training that were established in Austria only a couple of years ago and have led to an increasing participation in vocational training. This applies at least to the study courses for working people. It can be assumed that the new financing mode facilitates an effective supervision of the cost development. Grants from the part of the Federal government are, as has already been mentioned, in relation to unit costs and to the number of study places actually filled, and the use of the resources is subject to controls by the Science Ministry. This restricts the cost development, although the federal states, local authorities and enterprises can compensate the restricted financing from the part of the federal government, acting as additional financiers.

The cost development in the case of the non-profit providers of adult education and training courses is, at present, curtailed by the saving measures of the public (Federal government, Laender governments, local authorities) and of the provider organisations. In the field of the technical and vocational qualification measures financed by the Public Employment Service, important reforms have been made: the Public Employment Service drew up guidelines with regard to setting quality standards, checking the cost-benefit

ratio as well as to planning, carrying out and evaluating courses; additionally, it arranges to put training programmes out to tender in order to intensify competition among the providers.

Altogether, cost reductions in the field of general and job-related adult education and training can, however, not be expected, since the development in this field is very dynamic and calls for considerable expenses for development and staff training from the part of the providers.

3.2. Increasing the benefits of lifelong learning

The coverage of this point is limited to section 3.2.1; in order to be able to answer the questions in sections 3.2.2 to 3.2.6, extensive studies would have to be carried out, which, however, cannot be done within the given framework.

Guidance, counselling and referral practices

Information and counselling activities have increased in all fields of education over the past few years. The Federal Ministry of Education and Cultural Affairs as well as the Federal Ministry for Science and Transport are in charge of the counselling on education, training, and study opportunities; counselling on career options is part of the field of responsibility of the Federal Ministry for Labour and Social Affairs.

In the field of schooling, there is a school psychology and educational counselling service with approximately 70 counselling centres and 130 school psychologists. At the lower secondary schools and secondary academic schools there are students' counselling teachers, and at the secondary technical and vocational schools and colleges there are educational counsellors. The Public Employment Service publishes written information material, at the labour offices (job centres) there are special youth counsellors. Furthermore there is a network of more than 30 careers guidance centres, which not only have the function of the counselling of young people, but are accessible to all persons for the purpose of advice in the fields of education, training, and career choice. For "Reifeprüfung"-Certificate-holders there are specific counselling activities. Universities, the Science Ministry, the Ministry of Education, and the Social Ministry jointly carry out study and job fairs.

Counselling activities have increased in number also outside the mentioned institutions: in the chambers, at professional and interest associations, and at the adult education and training organisations. The Institutes for Economic Development have established offices for the counselling of individuals and companies and, moreover, carry out aptitude tests. The Association of Viennese Adult Education Centres trains as counsellors their administrative staff who take over registrations and applications for courses; furthermore, an "educational hotline" has been introduced to give advice to those interested; and finally there is a specific counselling opportunity for those interested in second-chance education.

In the year 1993, financial support from the part of the Ministry of Education facilitated the start of the establishment of an adult education information system (EBIS), with which the current offer of courses is recorded according to uniform criteria and made accessible to all those interested. The project was stopped, however, in the year 1997. Since that time, the Federal Ministry of Education and Cultural Affairs makes an effort to coordinate the existing regional information systems and to open them up to the supraregional public.

Chapter 4:

Mobilising resources for lifelong learning

4.1. Introduction: Funding arrangements by sector

According to the Study Specifications, a comprehensive and detailed description of the financing mechanisms of the various sectors of lifelong learning is to be given in Chapter 4. The financing mechanisms are to be examined regarding the extent to which they improve affordability of lifelong learning and provide an equitable access to lifelong learning opportunities across the life-cycle. These requirements on the analysis can, however, be met only partially, as there is a lack of data on financing sources on the one hand and, on the other, of the necessary studies which could be taken as reference points.

Due to the data situation, some major educational fields cannot be included in the analysis. Among them there is the training of health personnel which takes place at hospitals and is financed by hospital providers; vocational and continuing training of federal, Laender and municipal employees (with the exception of the in-service teacher training colleges and of the Administration Academy) as well as the vocational and continuing training activities in the field of the military and of the police.

Table 4.1
EU-resources for Leonardo and Socrates Activities, ESF resources, 1995-1997
(figures in ATS million)

Activities	1995	1996	1997
Leonardo total	45.4	50.3	65.2
Pilot projects	40.0	41.9	50.7
Mobility programmes I	no figures available		
Mobility programmes II	5.4	8.4	14.5
Socrates total	42.9	51.3	48.2
Erasmus	28.8	27.2	26.6
Comenius	3.7	10.1	8.2
Lingua	6.8	8.7	8.3
Open education and distance learning	0.8	0.4	2.0
Exchange of information and experiences	0.9	0.6	0.6
Adult education and training	-	2.1	2.5
Complementary Measures	1.9	2.2	-
European Social Fund	1888		1705

Source: Leonardo-Magazine, Special Issue 4/97

Note: Mobility programmes I: placements for students and young university graduates
Mobility programmes II: exchange programmes for persons in initial vocational training, young employees in employment, instructors

A relatively new source of financing of educational activities are resources from the European Union. Relevant are in this connection: the Leonardo-Programme, the Socrates-Programme, and resources from the European Social Fund, which are used for technical and vocational continuing education and training activities. The available information does not suffice, however, to assign the resources to the existing financing flows in a reasonable way. Therefore, here comes an advance report on the volume of these resources. The EU-resources have to be supplemented by Austrian project upholders or participants; no information is published on the amount of these supplementing resources.

Leonardo activities concern technical and vocational training and education, but they include projects that are part of initial and continuing education and training, and they include pilot projects (promotion of innovative ideas) and exchange programmes for teachers, trainers, and learners²¹⁵. Table 4.1 gives an incomplete overview of the expense development between 1995 and 1997; there are no figures on exchange programmes of Strand I (persons in initial vocational training, young employees, instructors), since these resources are granted in a decentralised way. Resources for mobility measures of Strand II (placements for students and young university graduates) increased heavily with 70 per cent over the three years.

In the Socrates Programme, a variety of activities is summarised with which an assignment to the different sectors of lifelong learning is not possible in all points. Erasmus programmes refer to universities and related institutions, but promote both students and teaching and administrative personnel to universities and related institutions, to public authorities, and enterprises. Comenius programmes relate to schools, they promote teachers (also from universities and related institutions), students, other staff, public authorities, publishing houses; in the available material on financing, however, secondary level II is not shown separately. The same is true of the different Lingua programmes. The other programmes (open education and distance learning, adult education and training, exchange of information and experiences on education sectors and educational policies, complementary measures) touch on all areas of education and include publishing houses, enterprises, public authorities, manufacturers of education software, and others.

Table 4.1 shows the resources approved by the EU for the years 1995 to 1997 (not the resources actually used); the Austrian financing contributions are not included in these figures. The total resources increased from 1995 to 1997 by more than twelve per cent, with the activities in the fields of Comenius, Lingua, and open education and distance learning increasing, and the Erasmus programmes remaining on their level. The high proportion of the Erasmus-programmes in the total budget has thus decreased from 67 to 55 per cent.

²¹⁵ cf. Gravert-Jenny/Kailer 1995, p. 39.

Since Austria's accession to the European Union in the year 1995, also funds from the European Social Fund (ESF) flows into the vocational training measures for unemployed people and employees in employment. The total amount of ESF resources for the two years 1995 and 1996 was, for all target regions, ATS 1.888 million; for 1997, ATS 1.705 million are budgeted²¹⁶. No information is given on the proportion of expenses for vocational training activities; these resources can, therefore, not be assigned completely to the sector of vocational-oriented continuing education and training.

The funding formulas of EU resources place an obligation on Austria to contribute additional resources, the extent of these resources, however, is not published.

4.2. Funding arrangements by sectors

4.2.1. Secondary level II

a) Financial mechanisms

Public schools

The Austrian school legislation distributes the competences for the maintenance and provision, administration, and financing of public schools to local authorities, Laender governments, and federal authorities, thereby creating a complex system of responsibilities²¹⁷, which makes it more difficult to determine the public expenses for education and training. The legal regulations governing the financing of the various school forms are described briefly in the following:

- Ø The school providers of the pre-vocational schools are the local authorities; they bear the expenses for investments, the running material expenses, and the expenses for the non-teaching staff. The employers of the teaching staff are the Laender governments, which are refunded the complete personnel costs by the federal government.
- Ø Vocational schools for apprentices are one element within the dual system for the vocational training of apprentices and complement the practical job-oriented part of in-plant training. The costs of company training are paid by the training employers. The financing of the schools is carried out by the Laender governments, they are refunded half of the costs for the teaching staff from the federal budget.
- Ø Secondary academic schools are divided into a four-year lower cycle and a four-year upper cycle; with the upper cycle classed as secondary level II. The school provider of public secondary academic schools is the federal government.

²¹⁶ cf. esf-news 1997, p. 2-4.

²¹⁷ Cf. Clement/Sauerschnig 1978, 37-44.

- Ø Secondary technical and vocational schools and colleges are part of secondary level II and are financed completely from the federal budget if they are public schools. In addition to those, however, there are also schools run by local authorities and private providers, the largest part of the teachers' costs are nevertheless paid from the federal budget. The structure of the federal budget does not allow a separation of the expenses into secondary schools and colleges.
- Ø Secondary colleges for agriculture and forestry are financed from the federal budget; with regard to school supervision and pedagogical matters, they are under the control of the Federal Ministry of Education and Cultural Affairs, in all other matters (service law, payment, maintenance and provision, and furnishing of the buildings) the Federal Ministry for Agriculture and Forestry is responsible. The secondary schools are under the responsibility of the Laender government, half of the teachers' costs are refunded from the federal budget.

Private schools

In the case of State subsidies provided to private schools, a distinction has to be made between personnel subsidies and material subsidies. As far as personnel subsidies are concerned, teachers who are public employees and receive their salaries from the public can be allocated to the schools ("living" subsidies), or the schools recruit their teachers themselves and get a refund for the staff costs. Those schools whose provider is a church are entitled to personnel subsidies, other private schools can receive subsidies for their staff requirements. Furthermore, the Republic of Austria has committed itself to take over the costs for the instruction in religions recognized by the State.

Subsidies for material expenditure are not provided for in the Private School Act. Nevertheless there exist contracts with private schools in which the federal government undertakes to finance or co-finance school projects.

Financial support of students

In the public schools at secondary level II schooling is free. However, cost-covering contributions for lodging, accommodation, tutoring in public students' homes, as well as learning and working material and contributions for school events (e.g. school skiing-courses) are allowed to be charged for. In Austria, students are entitled to the following financial supports:

- Ø family allowance,
- Ø school textbooks,
- Ø students' free school trips or grants for school trips, and
- Ø students' accident insurance.

Students at private schools are entitled to school textbooks and students' free school trips or grants for school trips only in those cases where these schools have public status (i.e. their examinations and certificates or graduations are legally equivalent to those of public schools).

Other supports can be granted under particular circumstances:

- Ø Student grants: They can be given if students cannot live with their parents because of their attending a school, if they are needy and their school success is positive;
- Ø Student supports: They are meant to enable needy students to participate in school events (e.g. school skiing-courses, school weeks in the country).

b) *Relative shares of financial contributions*

No information is available on the relative share of the federal government, the Laender governments, the local authorities, private providers, families, etc. in the financing of the attendance of secondary level II.

c) *Evolution of financial mechanisms*

Graph 4.1 shows the financing flows at secondary level in so far as figures are available. There is no information on private financing activities (from the part of enterprises, non-profit organisations, and families), nor is it known to which extent financial resources flow directly from Laender governments and local authorities to the students or their families. Taking those public expenses as the basis which flow directly to the schools at secondary level II, it is found that the federal budget bears the biggest share of the financing with ATS 23,646.8 million or 82.5 per cent; the Laender governments' share is ATS 4,614.0 million (16.1 per cent of the total expenses - these are expenses for vocational schools for apprentices); and the local authorities pay ATS 383.8 million or 1.4 per cent of the total expenses (these are, in general, expenses for the pre-vocational schools). The amount of payments refunded by the federal government to the Laender governments and local authorities comes to ATS 2,469.0 million, these are 8.6 per cent of the total expenses for the sector of secondary level II.

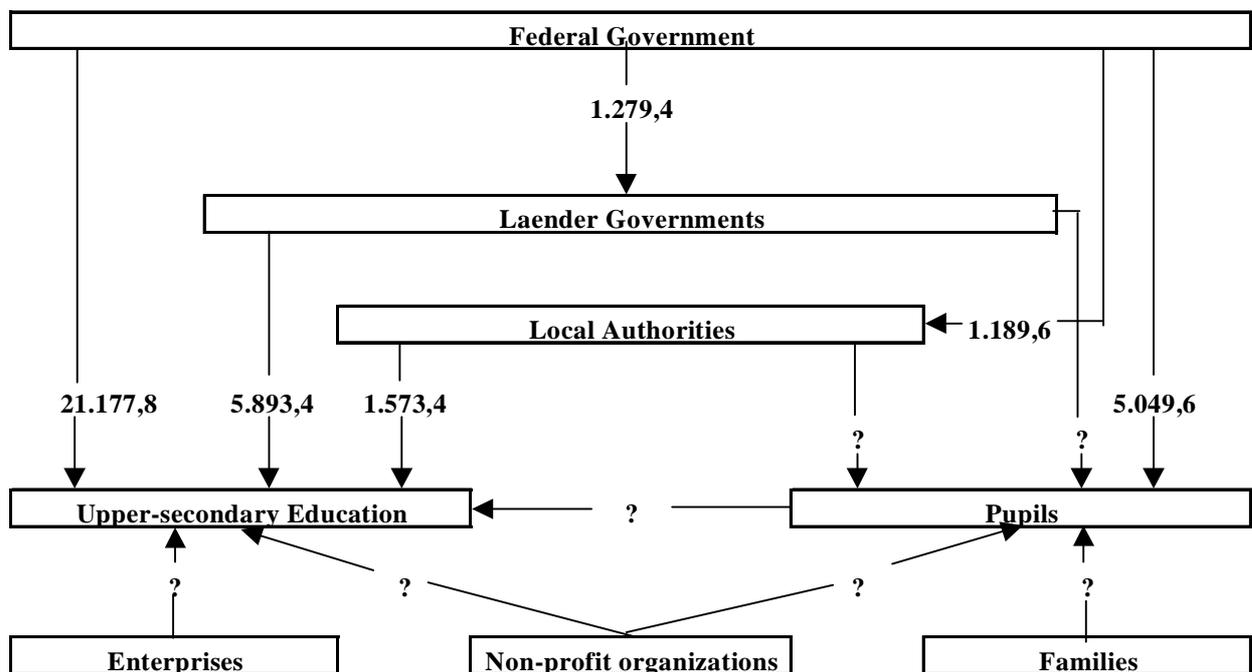
The sum of indirect expenses for the financial supports of students and their families (school textbooks, free school trips or grants for school trips, student grants etc.) amounts to ATS 5,050 million.

