

ALTERNATIVE APPROACHES TO FINANCING LIFELONG LEARNING

COUNTRY REPORT

CZECH REPUBLIC

1999

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CHAPTER 1. INTRODUCTION

1.1 Purpose of the Report

1. The present national report was prepared in the framework of the OECD project “**Alternative Approaches to Financing Lifelong Learning**” on the basis of an outline drafted by the OECD Education Committee. The principal objective of the national report is to describe and analyse the present state and the development of financing of lifelong learning in the Czech Republic and to attempt to propose ways and means which could assist in the improvement of lifelong learning in the Czech Republic.
2. The report is intended for two principal target groups: first the co-ordinators of and the participants in the above-mentioned international project, second for the actors of lifelong learning in the Czech Republic. Its purpose is to contribute, through the first aforementioned group, to the development of lifelong learning on supranational scale and, through the second group of actors, to influence the further development of lifelong learning in the Czech Republic.
3. The importance of the topic ensues from its perception in Czech Republic. The term of „lifelong learning“ has appeared in the Czech terminology only recently, primarily thanks to the translation of two key publications on the subject [3], [32]. It covers both institutional education and learning as a process of individual acquisition of knowledge and skills independent of institutions. This concept has not been fully accepted yet by professionals, to say nothing of the public, and the schools have not included the preparation for lifelong learning among their tasks. Also the sources quoted further on reveal that the concept and term of „lifelong *learning*“ has not become familiar in the Czech Republic yet. On the other hand, the term of „lifelong *education*“ was one of the important components of the reform of the educational system launched in 1976.

1.2 Political, economic and social context in general

4. Lifelong learning – like learning and education in general – develops in every country in concrete political, economic and social (socio-cultural) conditions of the respective country. On the one hand these conditions form the framework in which education develops and which may stimulate or limit the development of education. On the other hand, the education itself may influence the existing political, economic, social and other conditions. The **interaction** between general conditions and education appears also in the Czech Republic. In the 90s, however, this interaction has **significant specific features** which must be taken into account when evaluating, analysing and determining the possible future development of lifelong learning in the Czech Republic. We consider it necessary to draw the reader’s attention to these specific features in the very introduction to this report, as they are of fundamental significance for the understanding of the development of lifelong learning. They form the stage on which, among numerous other processes, also the changes of education are taking place.

5. Towards the end of 1989 a **fundamental change** took place in the Czech Republic which is rare in comparison with the most OECD countries. After the approximately forty-year existence of undemocratically organised and managed State its principles were rejected and abandoned which suddenly opened the possibilities of further development based on fundamentally different principles. This change concerned all principal facets of society including politics, economy and culture. While the rejection of undesirable ideas and principles linked with previous development was very fast and took place without any conflicts, the enforcement of entirely different new principles and ideas, in spite of favourable principal prerequisites, required the development of quite new political, economic and social structures. Although the most important steps were taken mostly in the first half of the 90s, when Czechoslovakia split into two independent states (Czech Republic and Slovak Republic), the process of creation of new structures continues and cannot be considered terminated. The development of life-long learning in the Czech Republic has been and still is influenced significantly by the far-reaching changes in the economy of the country.

6. At the beginning of the 90s the **economic reform** was launched with the objective to replace the previous system of dirigist economy with the system of market economy. With reference to the structure of national economy it meant the transformation of thousands of state enterprises into private enterprises and the development of the private sector nearly absent before. That was the reason for extensive **privatisation**. (At present the private sector generates about 4/5 of the GDP). In the field of economic instruments the abandonment of the system of detailed planning of production volumes and administrative setting of the prices of products and services necessitated the creation of the prerequisites for the real **function** of the market, supply and demand. That was the reason for a fast **liberalisation** of most prices of products and services. The realisation of so important processes had to be based on the drafting, approval and introduction of an **enormous number of new laws**.