There are efficiency problems in those school forms that are run by the local authorities or Laender governments, the costs of which are, however, refunded completely or partially by the Federal government. This applies only to a small part to school types at secondary level II (pre-vocational year and vocational

school for apprentices). As has already been described, the introduction of staff plan guidelines has created the possibility of coping with this problem²¹⁸.

Graph Fehler! Unbekanntes Schalterargument.

Financing flows concerning upper-secondary education, 1995
(Angaben in Millionen Schilling)



The formal equality of access to education at secondary level II is not touched by the type of financing, as access to public schools is free of charge. Financial barriers for the attendance of secondary level II can be only those connected with the costs for living expenses. There is no information on inequalities with regard to the distribution of the benefits and the financing of the education system.

Difficulties in adapting the number of teachers to the number of students are not caused by the Pragmatisierung (the status of tenure for life) of the teaching staff, as is often maintained, but by its skewed age structure. Due to the expansion of the Austrian education system since the 1970es there are too many teachers of close to the same age. The tenure status on itself does not prevent from carrying out a personnel politics that is both future-oriented and adapted to student numbers, but it is the high proportion of teachers

²¹⁸ cf. section 3.1.1 g)

in the ages of about 50. This has the consequence that a relatively small share of staff retires year after year and the room to vary the size of staff is narrow. Furthermore, the share of junior staff with lower pay is relatively small.

Cost control (agreement on staffing plan criteria between the federal government, the Laender governments and local authorities; the installation of a personnel information system for the purpose of allocations of the "Werteinheiten" - i.e. the time values of school lessons of different subjects - at federal schools) has already been discussed in detail, as well as the expansion of autonomous decision-making scopes of action, and the introduction of the partial legal capacity²¹⁹.

4.2.2. Tertiary sector

a) Financial mechanisms

The financing of the tertiary sector is to the greatest part carried out with public resources of the federal budget; the Laender governments and the local authorities most often contribute only to investments or place pieces in land at disposal. An exception is the "Fachhochschul"-sector.

The "Fachhochschul"-Course Act introduced not only a new type of university-related institutions in Austria, but also a novel system of admission, management, and financing. According to the Austrian Constitution, the federal government is in charge of the legislation and the execution of the law at universities (Art. 14 B-VG), this does not imply, however, that the federal government is also responsible for the management and financing them. The major characteristics of the "Fachhochschul"-system can be summarised as follows²²⁰:

- Ø The Austrian Council responsible for "Fachhochschul"-courses is an institution of accreditation and the body in charge of quality assurance. It decides on the introduction of study courses according to criteria of their scientific and curricular quality and judges the security of financing.
- Ø The federal government contributes to the financing according to a unit cost model in which average expenses per study place in technical and commercial branches are established; the federal government takes over 90 per cent of the unit costs.
- Ø The federal government has carried out a development plan for the "Fachhochschul"-sector. In this plan it is established that until the year 2000 a maximum of 10,000 study places are promoted. Furthermore, criteria are established concerning the decision if applications passed by the "Fachhochschul"-Council shall be promoted. These include savings in the use of resources (avoiding

²¹⁹ cf. section 3.1.1 g)

²²⁰ cf. BMWF and BMUKA o.O. and J.; Pechar 1996.

double offers, optimum company size of institutions, private fund-raising), increasing the social equality of opportunity and the permeability of the education system (promotion of the qualification of non-"Reifeprüfung"-Certificate-holders and of people under employment), innovativeness and internationality of the offer, and the aspect of regional development.

- Ø "Fachhochschul"-course providers are obliged to carry out a cost accounting and have to submit to controls by the Science Ministry.
- Ø "Fachhochschule"-course providers are entitled to select their students according to performance criteria, but they are, at present, not allowed to collect any tuition fees.
- Ø "Fachhochschul"-graduates obtain the right of admission to a doctorate study at a university²²¹.

Financial support of university students

University students are entitled to receive a family allowance up to the age of 26.²²² Furthermore, needy students have the right to student grants. After a period when rather restrictive provisions were in force, a change of the entitlement, which came into force since the academic year 1992/93, brought about an increase of student grant recipients by 27 per cent compared to the previous year. In the academic year 1995/96, approximately 27,350 students at universities, colleges for arts and music, and "Fachhochschul"-courses received a student grant averaging ATS 51,400 per year²²³. Another form of support concerns the students' homes. In the winter semester 1995/96, approximately 21,200 places in 173 homes were available; the average price for one place was ATS 2,230 ATS per month. In the year 1995, the federal government paid approximately ATS 1,191 million for scholarships, ATS 17.7 million for promotions to refectories, and ATS 148 million for promotions to various student-supporting associations and students' homes. Students' free school trips and grants for school trips were abolished in the framework of the Structural Adjustment Act 1996.

b) Relative shares of financial contributions

Since the complete expense volume for the tertiary sector that is paid by public and private sources is not known, no figures concerning the relative shares can be given.

c) Evolution of financial mechanisms

Graph 4.2 shows an incomplete picture of the financing of the tertiary sector. In the graph, expenses of the Federal government for universities, colleges for arts and music, teacher training colleges, academies for

²²¹ This right is considered the key point for the recognition of the equal status of the Fachhochschule sector with the diploma studies at universities (cf. Pechar 1996, 10%).

²²² or up to the age of 27 in case they do their military service beforehand.

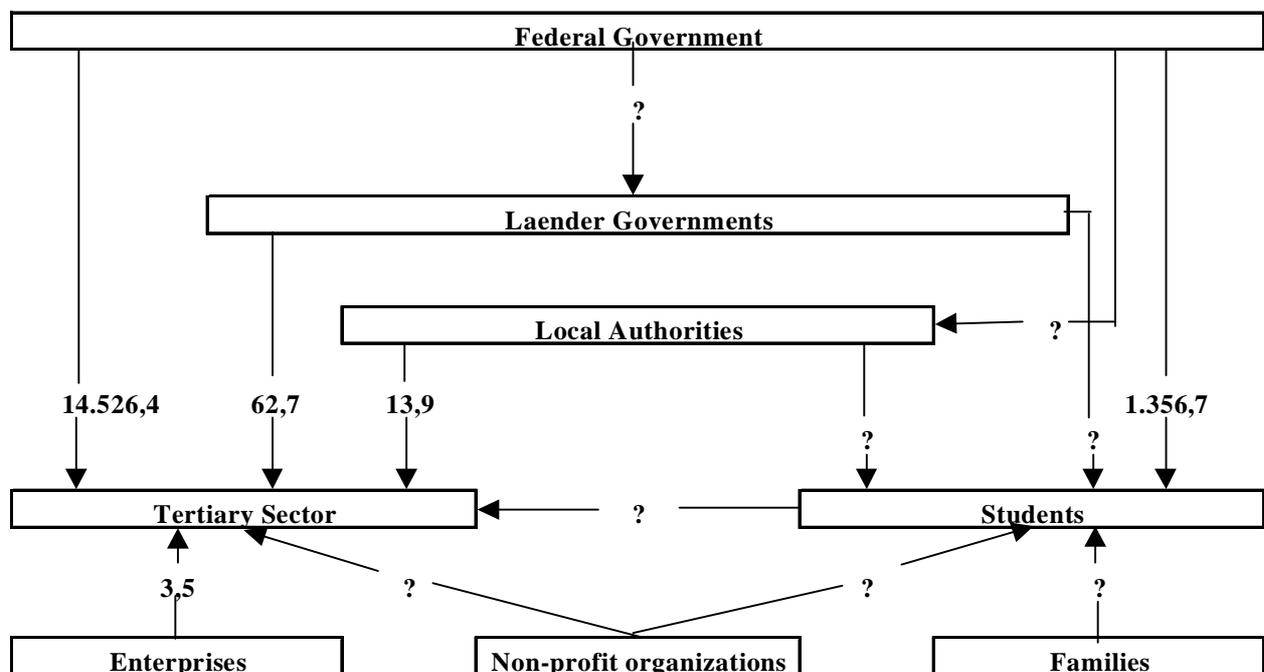
²²³ cf. Hochschulbericht 1996, Vol. 2, p. 221.

vocational school teachers, and "Fachhochschul"-courses for the year 1995 are included. The figures given - indicating expenses by the Laender governments, local authorities and enterprises - refer only to "Fachhochschul"-courses and do not include payments to other fields of the tertiary sector. Payments to students comprise family allowances, study grants, and other promotions for the benefit of students (e.g. subsidies to refectories and students' homes); but only students at universities and colleges for arts and music have been taken into consideration. In the financing also those receipts should be taken into account which institutions of the tertiary sector have due to instruction they offer outside the regular day-to-day study practice. However, no information is available on this point.

Graph Fehler! Unbekanntes Schalterargument.

Efficiency problems in the field of universities and the reforms that have been undertaken over the past few

**Financing flows concerning the tertiary sector, 1995
(Angaben in Millionen Schilling)**



years in order to minimise these problems (university organisation, study law, service law) have already been elaborated on above²²⁴.

In the "Fachhochschul"-sector a completely new path of financing and management has been chosen as described above. The advantages of the unit cost model are seen in a limitation of the public costs, since the

²²⁴ cf. 3.1.4.2.

State does not act as manager or as provider. An analysis of the courses held so far shows, however, that private financing is rather limited: Although the Federal government takes over a mere 54 per cent of the total costs in the course of the whole contract period up to the year 2000, the Laender governments (with 36 per cent) and the local authorities (with eight per cent) take over the second half of the financing, except for two per cent which are paid by enterprises²²⁵. Another advantage of the new system is seen in the fact that the providers of "Fachhochschul"-courses have a large scope of action in their use of the resources, since they are not subject to any regulations from a superior institution. This aspect is thought to increase the teachers' motivation and commitment and to promote innovativeness. Furthermore, it is said that the financing of study places has implemented a market element into the system which has positive effects on the support and assistance provided to students and on the adaptability of the teaching offer.

As for the social equality of the access to tertiary sector as well as for the distribution of costs and benefits, the same applies as has been said in regard with the secondary level II.

4.2.3. Adult Education and Training

a) Financial mechanisms

The sector of adult education and training is quite heterogeneous, as has already been reported, with regard to providers and offers. Apart from the offers on the part of the public education sector (by schools as well as universities and related institutions), there are commercial providers²²⁶, companies that organise courses for their employees²²⁷, and non-profit institutions whose providers most often are interest groups, local authorities, and churches.

The traditional organisations in adult education and training are non-profit institutions. They are organised in a decentralised way (whether at local or district level, as in the case of the Adult Education Centres, or at Laender level, as in the case of the Institutes for Economic Development and of the Vocational Support Institutes) and form associations at Laender and/or federal level. In 1972, the ten biggest associations came together in a forum, where the interests in adult education and training are discussed and particular joint activities are carried out (the forum is called KEBÖ or Austrian Conference of Adult Education Associations). The majority of traditional organisations are characterised by their strong connection to interest groups of the employers and employees (Trade Chambers, Chambers of Labour, Chambers of Agriculture, Trade Unions' Federation). Another part of adult education and training organisations is affiliated to religious communities (e.g. the institutions of Catholic adult education).

²²⁵ cf. Pechar 1996, p. 60.

²²⁶ They have to remain unconsidered in the following since no information is available on their financing.

²²⁷ These include also the CET activities organised within the Public Service (Federal government, Laender governments, local authorities) for the respective employees.

Adult education and training shows pronounced traits of segmentation with regard to offers of contents and to access. Segmentation of the content-related offers means here the separation of general-education and job-oriented events²²⁸: Whereas the 290 Adult Education Centres concentrate on providing courses with general-education contents²²⁹, the work-related training is dominant at the Institutes for Economic Development, the Vocational Support Institutes, the Laendliches Fortbildungsinstitut, the Education Association of the Österreichische Volkswirtschaftliche Gesellschaft, and the commercial providers. Public schools organise various programmes offering employed persons the opportunity to complete general-education and technical and vocational courses at a later stage in their lives. In the past few years also the traditional organisations in adult education and training offer courses preparing for university entrance (university qualification). The preparation for the external "Reifeprüfung"-Examination has always been an interesting field of activity for commercial institutions - apart from the running of "office and commercial schools"; over the past few years, the number of commercial providers has risen mainly in language courses, EDP-courses, and management programmes²³⁰.