7. The adoption of the above mentioned measures supported by the prevailing majority of the population, although they were linked with considerable difficulties, resulted in the stagnation of the standard of living: even nine years after the changes Czech economy has not attained the GDP level of the period before the reform. The slow increase of real wages has been eliminated by the decreasing, but still considerably high rate of inflation (6.8% in 1998).

8. The complex process of privatisation and **restructuring of enterprises** resulted *inter alia* also in the dismissal of numerous employees and often in the liquidation of whole enterprises. This had a particularly strong impact on the regions with a high quota of heavy industry and mining. All these changes resulted in **significant changes in employment structure**. The employment rate in agriculture dropped from 12% to less than 6.5%, this in the secondary sector (processing industry) from about 47% to 41% although this in the tertiary sector (services) increased from 42% to 53%. These trends are analogous with the OECD countries. Unusual, however, is **the speed of these changes** proceeding in the Czech Republic: about three times as fast as in Austria or Norway and about 50% faster than in Portugal [14]. These processes gave rise to the previously non-existent **labour market** and the previous full employment turned in increasing unemployment. For several years unemployment rate was held at a low level (about 3%). In the second half of the 90s, however, it began rising to attain 7% at the end of 1998.

9. It is impossible to describe here all enormous changes, their progress and consequences (some of them, however, will have to be mentioned in the chapters to follow). The given examples may be good enough to suggest the scope and depth of the changes that the Czech Republic has undergone and still is undergoing. They have shown that the development has had both positive and negative features. In their report on the labour market in the Czech Republic from the middle of the 90s [14] independent observers – OECD experts – saw e.g. the following positive features: *“The Czech Republic ... managed to maintain relatively stable macroeconomic conditions and achieved also considerable progress in structural transformation. In particular it has developed private sector that produces the highest GDP percentage of*

all transforming economies. All that proceeded with low unemployment and without visible characteristics of extensive destitution and economic distress.“ On the other hand another group of OECD experts stated in 1995 [36] that *„the restructuring of industry represents a formidable challenge, not yet successfully addressed by the privatisation process. There is significant evidence of government intervention to save large companies from bankruptcy, of labour hoarding among big companies, of workers changing nothing in their previous daily routine and of managers adopting a „wait and see“ attitude toward their new, often absent owners (usually investment privatisation funds or banks where the influence of state is very strong) with limited experience of innovative business strategies“* (p. 102).

10. Although we do not aspire to an exhaustive evaluation of recent development, it is possible to outline several fundamental features present almost in all fields which include the **extraordinary scope, depth and speed of the changes, significant and fast liberalisation of conditions and parallel existence of positive and negative consequences of the development.**

1.3 Political, economic and social context of lifelong learning

11. We consider **lifelong learning** as an integral concept covering all ways and forms of education. Regarding to the objective of the report we shall deal mostly with *lifelong education*, i.e. institutional and certified ways of acquisition of knowledge and skills.

12. With reference to the **age** of the learners, lifelong learning concerns all age groups. It can be divided into two fundamental phases, namely **initial education** of all young people, effected in the framework of the respective levels of education system, and all continuing education and learning linking up with the initial education sooner or later. With reference to **purpose** (objective) it includes both the education preparing the student for his/her future profession and aimed at the application of innovations, economic growth etc., and the education aimed at the personal cultivation of individuals or the cultivation of community life. Continuing (further) education includes both the education of the employed and of the unemployed, possibly also of the people in post-productive age. With reference to education **providers** lifelong education includes the education provided by the State and by community, Church, enterprises and other private institutions. With reference to **forms** lifelong education applies intramural and extramural education; the intramural education can take place both in educational institutions and on worksites (on-the-job training). With reference to **finance** the various components of lifelong education are financed from different resources. As the term implies, lifelong learning includes the whole complex of educational activities in the course of the whole man's life.