The financing sources of adult education and training include public resources from the part of the Federal government, of the Laender governments and local authorities, of resources from the provider organisations (Economic Chambers, Chambers of Labour, Trade Unions' Federation, Industrialists' Association, churches, etc.) as well as of the contributions paid by companies and course participants. In contrast to the school system, competences regarding the safeguarding of the offer, financing, and supervision in the field of adult education and training are not regulated among the regional authorities. The extent of promotion is left to the voluntary initiative of the Federal government, the Laender governments, and local authorities. This involves the danger that adult education and training or at least certain parts of it can easily be restricted if public budget resources become scarce or other interest groups gain political power and influence. This becomes obvious when analysing the development of promotions for adult education and training with funds from the education budget and the supports from the part of the Laender governments and local authorities in the period 1985 to 1995: They are subject to strong fluctuations and the total amount decreased clearly (by 7.5 per cent) between 1993 and 1995²³¹. The decrease of public subsidies and the rise of costs led to an increase of the fees participants have to pay. In so far as local authorities themselves act as providers of adult education and training organisation (in the case of Adult Education Centres), there is no legal obligation for maintaining a particular range of offers of events.

²²⁸ To these, ideologically, religiously, and politically connected organisations as well as the training for functionaries carried out by unions, entrepreneurial associations, and professional associations have to be added. Cf. Bisovsky 1991, 15; Lenz 1996, 3.

²²⁹ On the basis of the figures provided by Bisovsky (cf. 1996, 53), a share of approximately eight per cent of vocationally oriented courses in their complete course offer can be calculated for the Viennese Adult Education Centres for the year 1994/95.

²³⁰ Forstner names a figure of approximately 1,000 commercial institutes for the year 1989 (cf. 1991, 21), Kailer's result for the early 1990s is a figure of 1,500 providers with 50,000 participations (cf. 1993, p. 46).

²³¹ cf. below: the analysis on this development.

The financial support of adult education and training by the Federal government is based on the Promotion Act from the year 1973. The adoption of the Promotion Act had been preceded by the foundation of the Austrian Conference of Adult Education Associations (KEBÖ) in the year 1972, brought about by efforts of the Education Minister of that period, as a forum of associations that creates acceptance and consensus concerning the distribution of financial promotions²³². KEBÖ's aims are: advising the education minister and other public authorities in matters relating to adult education and training; the representation of common interests of the associations towards the Federal government, the Laender governments, and local authorities; raising the public consciousness on adult education and training; development of adult education and training in a pedagogical respect (professionalisation); and support of the co-operation between the associations.

A further step forwards in adult education and training was made in the early 1980s when the Education Minister of that time initiated a "development plan for a co-operative system of adult education and training in Austria"²³³. This "development plan" pursued the goal of expanding adult education and training with regard to contents of events, its range, co-operation of organisations, and professionalism. Of special concern were:

- Ø the creation of an extensive offer for all groups of the population,
- Ø the abolition of regional deficits,
- Ø the improvement of planning and didactics,
- Ø the safeguarding of a wide range of information on the offer
- Ø a rational use of the available resources by means of a co-operation of the adult education and training associations.

Bisovsky sees as positive results of the "development plan" the learning effects on the part of the adult education and training organisations regarding the necessity of setting priorities, organisational development, professionalisation, and contacts to adult education bureaucracy in the Federal government, the Laender governments, and local authorities; the aim of a co-operation between the associations has been missed however²³⁴. Filla ranks as other positive, albeit non-intended results: the introduction of co-operations between adult education and universities; a stimulation of publication activities on the part of adult education and training; and the examination of methods of the social sciences²³⁵.

²³² cf. Bisovsky 1991, p. 247.

²³³ cf. for a more detailed description Bisovsky 1991, p. 214-225; Filla 1991, p. 143-154.

²³⁴ cf. Bisovsky 1991, p. 225.

²³⁵ cf. Filla 1991, p. 153.

As yet another major impulse for the development of adult education and training in the 1980s, the financing of posts for unemployed teachers can be mentioned, which was carried out by the Ministry of Education. The teachers in question were used not only for course and seminar activities, but also for tasks in educational management (programme- and event-planning, educational counselling, public relations). Between 1984 and 1987, an average of approximately 200 teachers were employed in adult education and training in this way. The financing of staff by the Ministry of Education has remained unchanged since that time, in the meantime the focus has shifted, however, towards the recruitment of pedagogues; in the year 1995 resources were placed at the disposal of the associations belonging to the KEBÖ to finance the employment of 63 teachers and 150 pedagogues.

In the course of the "development planning", the year 1985 also saw a restructuring of matters relating to adult education and training in the Ministry of Education²³⁶. A separate Group for Adult Education and Public Libraries with a Department for Adult Education was created, which is active in the co-operation between the school system, the adult education and training sector, and teacher training. This group manages the subsidization of the adult education and training organisations, it co-ordinates the collaboration of the Federal Ministry of Education and Cultural Affairs with the associations, and administrates the Federal Institute for Adult Education and seven Promotion Offices with libraries in the federal provinces.

b) Relative shares of financial contributions

Since the total expense volume for the adult education and training field that is covered by the public and private economy is not known, no figures on the relative shares can be given, either.

c) Evolution of financial mechanisms

In the following, the promotions and the financing of continuing education and training institutions are elaborated on, in so far as there is data available for the report. The following points are covered:

- Ø public promotions and federal institutions for adult education and training,
- Ø in-service teacher training colleges and the Administration Academy,
- Ø technical and vocational schools and colleges for people under employment,
- Ø "Fachhochschul"-courses for working people,
- Ø University Centre for Continuing Education and Training (Danube University Krems),
- Ø open universities and correspondence courses,

²³⁶ cf. Forstner 1991, p. 5 and 12.

Ø expenses for training measures in the framework of the active labour market politics.

Public promotions and federal institutions in adult education and training

In addition to the promotions for adult education and training made by the Federal government, there are those made by the Laender governments and local authorities. These promotions are listed in the financial handling overviews of the regional and local authorities; it could not be ascertained in the framework of this report, however, which use the expenses booked in the budget section "adult education and training" are made of - in how far they are promotions, in how far also Laender governments and local authorities run their own institutions, and if the contributions include also expenses for the continuing education and training of the Laender government employees²³⁷. In the description, only net expenses (expenses minus receipts) have been used.

Table 4.2 shows the expenses of the Federal government between the years 1985 and 1995 at constant prices 1995 (price adjustment was carried out with the help of the GDP-deflator) and their proportion in the total budget for education and the arts. The relatively high amounts of subsidies in the years 1985 and 1986 are due to the additional resources in the framework of the project "unemployed teachers working in adult education and training", in the following years the promotion sums as well as their shares in the education budget decreased steadily from 0.22 to 0.16 per cent; at the beginning of the 1990s, an increase of the promotion volume could be observed, which in 1995, however 1995, suddenly fell below the 1991 level²³⁸; in comparison to 1994 this is tantamount to a decline by 16 per cent; the share in the education budget fell from 0.24 to 0.20 per cent.

Table 4.2
Public promotions for adult education and expenses for federal institutions in adult education and training (in ATS 1,000, at constant prices 1995)

Year	Federal Ministry of Education and Cultural Affairs		Laender governments excl. Vienna	Local authorities excl. Vienna	Vienna	Total
	Promotions	Institutions ¹⁾				

²³⁷ It could not be traced, either, where the not inconsiderable receipts come from that are booked in this budget section.

²³⁸ As has been explained by the interview partners from the associations, this triggered strong protest from the part of the KEBÖ and the adult education associations, which had been promised higher resources and which - with this prospect in mind - had already done expenses; after negotiations with the new Education Minister, the associations could get through an increase of the promotions to ATS 213 million for the year 1996 in order to be able to settle their debts.

	abs.	in %	abs.	in %	abs.	in %				
1985	111,763	0.22	55,496	0.11	167,259	0.33				
1986	113,541	0.22	61,859	0.12	175,400	0.34				
1987	96,968	0.18	61,159	0.11	158,127	0.30				
1988	88,754	0.17	62,848	0.12	151,602	0.29				
1989	84,614	0.16	64,749	0.12	149,362	0.28				
1990	87,769	0.16	68,503	0.12	156,272	0.28				
1991	140,348	0.25	72,063	0.13	212,412	0.37				
1992	142,083	0.24	71,333	0.12	213,416	0.36				
1993	153,108	0.24	74,160	0.12	227,269	0.36	111,871	338,421	346,425	1,023,985
1994	155,665	0.24	74,220	0.11	229,886	0.36	117,400	309,346	350,772	1,007,404
1995	130,562	0.20	71,763	0.11	202,325	0.30	121,930	286,875	336,507	947,637

1) also these figures include promotions

The subsidies from the Ministry of Education include also resources granted for the completion of educational qualifications at a later point in life. The total amount of these resources is subject to very strong fluctuations: In the second half of the 1980s they were at a price-adjusted level of approximately ATS 1.2 million per year, in the 1990s they grew from this level to ATS 4.7 million in the year 1995.

In contrast to the subsidies, the expenses for the federal institutions in adult education and training (the Federal Institute and the promotion offices) show a continuous development: They increased between 1985 and 1994 with an average annual growth rate of 3.3 per cent in real terms. Their share in the education budget is stable and lies at 0.12 per cent. In the year 1995, the expenses for the federal institutions in adult education and training, however, share the fate of the subsidies and fall markedly, albeit not as strongly (-3,3 % as against 1994).

The expenses of the local authorities (incl. the City of Vienna) for adult education and training have been recorded as separate items in the financial handling overviews of the regional and local authorities only since 1993. As can be seen from Table 4.3, the local authorities bear the main burden of the subsidies for adult education and training. Though the share of the Federal provinces (excl. Vienna) has experienced pronounced increases since 1993 (from 11.9 to 13.9 per cent), the share of subsidies from the part of the local authorities (incl. the City of Vienna) still makes up more than 70 per cent in the year 1995. In the years 1993 to 1995, the local authorities (excl. Vienna) reduced their subsidies in real terms by 15.3 per cent, in the year 1995, also the City of Vienna cut its support by 2.9 per cent as against 1994. As a result of the saving measures of the Federal government and local authorities, public promotions for adult education and training and expenses for federal institutions in adult education and training decreased by 7.5 per cent in real terms from 1993 to 1995.

Table 4.3

Shares of the Federal government, the Laender governments, and the local authorities in the public promotions for adult education and training (figures in % of the total promotion volume)

Year	Federal Ministry of Education and Cultural Affairs	Laender governments excl. Vienna	Local authorities excl. Vienna	Vienna	Total
1993	16.1	11.8	35.6	36.5	100.0
1994	16.7	12.6	33.1	37.6	100.0
1994	14.9	13.9	32.8	38.4	100.0

In-service teacher training colleges and the Administration Academy of the Federal government

The continuing education and training of teachers and other public employees is part of the field of in-company continuing education and training, since exclusively those persons have access to these training activities who are in a respective employment relationship.

The continuing education and training of teachers expanded considerably in the ten-year period between 1985 and 1995: From 1985 to 1994, expenses rose by 87.0 per cent in real terms, which is tantamount to an average annual growth rate of 7.2 per cent; in 1995 also in this area of the education system saving measures became effective, expenses were reduced by 1.3 per cent as against 1994.

The expenses for the Administration Academy of the Federal government increased strongly in the second half of the 1980s (by 82.5 per cent in the period between 1985 and 1990, or by an average of 12.8 per cent p.a.). In the 1990s, expenses have stagnated at a level of approximately ATS 70 million.

As has already been said, these figures do not cover by far all vocational and continuing training measures taking place in the public sector. It can be assumed that in each ministry specific training courses or programmes are carried out or financed which are not recorded in the budget. For a complete record, moreover also those training measures would have to be taken into account which are organised by the Laender governments and local authorities.

Table 4.4

Expenses of the Federal government for the in-service teacher training colleges and the Administration Academy (in ATS 1,000 at constant prices 1995)

Year	In-service teacher training colleges	Administration Academy
1985	172,798	39,120
1986	184,520	40,975
1987	198,052	42,616

1988	231,252	46,469
1989	242,250	49,557
1990	281,137	71,546
1991	296,961	68,207
1992	297,653	76,815
1993	307,628	70,200
1994	323,125	67,172
1995	319,089	72,320

Technical and Vocational Schools and colleges for People under Employment

The expenses of the Federal government for the technical and vocational schools and colleges for people under employment can be estimated by means of the costs ascertained for the secondary academic schools (AHS) as well as for the secondary technical and vocational schools and colleges (BMHS) under section 3.1.1. In this section, per-student expenses are calculated²³⁹; if these figures are multiplied by the number of students at the technical and vocational schools and colleges for people under employment, an estimated value for the expenses for these institutions is obtained²⁴⁰.

Table 4.5

Expenses of the Federal government for technical and vocational schools and colleges for people under employment 1985 and 1995 (in ATS 1,000 at constant prices 1995)

School type	Number of students		Expenses per student		Expense total	
	1985	1995	1985	1995	1985	1995
AHS	2,501	3,059	61.7	81.4	154,312	249,003
BMHS	10,575	14,466	67.6	84.9	714,870	1228,163
Total	13,067	17,525			869,182	1,477,166

The number of students under employment at both school forms rose in the period between 1985 and 1995, in the secondary technical and vocational schools and colleges with 37 per cent noticeably stronger than at the secondary academic schools with 22 per cent. The real cost increase was 70 per cent. In the year 1995, expenses for the technical and vocational schools and colleges for people under employment amounted to approximately ATS 1,500 million.

²³⁹ cf. Table 3.1

²⁴⁰ cf. Table 4.5.

"Fachhochschul"-courses for people under employment

Study courses for people under employment were a special concern when the coalition parties decided for the introduction of "Fachhochschul"-courses. The first organisations of this kind were introduced in the winter semester 1996/97²⁴¹, in the winter semester 1997/98 the BMWV lists nine study courses for people under employment.