13. Consequently, we consider lifelong learning as an extensive, yet **integral** process consisting of numerous parts which may have specific objectives of their own arising e.g. from the purpose of some part of lifelong learning (e.g. initial education), the prevailing age of the respective target group, etc. In any case, however, the specific objectives of every individual part of lifelong learning should be defined not only with reference to the part itself, but also with reference to lifelong learning as a whole. The conception of lifelong learning can be defined in contrast to another conception according to which every „part“ of lifelong learning (e.g. initial education) is autonomous, is usually considered as completed and its objectives and organisation need not take into account any further „parts“ of lifelong learning.

14. One of the most important **political** documents referring to lifelong education is the Policy Statement of the Government of the Czech Republic of August 1998. In the very part defining its principal objectives the Government declares: *“The Government considers its integral goal to be its contribution to the Czech society becoming a society of learning...The idea of a learning society draws on the presumption that the qualifications of people are currently becoming a basic production factor. Only a society which is capable of making an investment into the lifelong education of its citizens... Social spending, investment*

into human capital or into the development of the human potential is considered by the Government to be the most effective form of Government investment. It intends to reflect this form, especially investment into education, in its budget priorities and transform our society gradually into a knowledge society.”

15. In the section regarding education the Government declares its “responsibility for the educational policy and its results. The role of the State in the creation of conditions for the provision of equal access to education, for the quality and concept of education ... is irreplaceable.”

16. These statements are without doubt very promising for the development of lifelong education in the Czech Republic, the more so that no such declaration was made by the preceding Governments or the Ministry of Education, Youth and Sport or any other important institution in preceding years. However, since they have been made relatively recently, they were applied only in the preparation of the 1999 State budget. The budget shows that the chapter of education really ranks among those preferred. However, this positive feature is impaired by the fact that in the period of the present economic recession in the Czech Republic the budget amount allocated to education, with reference to the low GDP value in 1999, will be lower than in the middle of the 90s.

17. Political or other discussions of the issues of education in the preceding years were not concerned with the problems of lifelong learning. In the past two years the subjects of **initial education prevailed**, including such issues as the discrepancies between the professional structure of the graduates of secondary and post-secondary education and their demand on the labour market, the need of rationalisation of the upper secondary school network consisting of a too great number of too small schools, etc.

18. Also the attitudes of **social partners**, in particular the employers and the trade unions, have been concerned mostly with the problems of initial education. The **teachers’ trade unions** have been and still are aimed to increase the teachers’ salaries or to prevent from the increase of the teaching load, without affording attention to the problems of lifelong learning so far. The **employers** should consider lifelong learning their priority in the field of education; however, also they have concentrated on the issues of initial education, in particular initial VOTEC education (such as the criticism of graduates). On the other hand it must be admitted that the bodies representing the employers have been operating in the Czech Republic for a relatively short time and in spite of their immaturity, due to specific economic conditions, they had to deal primarily with crucial economic problems (privatisation, changes of tax system, price policy, export conditions, business rules and support, etc.) as a result of which education has been emerging as an urgent problem only recently.

19. The involvement of social partners in the development of professional education (both initial and continuing education) was described in 1997 in the National Report on the role of social partners in the development of professional education in the Czech Republic [24] prepared in the framework of the project and with the support of the European Training Foundation by the National Observatory of VET and Labour Market (a unit of the National Training Fund). In the conclusions and recommendations this report states that in comparison with EU member states the **involvement of social partners in VET** was **weak**, both in respect of its legal and institutional framework and the efficiency of this involvement. At the same time the report states that in the preceding year the interest of both employers and employees in VET in the Czech Republic increased.

20. As regards **economy** the issues of lifelong learning appears most distinctly on the **labour market**. The prevalence of supply over demand continues to increase so that the average unemployment rate in the Czech Republic is increasing. According to the Labour Market Statistical Yearbook of the Czech Republic [26] the problem groups include the persons with reduced working ability, the persons without any qualification (unskilled labour force) or the persons with incomplete basic education (often including the members of the Romany ethnical minority) and, last but not least, the graduates of all levels

of education and young people (juveniles) without labour experience. The structural disequilibrium between supply and demand is of a markedly regional character, but in total it is increasing. The schools are adapting to the changed structure of demand only slowly. This state enhances the growing conviction of both state authorities and the employers that greater attention must be paid to active unemployment policy incl. education. In 1998 the Ministry of Labour and Social Affairs started working on a long-term National Employment Plan which should be approved in 1999. Its draft version reveals that it will comprise also a section concerned with the support of the continuing education of the unemployed; greater attention will be turned to the problems of employment of graduates or of the young people with basic education and the continuing education of employed people as well.