University Centre for Continuing Education and Training (Danube University Krems)²⁴²

The University Centre for Continuing Education and Training was founded on the basis of a separate federal law in the year 1994. It has been given legal personality, and the law merely specifies the organisational structure as well as the competences of its different authorities and the relations between the authorities and defines the study courses to be established. In the framework of a far-reaching autonomy, the Centre is entitled to design its statutes and articles and the authorities can organise their activities under the items of the statutes. The authorities and the financial handling are subject to controls by the Federal Minister for Science and Transport.

Table 4.6

Budget plan for 1997 of the Danube University Krems broken down by types of income (in ATS million)

Types of income	absolute	in %
Federal government	52.1	51.2
Land	15.7	15.5
Running operating expenditure	13.5	13.3
Building investments	2.2	2.2
Tuition fees of participants	18.2	18.0
Tuition fees from scholarships	1.2	1.2
Money from third parties	14.0	13.8
Events	6.0	5.9
Research	4.8	4.2
Others (donations, etc.)	3.2	3.2
TOTAL	101.2	100.0

²⁴¹ cf. Hochschulbericht 1996, p. 74.

²⁴² The following description is based on information provided by the BMWV.

The Federal government and the Laender Government of Lower Austria have reached an agreement on the establishment and the operation of the University Centre and committed themselves to jointly provide for its services and maintenance. Further sources of income are: fees for the participation in lectures and payments from third parties (e.g. foundations, private and public scholarships, income from scientific services). Lecture fees have to be fixed at amounts covering the running costs of the teaching activities. The Federal government bears the running fixed costs (staff, running material expenditure, investments for equipment), the Laender Government of Lower Austria placed pieces in land and buildings at the disposal and is responsible for the maintenance and operating expenditure for rooms and buildings.

Table 4.6 illustrates the financing structure in the year 1997. If one-off special expenses of the Laender Government of Lower Austria (ATS 13 million) are left out, the financing volume amounts to a total of slightly more than ATS 100 million. The Federal government bears approximately half of this amount (51.2 %) of the expenses, the Laender Government of Lower Austria pays for approximately 15 per cent. Tuition fees cover one fifth of the costs, with only a very small part coming from scholarships; 14 per cent of the financing is carried out with resources from third parties.

The University Centre for Continuing Education and Training offers university programmes, seminars, workshops, and symposia in the fields of the economic and management sciences, telecommunication, European integration, the cultural sciences, as well as the environmental and medical sciences. Access prerequisite for university programmes is, in the first place, previous completion of a university study; in some areas, however, also branch-specific practical experience suffices.

In the academic year 1997/98, 387 students registered for 17 university programmes at the Danube University Krems. Approximately 600 persons attended workshops, seminars and participated in other activities.

Open universities (correspondence courses)

Austria actually does not have an open university of its own, and - because of the too small potential of students - it has not yet been taken into account to establish one. Austrians interested in attending an open university are facilitated a correspondence course by means of a co-operation contract of the University of Linz with the Open University Hagen (North Rhine-Westphalia). Assistance and support of the students is provided by Study Centres in Linz, Bregenz and Vienna, where counselling, study-accompanying mentoriates (i.e. lectures preparing for examinations), and learning-relevant equipment are offered (library, computers, internet access, video conference centre). Increasingly, also students at the Open University in Great Britain are assisted and supported.

The Federal government pays for each of the three Study Centres one million ATS for running expenses, to which another half a million ATS operating costs for the Study Centre Vienna have to be added. The

operating costs for the Study Centre Linz are borne by the University of Linz, for the Centre in Bregenz by the City of Bregenz. There are 18 permanent posts. In the academic year 1995/96, an approximate number of 1,700 students in Austria were assisted.

Expenses for training measures in the framework of the active labour market politics

Active labour market politics tries to influence both quantity and quality of supply and demand on the labour market by means of a wide range of activities:

- Ø information, counselling and guidance for young people in decisions concerning vocational training and career choice, and for adults in their job-search or in case they plan to found a firm;
- Ø promotion of the regional mobility of job-seekers;
- Ø promotion of the creation of work places (e.g. in non-profit activities, for long-term unemployed people, for mentally and physically disadvantaged persons, for persons released from prison, for social problem groups; in enterprises which are planning investments, are in a restructuring phase, and are of great importance for regional politics; promotion of the creation of additional apprenticeship posts);
- Ø financing or promotion of education and training measures (updating existing qualifications, providing special knowledge and skills, retraining, safeguarding high education and training standards, vocational preparation courses, work on probation, training for the job).

It is the target of education and training measures in the framework of the active labour market politics to improve placement chances of unemployed people and to prevent unemployment by means of training employees in enterprises. The figures on education and training measures given in Table 4.7 have been compiled from the "Social Reports" of various years²⁴³. The figures can be considered merely approximations to the actual situation. The reason is that in the Social Reports expense categories are changed again and again and that expenses for education and training measures cannot necessarily be separated from expenses for other measures. Calculations on the amount of training expenses per person cannot be carried out, because assignments of expenses and promoted persons are not clearly possible on the basis of the figures in the "Social Reports"²⁴⁴.

Table 4.7

Expenses for education and training measures in the framework of the active labour market politics (in ATS million, at constant prices 1995)

²⁴³ cf. BMAS 1990 - 1995.

²⁴⁴ Repeated enquiries at the Public Employment Service Austria for more detailed information remained without success.

Year	Active labour market politics - total	Education and training measures	Education and training share in total expenses (in %)
1990	4,123	2,061	50.0
1991	5,073	3,322	65.5
1992	3,819	2,593	67.9
1993	4,306	2,989	69.4
1994	4,773	3,432	71.9
1995	5,195	3,719	71.6
1993-95*	1,000	907	90.7

* "Structure Milliard" (i.e. Billion)

In the 1990s, the regular expenses for active labour market politics are between ATS four and five thousand million ("milliards", in English usage "billions"); in the years 1993 until 1995, the so-called "structure milliard" was added, a special programme of the federal government to stabilise the economic and employment development. Expenses for education and training measures increased stronger in the period between 1990 until 1995, their share in the total resources grew from 50 per cent to 72 per cent. From the "structure milliard", an amazing 91 per cent were spent on education and training purposes, if those investments are added which were used for modernising adult education and training organisations (ATS 268 million).

In the year 1995, around 135,000 persons were promoted in the framework of the labour market training measures; this gives an amount of approximately ATS 27,500 per person. This amount is, however, misleading in so far as not only direct expenses for vocational training activities come under the title "labour market oriented training", but also resources to cover living expenses. For the years 1991 until 1993, the "Social Reports" give a more detailed breakdown of expenses for education and training measures. They show that approximately 30 per cent of resources are used for training programmes in continuing education and training organisations, seven per cent for training programmes in companies, and three per cent for investments; the majority of the expenses (60 per cent) is used to cover living expenses of persons in vocational training.

In addition to the resources spent on continuing education and training by the public, also the money has to be taken into consideration that is raised by the providers of the continuing education and training organisations and the participants themselves. With the exception of the three associations which have been included in the present report to demonstrate the cost structure of the area of adult education and training, no figures are available.

Inequities in access

The specialisation of the continuing education and training organisations on selected fields of adult education and training is often coupled to access regulations, too. The attendance of CET courses carried out by companies directly or which they order at continuing education and training organisations is restricted to employees of these companies. Preferred participants of company CET programmes are managers and technical employees, whereas semi-skilled and unskilled workers and women are invited less frequently (Friebel 1993, p. 21-22). In their majority, company CET events take place during working hours and are paid by the respective employer²⁴⁵.

For courses financed by the Public Employment Service Austria, criteria of labour market and social policies are pre-conditions for a participation. Persons entitled to participate are: unemployed persons, employees threatened by unemployment, and so-called problem groups (women, mentally or physically disadvantaged people, non-Austrian citizens). Continuing education and training here mainly pursues the aim of retraining and of improving placement opportunities on the labour market.

A part of the continuing education and training market without institutional access restrictions are courses with general-education contents as well as technical and vocational courses and programmes offered by the technical and vocational schools and colleges for people under employment, by the traditional associations, and by the commercial institutes²⁴⁶. For the attendance of these programmes, participants have to use their spare-time, since in Austria there exists no legal obligation to grant leaves of absence (or part-time releases from work) for CET purposes. The issue of a paid leave of absence for the purpose of continuing education and training has been a topic of discussions in Austria already for two decades. A small step towards an improvement of this situation was made very recently with the legal possibility of taking an "educational leave" as of 1 January 1998²⁴⁷: Those who have been employed at a company for a minimum of three years can be released from work up to a period of twelve months for educational purposes; employees thereby renounce payment of their normal salaries, but they are paid a monthly CET allowance to the amount of ATS 5,600 by the Public Employment Service, however; employees are entitled to return to their company after the educational release at the same employment conditions. The use of the educational release has to be approved by employers.

Attendance of the public technical and vocational schools and colleges for people under employment is free of charge; courses of the traditional adult education and training associations whose providers are interest

²⁴⁵ cf. Denk 1991.

²⁴⁶ Fachhochschule institutions can select among applicants who fulfill the educational requirements for attendance.

²⁴⁷ cf. Solidarität 1997, p. 4-5.

groups and local or regional authorities are subsidised by the Federal government, the respective Land, local authorities and other providers, whereas the course fees for commercial providers have to be paid completely by the participants, who, however, receive financial support from the part of the public under certain conditions.

No study has been carried out so far concerning the question in how far the individual continuing education and training organisations or certain training contents can be attributed to the three segments. Information can be given only on a few organisations. The Vocational Support Institutes specialise in orders commissioned by the Public Employment Service; in the year 1995, 72 per cent of their course revenues fall to these orders. The Adult Education Centres only carry out technical and vocational continuing education and training courses to a limited extent, they can be classed among the segment of general-education providers with open access and provider subsidization. On the basis of the information made available by the Institutes for Economic Development, it cannot be said how high the proportion of courses is they carry out for companies, and how high their proportion of freely accessible events is.

Apart from the institutional and financial barriers, the continuing education and training sector is characterised by social differences in participation. This applies mainly to differences of the education status as well as to gender-specific differences. As has been shown in studies, the current adult education and training sector does not fulfill any compensatory function for persons with a low or poor level of education: Participation increases as the level of educational attainment rises so that the adult education and training sector stabilises or even enhances educational differences²⁴⁸. One reason for this development is the additional burden caused by a participation beside work and becomes a hindrance mainly for sections of the population that are remote from educational or training matters and for persons with a low level of basic education and training. Women are, compared to men, at a disadvantage due to their additional household chores and responsibilities for looking after children.

Inefficiencies

Efficiency problems exist with regard to the integration of adult education and training into the education system, to the transparency and comparability of offers, to the professionalisation of CET organisations, as well as to the co-operation between the associations. These points will briefly be discussed in the following.

a) Integration of adult education and training into the education system

Only a small part of adult education and training is connected with the rest of the education system in the sense that, after completion of courses, a continuation in other existing training programmes is possible.

²⁴⁸ cf. Lenz 1996, p. 1.

Ranking among this part, there are the technical and vocational schools and colleges for people under employment, which are run by the Federal government and lead to the same qualifications as the secondary technical and vocational schools and colleges for the youth. For the area of these schools and colleges, a module-model has been developed bringing together the normal form of education, introduction courses and colleges in a course of eight semesters. This model has been put into practice at most schools of this area. It gives participants the opportunity of choosing different ways to enter and leave the system according to their training background and further ambitions. An important goal of the model is to enhance permeability of the education system.

Courses preparing for taking school-based educational qualifications at a later point in life (completion of lower secondary school, skilled workers' examination, study qualification examination, general university entrance examination, and - only recently - the "Berufsreifeprüfung") are offered by adult education and training organisations as well and are promoted with funds from the federal budget.

A stronger integration of adult education and training into the education system would require that the State fulfills a function as regulatory body²⁴⁹ and provides for a standardisation of offers, for the recognition of qualifications obtained, for continuation opportunities, and quality assurance. A modular system of offers with recognised certificates and connections to the school and university sectors would enhance the attractiveness of adult education and training and could, in some areas, be an alternative or complementary system to institutions run by the State.

b) Transparency and comparability of offers

It is hard to get a clear overview of the current offers in the field of adult education and training due to their wide range as well as to the lack of regulations, a fact that is further aggravated by new providers - e.g. commercial institutions and universities - entering the market over the past few years. Lenz points out that continuing education and training is being more and more influenced by economic viewpoints, in that it is made an issue of usefulness, usability, and profitableness (as a condition for the personal, company-related, and national competitiveness), which accordingly has the effect that those interested in continuing education and training expect comparability, publicity, and a clear picture of the price-performance ratio²⁵⁰. In the year 1993, financial support from the part of the Ministry of Education facilitated the start of the establishment of an adult education information system (called EBIS), with which the current offer is recorded according to uniform criteria and made accessible to those interested. The tasks fulfilled by EBIS were termed successful by several of the interviewees from the adult education and training associations²⁵¹,

²⁴⁹ cf. Lenz 1996, p. 3.

²⁵⁰ cf. Lenz 1996, p. 3-4.

²⁵¹ Cf. the informative supply analysis carried out by Bisovsky (1995) on the basis of EBIS for Vienna.

nevertheless the project was stopped in the year 1997, since the Ministry of Education took back its financial support with the explanation of qualitative problems of the project.

c) Professionalisation

In the literature on this subject and in the interviews with representatives from the large adult education and training organisations, again and again the question of the too low level of professionalisation is mentioned. The organisations vary considerably with regard to their utilisation of persons serving in administration and in the educational management on a part-time or honorary basis, and there are differences between cities and the countryside. Over the past few years a considerable improvement has taken place. Between 1985 and 1995, the number of staff working at the KEBÖ members in an employment relationship has doubled, the pedagogical staff responsible for educational management and the development of the programmes has increased its proportion in the employees from 18 to 35 per cent. The financing of posts (teachers and pedagogues) by the Ministry of Education certainly plays a significant part in this development. It can be said at least of the large associations included in the study that they use considerable resources in the content-related and didactical continuing education and training of their lecturers and trainers, who in their majority work on a fee basis.

d) Co-operation between the associations

From the interviews with representatives from the three big associations Vocational Support Institute, the Adult Education Centres, and Institute for Economic Development, it becomes clear that there are differences concerning major questions of adult education and training politics between the KEBÖ-members, or that, at least, no common strategy can be found. The connection to the interest organisations of the social partners, to political parties and other ideological groups, they say, is too strong so that it keeps them from advocating independent opinions and claims.

The associations represent different positions in the issue of a stronger integration of adult education and training into the education system, in the regulation of the competences of the Federal government, the Laender governments and local authorities; and in the question of the educational leave of absence. Whereas the Vocational Support Institutes and the Adult Education Centres are in favour of a better integration into the education system, the Institutes for Economic Development view their good connections with the entrepreneurial sector as sufficient for offering continuing education and training tailored to the needs of the economy and approved by employers.

In a nutshell it can be said that the Austrian adult education and training scene does not have a strong lobby. Bisovsky emphasises that the establishment of the KEBÖ was possible only under the pressure of

the Education Minister of that time and that it is not a union of the associations themselves²⁵², and that the progress hitherto made is solely due to initiatives by the government²⁵³. The KEBÖ serves the function of a government contact for the granting of financial promotions and the execution of projects; it serves as a platform for the forming of opinions and the reaching of agreements between the member associations. Filla lists as further positive elements of the KEBÖ: activities for the vocational continuing education of teachers and trainers in adult education and training, the annual drawing up of a report on the number of persons employed and persons on the staff, as well as the quantitative size and attendance of courses²⁵⁴.

With regard to the basic problems - i.e. the regulation of competences, the integration into the education system, the educational leave of absence, the professionalisation, and the co-operation of the associations - the interview partners do not see any signs of change at the moment; the situation is termed stagnant in these points. The professionalisation of those parts of adult education and training which still rely mostly on honorary staff is, in their opinion, an issue of the public subsidies, which, however, stagnate due to the austerity measures. The educational leave of absence is something they do not consider a topic at present.

A positive development is, in their view, the introduction of the "Berufsreifepfprüfung", since it facilitates to improve the integration of apprenticeship into the education system. Positive impulses for adult education and training, they say, have come from Austria's joining the European Union: By means of international projects, contacts and processes of experience exchange with adult education and training organisations from other countries have been created, and additional resources from the European Social Fund are now flowing into vocational adult education and training.

4.3. Additional sources of financing

i) Promotion of the gifted

A special instrument for the financial support of vocational and continuing training is the 1996 measure regarding the promotion of gifted apprentices and apprenticeship graduates. It is a promotion programme of the Economic Chambers and the Federal Ministry of Economic Affairs and is covered in the framework of this section in so far as it is mixed form of financing with public and semi-public funds. The prerequisite for utilisation is an excellent apprenticeship-leave examination or the proof of another talent, such as excellent reports and certificates from the vocational school for apprentices, successful participation in apprentices' competitions, or the successful completion of a longer CET programme.

²⁵² cf. Bisovsky 1991, 153.

²⁵³ cf. Bisovsky 1991, 247; cf. similar also Forstner 1991, p. 46.

²⁵⁴ cf. Filla 1991, p. 187-188.

The sum used for the promotion of the gifted amounted to a total of around ATS 3.9 million in the year 1996 (Ministry of Economic Affairs: ATS 2.9 million, Economic Chambers: ATS 1 million), with the chamber organisations of the Austrian economy in particular supporting the applicants who passed with excellent success in their apprenticeship-leave examinations. In 1997, expenses increased to a total of ATS 7.6 million (Ministry of Economic Affairs: ATS 5.8 million, Austrian Economic Chamber: ATS 900,000, Laender chamber organisations: ATS 900,000, with the latter promoting the higher qualifications in the framework of the WIFI-Fachakademie courses, i.e. a programme at the Institute for Economic Development of the Economic Chamber).

ii) *Viennese Employees' Promotion Fund or WAFF (Wiener Arbeitnehmerförderfonds)*

One example for the subsidisation of individuals by Laender funds is the Viennese Employees' Promotion Fund (WAFF): In Vienna a new employee promotion fund was established in September 1994 where apart from work foundations (see Section 5.2: "Case Study - Steel Foundation") also individuals are subsidised. It is the task of this fund to promote Viennese employees affected by reorganisation measures, plant closures, and insolvencies, in their necessary vocational continuing education and training. The measures of promotion are primarily intended for those threatened by unemployment, but also for job-seekers with a special qualification need.

With these measures

- Ø an efficient method of active labour market politics for processes of structural change is created,
- Ø the promotion of programmes for the establishment of small firms is facilitated,
- Ø labour market political aims of local authorities, the provincial labour office, and the social partners are combined,
- Ø and finally an opportunity is offered in the sense of objectives 3 and 4, to obtain resources from the EU Social Fund also for Vienna. In order to avoid double promotions, this activity is co-ordinated with the Public Employment Service.²⁵⁵

iii) *Releases from work for educational purposes*

In the context of the tapping of additional sources of financing, the releases from work for educational purposes – effective since 1 January 1998 – must be mentioned, which have already been discussed under the aspect of the inequalities of access to continuing training and education (see Section 4.2.3 "Adult education").

²⁵⁵ compare Blumberger et al. 1995, p. 19

In contrast to that, there are legal provisions for releases from work for educational purposes that are limited to certain groups of employees with special functions and responsibilities: According to the Constitutional Labour Act, shop stewards are entitled to these releases (section 18) and to extended releases (section 19) which are limited to three weeks within one four-year function period of the works council, during which time they are paid their remunerations. In this connection the possibility of fixing releases from work for educational purposes in company agreements or in individual collective agreements is stressed.

As yet another financing source for lifelong learning, promotions by representations of interests and professional associations, such as numerous programmes by the Chamber of Labour and the Economic Chambers (provincial organisations), must be mentioned, including the promotion of skilled workers' qualifications, travel allowances, apprenticeship grants, school grants, as well as allowances for the establishment and operation of apprentices' workshops.²⁵⁶

With regard to the promotion by employers' representatives, furthermore, indirect promotion for participants in WIFI-courses by the Economic Chamber must be mentioned, which takes over the difference between the small course fees and the actual course costs.

iv) Releases from work for educational purposes (Bildungskarenz or Bildungsfreistellung)

In the context of the tapping of additional sources of financing, the releases from work for educational purposes (Bildungskarenz) - effective since 1 January 1998 - must be mentioned, which have already been discussed under the aspect of the inequalities of access to continuing training and education (see section 4.2.3 Adult education).

In contrast to that, there are legal provisions for releases from work for educational purposes that are limited to certain groups of employees with special functions and responsibilities (Bildungsfreistellung): According to the Federal Act on Industrial Constitution (Arbeitsverfassungsgesetz), shop stewards are entitled to these releases (section 18) and to extended releases (section 19) which are limited to three weeks within one four-year function period of the works council, during which time they are paid their remunerations. In this connection the possibility of fixing releases from work for educational purposes in company agreements or in individual collective agreements is stressed.

As yet another financing source for lifelong learning, promotions by representations of interests and professional associations, such as numerous programmes by the Chamber of Labour and the Economic Chambers (provincial organisations), must be mentioned, including the promotion of skilled workers'

²⁵⁶ as of April 1998

qualifications, travel allowances, apprenticeship grants, school grants, as well as allowances for the establishment and operation of apprentices' workshops.²⁵⁷

With regard to the promotion by employers' representatives, furthermore, indirect promotion for participants in courses by the Institute for Economic Development of the Economic Chamber must be mentioned, which takes over the difference between the small course fees and the actual course costs.

Last but not least it is worth mentioning that agreements between employers and employees can be concluded, concerning e.g. the reimbursement of educational and training costs under the condition that the employees obtain knowledge and skills going beyond the framework of on-the-job training.

²⁵⁷ as of April 1998

Chapter 5: Case Studies of "Good Practice": Cost Reductions and Improvement of Implementability of Lifelong Learning

5.1. Introduction

Case Study 1 deals with the "Fachhochschul"-sector, the introduction of which, in the year 1994, has to be seen against the background of a paradigmatic change in educational policies during the 1990s. The state monopoly as sole provider of university institutions had led to the creation of a relatively homogeneous offer characterised by a high density of regulations in the organisational and study fields at a legal level. A student body with increasingly heterogeneous backgrounds concerning their previous educational qualifications and future career wishes requires, however, innovativeness from the higher education sector, improved adaptability to the needs on the labour market, and finally flexibility towards social demands. The introduction of the "Fachhochschul"-courses was a reaction to these changes of demands in the tertiary sector, aiming at an efficiency increase and a quality improvement of the "Fachhochschul"-course offers by means of a strengthening of autonomy and responsibility.²⁵⁸

In the 1990 Working Programme of the Federal Government for the XXII Legislative Period, three concerns of educational policies are expressed:

- Ø diversifying the so far uniform higher education sector
- Ø increasing the permeability of the education system, in particular for graduates of the dual system
- Ø harmonising the Austrian education system with the systems of the other EU member states

Both the content-orientation and the organisational form of the "Fachhochschul"-courses shows an innovative character facilitated by a student qualification in accordance with their own needs as well as in accordance with world of work requirements. Thus, attendance of a "Fachhochschul"-course can bring benefits and returns that will increase career and life opportunities for the graduates. At the same time also economy and society have benefits from an optimally qualified workforce potential since the latter can be considered a decisive location-specific and competitive factor.

In quantitative terms, the "Fachhochschul"-sector is of marginal importance only, which is due to its short time in existence – at present, about 6,200 students are enrolled at "Fachhochschul"-courses, but in qualitative terms it is remarkable in many ways.

²⁵⁸ compare BMWFuK and BMUKA 1996, p. 5

Case Study 2 deals with a new development in Active Labour Market Policies which focuses on the reintegration of unemployed persons into working life. Issues of qualifications obtained in the course of vocational training play a major part there. In the centre of these measures there are not so much new forms of TVE education and training or of work placement, but rather the mobilisation of additional sources of financing as well as a new form of organisation and a combination of these activities. The new organisation form the characteristics of which are discussed in greater detail in the following is called "work foundation". Due to their success, these foundations have become quite popular and have spread relatively fast in this country over the past few years; it can be expected that their importance will still increase in the future.

5.2. Case Study 1: "Fachhochschul-Courses" – 'Good Practice' in Increasing the Rates of Return of Lifelong Learning

The topic "Fachhochschule"-courses has already been elaborated on under various aspects in the framework of this study, in particular under organisational perspectives, so that no comprehensive characterisation of this relatively young post-secondary offer, just some additional remarks will be made here: "Fachhochschul"-courses are independent complementary institutions in the existing university sector, providing carefully developed, practice-oriented, but still science-based curricula and teaching contents ("safeguarding of a practice-oriented educational pathway at post secondary level"²⁵⁹). Whereas universities offer courses oriented towards study fields, "Fachhochschul"-courses provide offers oriented towards occupational fields ("imparting the skills necessary to solve the tasks of the occupational field in question in accordance with the state of the art and practical requirements"²⁶⁰). They are not tightly regulated, which enables them to react flexibly to the changing needs of the economy ("promotion of the occupational flexibility of the graduates"²⁶¹). "Fachhochschul"-courses primarily cover innovative professional fields requiring increased interdisciplinary qualifications.

Studies at "Fachhochschul"-courses are strictly organised, students are obliged to participate, to be present, in classes. Curricula and the order of examinations have to be keenly observed to guarantee a minimum study duration. Study requirements are very high – an average of 50 to 60 lessons per week. In full-time courses, a practical training in the second section is obligatory, which safeguards practice-orientation already during the training. After having passed all necessary examinations and writing the diploma thesis, the academic degree "Mag. (FH)" or "Dipl. Ing. (FH)" is awarded.

²⁵⁹ FHSStG section 3 subsection 1

²⁶⁰ FHSStG section 3 subsection 1

²⁶¹ FHSStG section 3 subsection 1

In the context of this chapter it seems appropriate to summarise those aspects of the "Fachhochschul"-sector that can be termed "aspects producing or increasing benefits or returns" for graduates and companies as well as for the economy and society:

- Ø The planned mixed financing scheme stimulates the willingness of regional authorities and of the economy to invest in the field of education.
- Ø The unit costs model sets incentives for the "Fachhochschul"-providers to organise and run "Fachhochschul"-courses in an efficient business-oriented way (avoidance of double offers of study courses, optimum company size of institutions, optimum use of resources, tapping of private sources of financing).
- Ø Due to the "Fachhochschul"-providers' obligation to carry out cost accounting, transparency about the financial framework conditions required for the development of study courses is created.
- Ø With the introduction of "Fachhochschul"-courses, an adaptation of the Austrian educational offers to European structures in the education system was achieved and thus the mobility of Austrian employees in the international labour market facilitated.
- Ø The target group for "Fachhochschul"-courses is larger than with university-based study courses in so far as also non-"Reifeprüfung"-holders with branch-specific qualifications are entitled to attend (i.e. graduates from apprenticeship training and from TVE schools).
- Ø The mostly innovative character of the course contents addresses a new target population.
- Ø Within the "Fachhochschul"-sector there are – apart from full-time day variants – also evening variants for persons under employment.
- Ø "Fachhochschul"-students with branch-specific experience receive credits to shorten their study times (e.g. graduates from secondary technical and vocational colleges).
- Ø A key concern of the "Fachhochschul"-sector is to impart contents oriented towards occupational fields in accordance with current requirements. The harmonisation of study contents with the requirements of occupational practice is carried out by continuously involving practitioners who belong to the development team, the teaching staff, or the Council responsible for "Fachhochschul"-courses ("Fachhochschulrat").
- Ø The Act on "Fachhochschul"-courses provides for an ex-post control by means of regular internal and external evaluation measures to strengthen the study course providers' responsibility. Every five years an evaluation report has to be presented and approved by the Council – this is the pre-requisite for a prolongation of the study course.
- Ø The Council responsible for "Fachhochschul"-courses as the accreditation authority decides on the introduction of study courses according to criteria of scientific and curricular quality and judges the security of financing. Further decision criteria are the reduction of regional disparities as well as the supra-regional harmonisation of the study offer.