21. In respect of the **sources of finance to support lifelong education** the discussions focused on two principal issues. The first concerned the sources of funding continuing education, the second concerned the incentives and mechanisms stimulating the development of education. In the first question the opinions prevail that initial education including vocational education and training should be funded by the state budget, in case of private schools also by the fees paid by the students. However, the liberal circles exert strengthening pressure on financial participation of students and an increase of the private segment of the education system. On the other hand, no pressure is exerting on the enterprises. In the case of continuing education the prevailing opinion is that continuing education of employees (on-the-job training) should be funded by the employers and/or the employees while the training of the unemployed should be funded by the state budget. There is a great number of private educational establishments, which are free to set up prices for their educational services. Regarding the other issue – the stimulative function of the State – the prevailing opinion is that so far the State has neither suggested, nor drafted and, consequently, adopted any mechanisms and incentives stimulating the development of lifelong education/learning.

22. With reference to **social and cultural context** we consider it necessary to mention several important features related to lifelong learning. The Czech Republic is a country with a traditionally high literacy. Compulsory six years schooling was enacted in 1774; in 1869 it was extended to eight years with the attendance rate of 97% of children of the respective age. Until 1918 Czech education system developed in the framework of the Austro-Hungarian Empire and, therefore, had identical features with the Austrian education system. In the 20s and 30s, however, it was influenced by strong democratisation tendencies, in the first place endeavouring to achieve common education of the compulsory schooling age group and, secondly, maintaining that general education should continue also after school-leaving, during vocational training. These ideas were applied formally after 1948. The basic school became a comprehensive one and access to further level of education was opened intentionally to „workers and farmers“. However, the selective character of the education system was conserved, only the criteria changed. And as the correlation between achieved education level and income was very weak and even negative in a number of cases, the envisaged social mobility stopped fast and from the 60s the educational standard of the family was reproduced significantly again. After 1989 this trend strengthened. Some sociological research projects and the data of the TIMSS project [30] testify that the educational achievements of the pupils and their educational career are determined significantly by their parents' level of education. Less significant are regional differences and, with regard to some other characteristics of the Czech education system (emphasis on encyclopaedic knowledge and memory), the gender differences in the access to education are not very significant either (on the education system see further on).

23. **Adult education** used to depend initially on individual initiative. At the beginning of last century it became the responsibility of professional organisations in some professions (physicians) or sectors (agriculture). After 1948 it received an important impulse due, on the one hand, to the fact that the post-war reconstruction and restructuring of economy required a new structure of labour force, on the other hand to the fact that many people could not continue their preceding career for political reasons and had to be replaced. Selected „working cadres“ were enabled regular studies. Moreover, there was a wide

possibility of so-called external, i.e. part-time studies at upper secondary schools and at universities for working people in the form of evening or distance classes (in which the school attendance was reduced to consultations). Part-time study followed (with a different time schedule) the same curriculum as the regular study and issued certificates with the same qualification as the regular one. It depended on the consent of the employer, which bound him simultaneously to grant the studying worker the legally stipulated study leave. The scope of part-time study was considerable. In the 80s, for instance, the number of part-time students of upper secondary schools represented 13–15% of all students and on university level 20–24% of all students. Part-time courses represented a „second chance“ both for those who could not study earlier for personal reasons, and for those who were barred from regular study for political reasons which were invalidated in the course of time.

24. Also education within the enterprises (on-the-job training) was widespread. Its organisation was facilitated by a high concentration of enterprises, which usually had educational departments of their own. Apart from vocational education and training they organised also language courses and, in accordance with the customs of the period, political courses as well.