Even though attendance of "Fachhochschul"-courses primarily represents a form of initial vocational training – due to the fact that the major part of the offer is conceived as a day variant – in this connection also the aspect of lifelong learning is decisive in two respects:

- Ø On the one hand, participation in part-time "Fachhochschul"-courses is a form of further vocational training. The high importance of part-time courses from the viewpoint of educational policies is reflected in the Federal Government's Working Agreement 1994: It states that offers in the framework of the "Fachhochschul"-sector are to be created for the workforce as a form of further vocational training as well as for completing an educational pathway at a later point in life ("expansion of the comprehensive CET system in the field of the ... "Fachhochschulen" ... so that the workforce is able to obtain educational qualifications and participate in further education and training"²⁶²).
- Ø On the other hand, attendance of a long form "Fachhochschul"-course represents a kind of CET for a special group of persons: those without a "Reifeprüfung" Certificate, such as graduates from apprenticeship training or secondary technical and vocational schools. As specified by the "Fachhochschul"-Course Act, this group must attain branch-specific knowledge and skills as well as practical work experience in order to enrol in a "Fachhochschul"-course. ("The subject-related access requirement for a "Fachhochschul"-course is the general university entrance qualification or a branch-specific vocational qualification"²⁶³). The Working Agreement 1994 documents that also the promotion of the education system's permeability by admitting persons without "Reifeprüfung"-Examination to "Fachhochschul"-courses is a major concern of educational policy makers. Among other aims, this Agreement emphasises the possibility of providing access to a "Fachhochschul"-course to apprentices ("access conditions for apprentices in particular shall be evaluated"²⁶⁴).

In the Coalition Agreement 1996, the intention of expanding the "Fachhochschul"-sector is addressed again, in which connection the further development has to be geared towards working people and students without a Certificate of Higher Education ("Reifeprüfung" Certificate) in particular ("... special consideration of the workforce and students without "Reifeprüfung"-Examination"²⁶⁵).

In connection with the educational offer in the framework of "Fachhochschul"-courses in the light of further vocational training, last but not least the Amendment of the "Fachhochschul"-Course Act passed in May 1998 has to be mentioned, with which the admissibility of target-group specific study offers is anchored expressly in the access provisions ("... If the scientific concept of a "Fachhochschul"-course bases on relevant professional practice, access to this "Fachhochschul"-course may be limited to the

²⁶² Arbeitsübereinkommen 1994

²⁶³ FHStG section 4 subsection 2

²⁶⁴ Arbeitsübereinkommen 1994

²⁶⁵ Koalitionsübereinkommen 1996

respective target group.²⁶⁶). Essentially this is an offer for working graduates from secondary colleges for engineering (HTL) to obtain a higher qualification, the duration of which is six semesters and – as provided by the Act on Fachhochschul“-courses – has to be established as a distance learning programme²⁶⁷.

From an individual point of view, benefits and returns of lifelong learning become possible due to the increased occupational and career opportunities arising after completion of a "Fachhochschul"-course. Due to the fact that the first "Mag. (FH)"²⁶⁸ and "Dipl. Ing. (FH)"²⁶⁹ completed their studies in summer 1997, no differentiated statements can be made in this respect. As has been shown by a survey carried out by the Institute for Research on Qualification and Training of the Austrian Economy in late 1997 and early 1998 among Austrian enterprises employing "Fachhochschul"-graduates, however, integration into the labour market seems to be extremely successful at present: 172 out of 181 "Fachhochschul"-graduates were already employed in their respective branch at the time the study was conducted, seven were doing their military service. Differentiating by the different "Fachhochschul"-courses where graduates can already be found, all of them have a 100% or slightly lower employment rate.²⁷⁰

Asked whether the "Fachhochschul"-sector has already been able to fulfil its aims in terms of educational policies, first answers can be provided with the help of the above-mentioned study. The questioned employers stated that, on the one hand, the educational profile of the "Fachhochschul"-graduates was practice-oriented and geared towards the companies' subject-specific needs and that, on the other, graduates had the social skills, creativity and flexibility necessary for integration into changing occupational environments. Only a few of the graduates were at that time employed at company interfaces or fulfilled managerial tasks – facts which are most likely linked with their short time at work.²⁷¹

Cost assessment and financial ratios facilitate the examination of the business efficiency of a "Fachhochschul"-course management. The advantages can be described as follows:

- Ø The major cost positions are made transparent.
- Ø The search for possible cost-increasing factors is facilitated.

²⁶⁶ FHSStG section 3 subsection 2 subparagraph 2

²⁶⁷ FHSStG section 3 subsection 2 subparagraph 2

²⁶⁸ "Mag. ... FH" stands for "Magister ... Fachhochschule". Recently the term "Magistra" (pl. Magistrae) has been introduced as female equivalent to "Magister".

²⁶⁹ "Dipl.-Ing...(FH)" stands for "Diplom-Ingenieur ... Fachhochschule", a degree which is equivalent to the "Magister" but is awarded to graduates of certain, mainly technological, fields of study.

²⁷⁰ ibw-Befragung österreichischer Unternehmen, die Fachhochschul-AbsolventInnen beschäftigen (unpublished) 1998"

²⁷¹ ibw-Befragung österreichischer Unternehmen, die Fachhochschul-AbsolventInnen beschäftigen (unpublished) 1998

- Ø In the comparison over time, changes – and therefore positive as well as negative tendencies of the cost development – are made visible.
- Ø Comparisons of different study courses can be carried out, showing major differences and explaining them.
- Ø Cost assessment and financial ratios can serve as the basis for cost planning and control.

The individual "Fachhochschul"-courses apply different kinds of cost determination: For the study course International Economic Relations for example, commercial bookkeeping, including a balance, profit and loss account, and notes to the financial statements, is carried out according to commercial-law standards valid for companies limited by shares, and then examined and found properly conducted. Another example: For the "Fachhochschule"-course Manufacturing Automation, data is available through a type of accounting that is a mixed form between double-entry bookkeeping and cameralistics.

The following listing shows the cost types (staff costs – instruction, staff costs – administration, running operating costs) to be differentiated between in the framework of a cost analysis.

1. staff (instruction)
 - full-time trainer fees including ancillary costs
 - part-time trainer fees including ancillary costs
 - other employees involved in instruction
 - course costs / travel costs
 - others
2. staff (administration)
 - management
 - fees "Fachhochschule"-collegium
 - secretariat
 - other staff
 - course costs
 - travel costs
 - others
3. running operating costs
 - economic assets / consumer non-durables
 - operating supplies / other economic assets
 - energy costs
 - maintenance and service
 - communication and information costs
 - various types of insurance

interests / charges
general administrative expenses
other services

Basing on these figures, the following cost and quantity relations (ratios) are obtained, which are expressed by means of economic indicators:

- Ø $\frac{\text{staff costs (instruction)}}{\text{student}}$
- Ø $\frac{\text{staff costs (full-time trainers)}}{\text{student}}$
- Ø $\frac{\text{staff costs (part-time trainers)}}{\text{student}}$
- Ø $\frac{\text{staff costs (full-time trainers)}}{\text{man months}}$
- Ø $\frac{\text{costs of part-time trainers}}{\text{period of instruction}}$
- Ø $\frac{\text{staff costs (administration)}}{\text{student}}$
- Ø $\frac{\text{staff costs (secretariat)}}{\text{student}}$
- Ø $\frac{\text{running operating costs}}{\text{student}}$
- Ø $\frac{\text{investments / acquisitions (including maintenance)}}{\text{student}}$
- Ø $\frac{\text{depreciations on fixed assets (including maintenance)}}{\text{student}}$

5.3. Case study 2: "Work foundations" - 'good practice' in mobilising resources for lifelong learning

On the following pages, first of all the concept of the work foundations is described²⁷², which have become a wide-spread solution to employment problems over the past few years, and, after that, their operation, financing and success is illustrated by means of the example of the "Steel Foundation", the first work foundation in Austria, which has therefore served as a model for the following work foundations.

²⁷² cf. ÖSB-Informationen H.3 (1996); ÖSB without year; ÖSB 1994/95; Lechner et al. 1991

(a) *The concept of the work foundations*

Work foundations are a relatively new institution on the labour market in Austria. The first such institution was the "Steel Foundation", which was established in the year 1987 and has been running up to this day. It is characterised by a novel form of financing of measures relating to labour market politics, with the function of providing vocational and continuing education and training as well as re-integrating dismissed employees into working life.

Work foundations do not replace existing forms of training or of the placement of unemployed persons in jobs, but they combine these forms and represent an alternative form of financing and organisation of labour market specific measures. They can become effective under certain preconditions and find the support of the Public Employment Service. Work foundations are institutions founded in the wake of redundancies at one or more enterprises and are provided by associations, enterprises or local or regional authorities; their aim is a comprehensive support of the employees in their re-integration into the world of work.

The starting point of work foundations are therefore companies in which a major staff reduction takes place. Their concept provides that the initiative for the establishment of work foundations comes from the "bottom line", either from enterprises, works councils, or from employers' and employees' associations that seek a collaboration with public authorities and the Public Employment Service. In the financing, various parties can be active: enterprises, local authorities, Laender governments, staff, employers' associations and the Public Employment Service. If those involved agree on a concept and a social plan that promise a sufficient safeguarding of financial, organisational, material and personnel-related resources, the Public Employment Service Austria has to check if certain criteria of the labour market policy are met. The recognition of these criteria means that the participants are legally entitled to draw unemployment benefit for the duration of the foundation measures, however only for a maximum of four years²⁷³. The recognition of a work foundation by the Public Employment Service is dependent on the approval of the institutions and authorities in charge of the collective salaries in the respective economic branch.

Depending on the target group and particular circumstances, four types of work foundations can be differentiated between: enterprise foundations, insolvency foundations, branch foundations and regional foundations. The various services rendered are: support measures for active job search (job application training, surveys on staff requirements and needs in a specific region, placement services), vocational and continuing education and training measures (organisation of specific courses, programmes and in-company placements), and support of company foundations (legal advice, help in the drawing up of a business

²⁷³ cf. section 18 of the Unemployment Insurance Act.

concept, financial support). At the beginning of the measures there are activities which fulfill the function of making the dismissed employees familiar with their new situation and providing an occupational re-orientation, since the majority of participants changes into a new career after a long employment.

The new feature of work foundations concerns the type of financing and form of organisation of the support measures for unemployed persons. As far as financing is concerned, the advantages of work foundations lie in the fact that, in addition to the usual resources unemployed persons receive from the Public Employment Service, additional money is raised: funds from enterprises and staff, local authorities, Laender governments, and organisations as well as from the resources of the European Social Fund. These additional resources allow the utilisation and the execution of a wide range of measures for the benefit of the participants, increasing their chances for a re-entry into working life.

For enterprises there is the incentive to join work foundations by - in spite of their staff reductions - showing social responsibility, thereby counteracting the loss of their reputation in the region. Work foundations facilitate a socially agreeable form of structural change by means of the above-mentioned comprehensive measures and the generous support offered to the dismissed employees, thus reducing the probability of industrial disputes. And yet another benefit must not be overlooked: The establishment of work foundations in which local authorities, Laender governments, enterprises and staff participate draws public attention to the problems of the respective enterprises, regions or branches - this counteracts the otherwise wide-spread tendency that dismissed persons are given the blame for their unemployment. This removes a major obstacle for the re-employment of persons who have lost their employment.

Another major advantage of work foundations in comparison to traditional measures can be seen in the fact that for each foundation an independent management is installed. In this way, problems of unemployment are solved in a decentralised form with less bureaucracy, and the feeling of responsibility for the use of resources is strengthened. The measures can be carried out in a company-near form and can be adapted to the specific needs, requirements, and possibilities of the respective region and of the participants themselves. A greater number of institutions from the region (enterprises, local authorities, branches of local or regional authorities, training institutions) can be involved into the activities, already existing contacts and information can be utilised. Furthermore, the establishment of work foundations facilitates that vocational training and placement measures can be started early, i.e. immediately after the ending of the employment relationships of the dismissed employees. Thus, a frictionless transition from the dismissal to the professional re-orientation and re-qualification becomes possible. Last but not least, the danger of a social isolation is counteracted by bringing together the unemployed people in a work foundation and by carrying out joint activities in the framework of the orientation phase.

The activities of work foundations are supervised by the Public Employment Service and - usually - by representatives of those institutions which contribute financially: representatives of enterprises, works

councils, civil servants from local authorities and Laender governments, political mandataries, representatives from employers' and employees' associations. Most of managements carry out regular evaluations of the success of the measures.

As a matter of fact also work foundations face difficulties, some of which will be discussed in the following²⁷⁴.

- Ø A problem comes from the variety and the heterogeneous composition of the participating institutions. In many cases, conflicts of interest arise between regional politicians, trade unions, and companies which do not participate in the work foundation.
- Ø Since providers and financial backers of work foundations are not identical, there can be conflicts of interests also in this respect. A good foundation management is of greatest importance for the handling of conflicts and the success of work foundations.

The following figures give an overview of costs²⁷⁵ and the volume of work foundations in Austria in the year 1995²⁷⁶.

Experience says that an average of 30 to 50 per cent of dismissed people join a work foundation. The average period of assistance there is eight to twelve months, thus lying considerably below the possible assistance and support duration of three or four years. The costs for vocational guidance lie at approximately ATS 25,000 per participant. The direct vocational and continuing education and training costs are subject to strong fluctuations and are an average of ATS 30,000 to 50,000 per participant. For the foundation management, administration as well as room-related and material expenditure, approximately ATS 1.2 to 1.5 million per 100 participants and year have to be reckoned with. The monthly scholarships paid to the participants in the foundation are between ATS 1,000 and 1,500.

In the period between 1987 and the end of 1997, in Austria approximately 80 work foundations were running, in the reference month November 1998 86 foundations could be counted. In the year 1995, there were 52 work foundations: two branch foundations, 10 insolvency foundations, 16 regional foundations, and 24 enterprise foundations. In these 52 foundations 3,709 persons were assisted, the share of men was at 64 per cent. 1,898 persons completed their foundation measures, slightly more than 70 per cent could find a job²⁷⁷. In the year 1995, the Public Employment Service spent ATS 229.2 million on benefits for the training of the unemployed and ATS 103.7 million on additional promotions in the framework of work

²⁷⁴ cf. ÖSB without year, 22-24

²⁷⁵ cf. AMS and ÖSB 1994/95

²⁷⁶ cf. ÖSB-Informationen 1996, 5

²⁷⁷ In 1997, 5,282 persons were active in work foundations. Integration rates amount between 70 and 90 per cent.

foundations. Information about the financial expenses of work foundations going beyond the contributions by the Public Employment Service was not available.

(b) Steel Foundation

The Steel Foundation is the first work foundation ever established in Austria; it served as a model for the numerous work foundations that were to follow. It was created in the wake of the structural adjustment of the Austrian iron and steel industry and of the dissolution of the state-owned iron and steel group VOEST-ALPINE-AG. The immediate trigger for its establishment was the steel crisis, which lasted over the whole decade of the 1980s and led to a drastic reduction of employment in the iron and steel sector²⁷⁸. An especially aggravating factor was that employment reductions were concentrated on a few regions (in particular on the Greater Linz area and on the Mur-Mürz-Furche). Until the second half of the 1980s it was attempted to halt staff reductions by means of early retirements. There were two reasons, however, speaking against a continuation of this measure: the declining acceptance for the subsidisation policy in the private sector and the fact that more and more younger workers were laid off.

The property relations of the State, the political explosiveness of the problem, and the strong position of the works council in the VOEST-ALPINE-AG were favourable conditions for finding a solution that went beyond the typical activities introduced by labour market politics, and included novel financing and support measures. It was the aim of these measures to support the dismissed persons in a comprehensive way in their efforts of starting a re-entry into working life. The company management and the works council concluded a company agreement on the financing of the measures²⁷⁹:

- Ø The employees of the VOEST-ALPINE-AG and of its successor companies committed themselves to the payment of a solidarity contribution; at the time of the establishment of the work foundation in October 1987, this amount was fixed at 0.75 per cent of the income, as of November 1989 it was reduced to 0.25 per cent;
- Ø The VOEST-ALPINE-companies founded a fund to the amount of ATS 10 million and committed themselves to pay an annual contribution of 50 per cent of the solidarity contribution of the employees as well as to maintain the room-related, staff-related, and administrative infrastructure for the foundation company;
- Ø The foundation participants are required to renounce their claim to the payment of half of their legally established severance pay for the duration of their participation, however only to a maximum of ATS 100,000, and place interest from this amount at the foundation's disposal.

²⁷⁸ by 35 per cent between 1980 and 1988; cf. Lechner et al. 1991, 13

²⁷⁹ cf. VOEST-ALPINE-Steel Foundation 1-96, 4-5

Furthermore, participants receive the already mentioned "training-unemployment benefit" from the resources of the state unemployment insurance, which can be granted for a maximum period of four years. From the foundation means, participants can obtain a basic scholarship to the amount of ATS 5,000 14 times p.a. (up to May 1993 these were ATS 2.500), for those contributing the only income to their family, a monthly additional scholarship of ATS 1,000 and of ATS 500 for each child is available. The unemployment benefit combined with the basic scholarship must, however, not make up together 80 per cent of the person's last net salary; all payments together (i.e. unemployment benefit, basic and additional scholarship) must not exceed the last annual net salary. The Steel Foundation did not make available any figures on expenses made so far.

The enterprises participating in the Steel Foundation employ approximately 16,000 persons. In the ten years of its existence (from 1 October 1987 to the 30 September 1997), 2,249 persons entered the Steel Foundation; 1,913 people left the Foundation in the same period; 336 persons were in assistance on the record date 30 September 1997²⁸⁰. After the year 1993, the number of participants experienced a marked increase: Whereas in the years 1988 to 1992 the average monthly number of assisted persons was approximately 240, this figure rose in the following years to 405 persons per month.

With regard to the educational attainment of participants, the following structure becomes visible: 7.5 per cent of participants only attended compulsory school, little less than 70 per cent completed an apprenticeship training, the second largest group consists of persons with "Reifeprüfung"-Certificate (13 %), five per cent have graduated from a secondary technical and vocational school, and another five per cent have a university graduation. The Steel Foundation is to a high degree made use of by younger persons: Half of the participants who received assistance in the ten-year period was under 30 when entering the Foundation, another quarter was between the ages of 30 and 40, only six per cent were 50 years old or above. The share of women was a little more than 13 per cent; the available data does not show, however, whether this proportion corresponds to the share of women among the employees or among the dismissed persons.

Table 5.1
Results of vocational guidance since 1987 (record date 30 September 1997)

Aim of the orientation phase	Number of Participants	in %
Job search	240	11
Training, of which	1,725	77

²⁸⁰ on the following data cf. VOEST-ALPINE-Steel Foundation 2-97, 7ff.

Vocational higher qualification	(1,079)	(62)
School-based education	(446)	(26)
University education	(200)	(12)
Company foundation	116	5
Still in vocational guidance	32	1
Leave after a short time	136	6
Total	2,249	100

After their entry, all foundation participants start with a vocational guidance phase, which takes six weeks and has the function that participants become clear about their occupational and private situation as well as about their wishes and personal pre-requisites; obtain information on possible activities; and make a plan for their future activities. In principle, they can choose between three alternatives:

- Ø They can start looking for a job; in the framework of the Steel Foundation they receive support in their compilation of job application papers, in their self-marketing, and the actual job-search; this phase can last up to four months.
- Ø They can start a training programme to improve their vocational qualifications (to expand or update them, or to specialise) or obtain a new vocational qualification; the training can be in the form of courses, programmes, an apprenticeship training, or the attendance of a school, university, university-related institution, etc.; the training phase can last up to four years.
- Ø And finally participants can decide to found their own company; the pre-condition of which is that they have a product idea; in the framework of the Steel Foundation they receive counselling, guidance and support in the elaboration of a company concept, a training plan, and for the establishment of the company; this phase can last up to three years.

An overview of the results of the orientation phase of the foundation participants in the 10 years of its existence (between 1 October 1987 and 30 September 1997) is given in Table 5.1. From the 2,249 persons who over the past ten years entered the Steel Foundation, 11 per cent (240 persons) opted for the job-search (without a previous additional training phase), more than three quarters of the participants (1,725 persons or 77 per cent) started a vocational training programme, and a small part (116 persons or 5 per cent) prepared themselves for a company foundation. 136 persons (6 per cent) left a short time after their entry and did without the Foundation's support. Finally, 32 foundation participants still experienced their vocational guidance phases at the time of the survey (30 September 1997). From the persons who took up a vocational training, 1,079 persons (these are 63 per cent) chose the path of vocational higher qualification, 446 persons (26 per cent) selected a school-based form of education (a secondary college for engineering or another full-time secondary technical and vocational school or college), and 200 persons (12 per cent) decided for studying at a university or a related institution ("Fachhochschul"-courses, teacher training college, post-secondary course in technical and vocational education).

Table 5.2**Reasons for withdrawal from the Steel Foundation since 1987 (record date 30 September 1997)**

Reasons for withdrawal	Number of Participants	in %
Re-entry into working life	1,444	76
Continuation of a training programme	211	11
Job search without success	75	4
Retirement from working life	84	4
Other reasons	99	5
Total	1,913	100

The length of assistance in the Steel Foundation was less than half a year with a quarter of the participants, with slightly more than half (55 %) of them not more than 1 1/2 years. Another quarter (27 per cent) took advantage of the Steel Foundation's support for between 1 1/2 and 2 1/2 years. Only one fifth of the participants (18 per cent) stayed for between 2 1/2 and four years in the assistance of the Foundation.

The success of the foundation measures is shown in Table 5.2. Taking the re-entry into the world of work as a criterium, as is the Steel Foundation's objective, the success rate of its assistance is at 76 per cent. No specifications are made on the success of other assistance and support measures in line with labour market politics, so that a comparison is not possible; nevertheless the given percentages can be taken as a very good result.

The balance of the company foundation projects is not as favourable. From the 103 projects started in the period between 1 October 1987 and 30 September 1997, 13 had not been concluded by the date of reference. From the remaining 90 projects, more than half (51 projects) had to be stopped, 39 projects led to a business foundation. In these 39 enterprises, a total of 130 new jobs were created.

Two features of the development of the Steel Foundation suggest that the original function of this institution has changed in the course of its existence. First of all, it has to be taken into consideration that the Foundation is being continued far beyond the time up to which those employees were to be supported who had been laid off due to the steel crisis. Today it is not any more the staff of the formerly nationalised VOEST-ALPINE-AG who receive assistance in the framework of the Steel Foundation, but the employees of the VOEST-ALPINE-AG's successor companies. As has already been analysed, there was even a considerable rise in the number of assisted persons, which started in the year 1993. Remarkable is, furthermore, that a not insignificant proportion of participants are again employed in the field where the foundation enterprises are active. Also this proportion seems to have increased over the years. Unfortunately, data is available only for two points of time. According to a sample survey from the years 1990 in Linz (120 responses), 29 per cent of the graduates were again employed by the VOEST-

ALPINE²⁸¹; after completion of the training measures they could again be employed in fields which expanded due to the re-structuring process. The tendency towards re-employment affects mainly older employees: Among foundation participants aged above 45, the re-employment rate was 64 per cent. On the basis of a complete survey on the reference day 30 September 1994, 36 per cent (327 persons) from 908 who had been re-integrated into the world of work were employed at VOEST-ALPINE successor companies²⁸².

The rise of the number of participants shows that the Steel Foundation has obviously lowered the barrier of companies to make employees redundant, due to its good assistance rendered to its participants. It becomes visible, moreover, by the high number of employees who return that the successor companies of the former VOEST-ALPINE-AG use the Steel Foundation as an instrument of continuing education and training and retraining; for them, the advantage of this instrument lies in the aspect that they do not have to pay for the educational measures alone, but that they are co-financed by the employees of the enterprises with their solidarity contribution, by the dismissed persons themselves by means of their renunciation of interest payments for their severance pay, and by the Public Employment Service with the training-unemployment benefit. In this way, the structural change is facilitated for the companies in a financial respect, however also in a moral respect, since it is carried out in a socially more agreeable form than in the case of traditional measures. Several reasons can be assumed for the employees' preparedness to co-finance the foundation measures: the weakness of their position in the present labour market situation; a "bad conscience" about and sympathy with the dismissed colleagues; the fear to come into the same situation themselves one day. The employees who stay in the company can, however, also expect a direct benefit from the foundation activities for themselves: Easing the structural change and facilitating the permanent adaptation of the staff's qualifications increases the competitiveness of the companies in the foundation and secures work places. For the dismissed employees there is the advantage over other unemployed people in the possibilities they have for pursuing extensive educational activities and in the good chances they receive for a re-entry into in the world of work.

5.4. Lessons from the Case Studies

No conclusions can still be drawn from Case Study I (on the benefits and returns of the attendance of "Fachhochschul"-courses) due to the short time they have been in existence in Austria and the resulting low number of graduates. At present, those characteristics of this relatively new post-secondary educational pathway can be described that represent prerequisites for obtaining highest possible returns on the part of the graduates, enterprises, the economy and society:

²⁸¹ cf. Lechner et al. 1991, 47

²⁸² cf. Nigsch 1995, 17

- Ø mixed financing
- Ø unit cost model
- Ø optimum size of the institutions
- Ø optimum utilisation of resources
- Ø tapping of private sources of financing
- Ø cost accounting and therefore transparency about the financial framework conditions of the study courses
- Ø adaptation of the Austrian educational offer to European structures and systems
- Ø enlarged target group (non-”Reifeprüfung”-holders, persons under employment)
- Ø innovative character of the teaching offer
- Ø interdisciplinarity
- Ø possibility of receiving credits for branch-specific knowledge, skills, and experience for students, thereby reducing their training times
- Ø imparting contents of learning in the field in question in accordance with current demands
- Ø shortening of on-the-job training times for employers due to practical training during the study
- Ø regular internal and external evaluation measures
- Ø reduction of regional disparities
- Ø supra-regional harmonisation of the study offers
- Ø avoidance of double offers of courses

The positive elements of work foundations can be summarised in the following points:

- Ø Work foundations as compared to traditional measures of active labour market politics are characterised by the involvement of a greater number of institutions which participate in a financial and/or organisational respect in the activities.
- Ø The participation of a greater number of institutions guarantees that, in addition to the resources of the Public Employment Service, additional resources are raised; this ensures that unemployed persons can take part in a greater number of more intensive and more comprehensive training activities.
- Ø Local and regional public authorities show more commitment and responsibility than in traditional cases, which is due to their involvement in the labour market measures.
- Ø Work foundations have - because a variety of institutions participate - good regional connections and insider knowledge.

- Ø The participation of local and regional authorities, enterprises and the social partners alleviates the tendency to blame the dismissed persons for their unemployment, thus increasing their chances of finding a new post.
- Ø The establishment of work foundations offers the opportunity of an early planning and the introduction of measures connected with labour market politics.

The good successes of work foundations with regard to the re-entry of unemployed people into working life is due to these positive features. The re-entry rate lies at more than 70 per cent. There are, however, also some problems which are specific for work foundations:

- Ø The heterogeneity of the participating institutions can lead to conflicts of interest and make it harder to carry out the activities;
- Ø Work foundations can lower the enterprises' barrier to reduce their workforce;
- Ø Work foundations can be turned into permanent institutions by employers in order to use them for carrying out CET measures: Employees are dismissed and re-employed after the training, public resources and solidarity contributions of the employees serve the purpose of financing.

Work foundations are institutions that are applicable to wide areas of the active labour market politics, namely at those companies where employees are made redundant. Smaller enterprises can be involved if there is a closer link and contact with staff representatives so that information on regional re-structuring measures, impending lay-offs or company closures can be exchanged. In order to find a solution for this problem, associations have been founded in some federal provinces acting as organisational cover for work foundations; smaller enterprises which cannot afford their own foundations can join them. Even though there is the danger that independent initiatives and self-organisation, which are important factors for the success of work foundations, are pushed somewhat into the background, such a solution has the advantage that also smaller enterprises can benefit from the positive sides of work foundations. The overall benefit of work foundations lies in the fact that the change of economic structures is facilitated and can be brought about in a socially agreeable way at a company, regional and branch-specific level.

Chapter 6: Conclusions

When estimating the additional financing requirements for closing participation gaps, the present study is oriented towards the OECD suggestion which are based on information about countries with above-average high graduation rates. In more detail, the following requirements to be made on the Austrian education system become visible:

- ∅ the share of those aged between 20 and 24 who have completed a pathway at the secondary level II should be raised from currently 79.8 to 90 per cent;
- ∅ the rate of graduates in university long first-degree programmes is 10.6 per cent at present and should lie at 13.0 per cent;
- ∅ the graduation rate in non-university post-secondary forms of the tertiary sector is currently about 19 per cent and should amount to 25 per cent;
- ∅ in the area of university short first-degree programmes (with a duration of less than six semesters) practically no statistically relevant graduation rates can be found at present²⁸³; according to the OECD suggestions, 30 per cent of the persons in each age group should complete such a programme;
- ∅ and finally the orientation value in the sector of CET is at an annual participation of 40 per cent of the adult population (currently approximately 26 %).

Actual values and desired values of participation in education and training

Education sector	Actual value	Desired value	Increase (in %)
Secondary level II (graduates per age group in %)	79.8	90.0	12.8
Tertiary sector (graduates per age group in %)			
long university forms	10.6	13.0	22.6
non-university forms	16.9 (18.7*)	25.0	33.7
short university forms	x**	30.0	-
CET (participants of population in %)	25.8	40.0	55.0

* As explained in chapter 2, completing a secondary vocational school is regarded as completion of a non-university post-secondary course; therefore, an increase in the graduation rate of the secondary vocational schools (from 79.8 to 90.0 %) rises the graduation rate of the non-university post-secondary forms (from 16.9 to 18.7 %). Taking this into account, the participation gap decreases in size correspondingly.

** The graduation rate of these programmes is negligibly low at present.

²⁸³ As explained in chapter 2, the graduation rate per age group is estimated at about 0.02 per cent at present, a value irrelevant to identifying the participation gap in this area. The same applies to the amount of the costs about which, besides, no information is available.

Due to incomplete information, both the estimation of the current educational expenditure and of the relative additional requirements is highly uncertain. For the sector of the secondary level II there is mainly a lack of data on the situation of education and training in the health professions as well as insufficient information on large areas of CET (federal government, Laender governments, regional governments, hospitals, non-profit organisations). Furthermore it has to be emphasised that the estimation of participation gaps and of the additional financing requirements is based on very simple assumptions and can, therefore, provide merely a rough picture of the values in question. The estimation is not based on a projection of the population development for the years to come but on the population structure by age groups in the year 1995; economies of scales (e.g. increase of students per class and of the teacher-student ratio as well as a more intensive use of the available rooms when increasing participation in education and training) and – related to that – the degression of per-capita costs are not taken into consideration. The per-capita expenditure is thus projected in a linear form. Both factors (not taking into consideration decreasing age groups and the economies of scales) lead to an overestimation of the additional financing requirements. Therefore, the figures of the following table indicate an upper limit of resources additionally required.

Additional financing requirements by education sectors (figures in million ATS)

Education sector	Total expenditure	Additional req.	Relative add. req. (in %)
Secondary level II	35,445	3,940	11
Tertiary sector			
long university forms	14,610	3,300	23
non-university forms	1,228	1,610	131
short university forms	x*	6,430	-
Whole tertiary sector	15,838	11,340	72
CET	27,691	15,240	55
Total	78,974	30,520	39

* The graduation rate of these programmes and the amount of costs are negligibly low at present.

If Austria wanted to aim at being among the leading nations with an above-average high participation in education and training, direct costs (i.e. the expenditure needed for providing the educational offer) of approximately ATS 30,000 million (including the costs of the enterprises for apprenticeship training) would have to be reckoned with. This amount corresponds to an increase by a little less than 40 per cent of the present educational expenditure. For the individual sectors, the situation is the following:

- Ø The biggest financing need can be seen in the sector of adult education and training. The amount of ATS 15,000 million would mean that the half of the total resources additionally required are needed for expanding this sector.

- Ø The tertiary sector comes in second place, with additional financing requirements of ATS 11,000 million; with relative additional requirements of 72 per cent, this sector even takes the first place in relative terms. This is mainly due to the fact that the field of university short first-degree programmes is not developed in Austria, but also the range of non-university programmes should be expanded to a large extent. Also the graduate rates of long university forms (with a duration of at least six semesters) had to be raised somewhat; here an additional amount of ATS 3,000 million (or 23 % of the present expenditure) would be required for obtaining a graduation rate of 13 per cent.
- Ø The secondary level II is relatively well developed. Approximately ATS 4,000 million would be needed to raise the number of graduates to 90 per cent of the adult population, approximately eleven per cent more than today.

For the issue of financing the additional educational demand, not only the amount of the funds required is of importance, but also the question where the resources should come from. The current structure is given in the table below. Nearly two thirds of the total expenditure for education and training fall to the public (including Laender governments and local authorities), one quarter of the expenditure is borne by the enterprises, and one seventh of the costs is covered by the participants. Broken down by sectors, the situation varies considerably. Whereas educational expenses in the tertiary sector are financed completely by the public²⁸⁴, the prime weight of the financing in the sector of CET is on the private side: two fifths are borne by the enterprises, two fifths by the participants, and one fifth are public subsidies. At the secondary level II, the enterprises pay the costs of the in-company part of the apprenticeship training, which amounts to approximately one fifth of the educational expenditure of the secondary level II.

Current financing sources by education sectors (figures in % of expenditure)

Education sector	Public	Enterprises	Participants
Secondary level II	81	19	-
Tertiary sector			
long university forms	100	-	-
non-university forms	100	-	-
short university forms	-	-	-
Whole tertiary sector	100	-	-
CET	19	42	39
Total	63	23	14

²⁸⁴ In this connection some reservations apply, which, however, do not change the situation as a whole. It has to be taken into consideration that university programmes and further training activities at universities (including the University Centre for Further Training) are, in their majority, paid by participants and funded by enterprises; moreover, there is a small contribution of companies for Fachhochschule study courses.

The financing volume obtained by means of the calculation has a size that would require a longer-term comprehensive development concept in order to approach, step by step, the aim of lifelong learning. The increase of the numbers of graduates would not have to be achieved solely by opening up additional financing sources, but could, in part, also be achieved by increasing the efficiency and by using the funds made available by increasing the efficiency for other targets.

The plans of the Federal Government in connection with educational policies, as they have been formulated in the Working and Coalition Agreements, include a great number of aims in the sense of lifelong learning, the implementation of which the Government is consistently working on. These are measures to expand the educational offers and to improve participation possibilities. These measures can be summarised as follows:

- Ø improvements of the educational offers for people under employment in general (expansion of the initial training options; adjustment of the curricula; the legal anchoring of the right to CET times);
- Ø improvement of access to university studies and "Fachhochschul"-courses for persons without "Reifeprüfung" and TVE-Diploma Examination, via second-chance education ("Reifeprüfung"-Examination and "Berufsreifeprüfung") and for people under employment ("Fachhochschul"-courses for people under employment);
- Ø financial promotion of bridge courses for adults who want to complete lower secondary school.

For all these measures, the necessary legal bases have recently been created and the first steps for their practical implementation have been taken. In the present report, a variety of these measures has been discussed in greater detail. A comprehensive concept for the development of the education system is, however, has not drawn up until now.

The measures concerning the financing and organisation of the education system focus on those education sectors where the State is traditionally the most prominent provider: the secondary level II and the tertiary sector. They aim at a limitation of the expenditure per participant as well as at a better harmonisation between educational supply and demand. The following measures can be distinguished between: rationalisation measures, saving measures, a better adaptation of the offers to the demand, and the establishment of new forms of financing.

- Ø Rationalisation measures are to be achieved by means of the deregulation and decentralisation of decision-making competencies (expansion of the scope of the autonomy of schools and universities regarding the use of the allocated resources and the design of curricula), by means of modifications of provisions of civil service law regarding universities (including teaching activities among work obligations; introduction of contractual professors, whose contracts have to be renewed after some years), and guidelines on the organisation of learning (schools: group sizes, class partitioning numbers; universities: multiple use of teaching offers as elective subjects for different studies). In the sector of adult education, the co-operation between public and private institutions in the use of capacities is to be

improved and the competition between the various providers is to be enhanced by the AMS (Public Employment Service Austria) by means of public invitations for tenders for courses.

- Ø Saving measures comprise among other things: the reduction of lessons according to the curricula (at secondary level II) and of subjects required from university students; the increase of the performance requirements made on the teaching staff (teaching obligation of university assistants; scheduling of in-service teacher training at times in class-free times); reductions of income, partly affecting all civil servants (reduction of extra charges, reduction of old-age pensions) and partly affecting teaching staff only (e.g. reduction of the remuneration for courses, lectures and examinations); reduction of the financial promotions for the organisations active in adult education²⁸⁵ and for pupils and students (concerning family allowances, school textbooks, free trips to school or university).
- Ø An improvement of the adaptation of educational supply and demand is expected to be brought about by the deregulation and decentralisation measures as well as by the expansion of the granting of partial legal capacity. In the university sector, the social partners influence the development via the university boards and the Austrian Advisory Board for Universities. The new University Study Act provides for educational focuses at the individual teaching locations and for surveys and assessments of the need of graduates in the introduction of new study courses. In adult education, the individual organisations have strongly renewed and diversified their course offer.
- Ø Private financing sources are to be opened up by granting the partial legal capacity to schools. The financing of the "Fachhochschul"-courses is carried out according to a new model: the government limits its contributions to a certain amount of standard costs per study place; Laender governments, regional governments and private enterprises participate much more in the financing in the case of the universities. In the sector of adult education offered by the public, fees are charged for vocationally oriented special programmes. New financing arrangements have been made in connection with the establishment and operation of the University Centre for Further Training (participation of the respective provincial government and regional government where the Centre is located). In addition, Austria's entry to the EU has opened up new financing resources for pupils' and students' exchange, in-service teacher training, and the further training of people under employment and unemployed persons.

So far no assessment of these measures regarding the efficiency increase has been made. A related study would be needed to find out the saving volume hitherto achieved and, above all, the volume to be expected for the years to come. Such a study would have to cover also the question in how far the measures influence the quality of the educational offer and the weighting of the educational aims and the demand for education and training of the different social classes. As far as the allocation of the saved resources is concerned it can be assumed that so far the budget consolidation and not the restructuring and expansion of the offer have been in the foreground.

²⁸⁵ To a large extent, the reduction goes back to austerity measures of the local authorities.

A comprehensive plan for the development of the education system in the sense of lifelong learning would have to include the following points:

- Ø time- and quantity-related performance targets concerning a step-by-step expansion of the participation in education and training and concerning the increase of graduation numbers;
- Ø a longer-term financing concept comprising all sectors of the education system, setting efficiency targets, determining the allocation of saved resources and the use of additional funds, and containing restructuring measures with regard to staff, the use of rooms, etc.;
- Ø involvement of the social partners for safeguarding the implementation of the measures mainly in the entrepreneurial field and among commercial providers;
- Ø involvement of the teachers' unions for designing the restructuring measures in a socially compatible way;
- Ø involvement of the non-profit adult education associations in order to use their know-how and CET potential.

The involvement of the social partners in a development plan for education and training is needed because the majority of the educational expansion and of the additional financing affects fields that are financed traditionally mainly by private sources. If these financing regulations remained unchanged, it would mean that two thirds of the additional ATS 30,500 million (or 19,500 million ATS) would have to be borne by the enterprises and the participants.

One sector the financing of which has so far not been covered by reform measures are the non-profit adult education organisations. The amount, responsibilities and form of the public promotion in this field is not regulated satisfactorily, furthermore still a comprehensive system of educational guidance and information on offers has to be created. This means that a CET potential which has been developing in Austria in the course of decades should still be expanded further and be used in a better way.

A major potential for an efficiency increase and an increase of the educational graduation rates lies in the reduction of the drop-out rates in all sectors of the education system. Up to now, this problem has not been paid enough attention to. Improvements could be achieved through relatively minor additional efforts so that the educational expenditure per graduate could be reduced considerably. The problem of the drop-out rates mainly applies to the university studies, the upper cycle of the secondary academic schools, and the secondary technical and vocational colleges. The reduction of the drop-out rates has to be seen in connection with didactic improvements. The use of new learning media (e.g. computer-assisted teaching) and innovative didactic methods (such as peer group tutoring) could bring major improvements here.

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