25. General/hobby and civic education was provided, apart from school institutions (language and art schools), also by purpose-oriented organisations (driving schools) and educational institutions established by local government authorities, which organised language, computer and various hobby courses for moderate fees in the framework of (non-profit or subsidised) communal services.

26. The whole field of continuing education – whether job-linked or general – was profoundly shattered by the social change after 1989. The transformation of economy resulted in a drop of GDP, the changes of economic structure and qualification requirements, the disintegration of large enterprises into small units and fuzzed perspectives of further development. All this exercised a negative influence first on enterprise-organised education and subsequently also on school education because it, too, has always been dependent, though indirectly, on the interest of enterprises. The changes in state administration and the emerging self-government did not provide any fertile soil for educational activities organised by local government which were curtailed substantially. On the other hand, the business activities in this field underwent a new development. At present the development of adult education is determined mostly by the market principle of supply and demand.

27. The mutual relations of the individual parts of lifelong learning in the Czech Republic, their present development and state can be characterised by their mutual **separation**. In other words, there are no significant relations and links either between initial and continuing education or between education provided by state and non-state institutions.

28. The above mentioned statements are mostly **general**. They may characterise lifelong learning as a whole, but may differ in respect of its individual components. Detailed description and particularly analysis, causes, consequences and relations form the content of the chapters that follow.

CHAPTER 2. ESTIMATING PUBLIC COSTS OF LIFELONG LEARNING

2.1 Current enrolment patterns

2.1.1 Introduction – Changes of education system and demographic development

29. The education system was defined by the 1976–1984 reform (envisaging its long-term stability) with the priority of labour force preparation. Pre-school education was provided by nursery schools for the children 3–5 year-olds, the participation rate was 95–97% of the age group. At the age of 6 years the children started their compulsory schooling lasting 10 years. Compulsory education consisted on eight-year “basic school”, i.e. primary and lower secondary school of single structure common for the whole age group. Subsequently the pupils spent at least two years at an upper secondary school. The purpose of this arrangement was to assure that practically everyone who completed the compulsory education was qualified for work.

30. Upper secondary schools were divided into three groups, two of which were markedly selective. The distribution of the students in the individual school types and study specialisation were controlled centrally: approx. 13–15% of the population studied the *gymnasiums* which lost the character of purely general schools and provided also the fundamentals of professional qualification: some 30–35% of the population attended secondary technical schools, with prevailing industrial technology specialisation. The remaining 50–55% went to secondary vocational schools where they prepared for manual professions.

31. The education provided by *gymnasiums* and secondary technical schools (lasting 4 years in either case) certified with the final „*maturita*” examination, representing the necessary prerequisite for higher studies. In vocational schools only about 5% of pupils studied the branches certified with the „*maturita*“ examination. On ISCED 3 level, consequently, technical and vocational education markedly prevailed over general education. However, secondary technical schools had a tradition of long-standing and high prestige due also to a considerable representation of general-education subjects in their curricula. The branches certified with a *maturita* examination (i.e. the branches of ISCED 3 A level) admitted about 40–44% of the basic school leavers. The graduates of these branches represented potential higher education students. The selectiveness of higher education was much greater: they admitted 34–37% graduates of secondary schools with *maturita* certificate, i.e. some 10% of all 18 year-olds. All higher education institutions were of university type, the length of study being mostly 5 years.

32. The system comprised (from earlier years) two „second chance“ institutions. One were the second secondary programme, so-called follow-up studies enabling to those who have completed vocational schools (ISCED 3C) to pass the “*maturita*” examination, usually in the form of part-time study. The second were the post-secondary courses, initially intended for the graduates of general schools to obtain the required qualification, while the graduates of technical secondary schools could supplement and/or broaden their qualification. Those who were not admitted to university often used this form. After the introduction of professional education to *gymnasiums* the post-secondary study was restricted

considerably. Part-time study of employed people was widespread in all types of education and the labour legislation was very favourable for its participants.

33. The present education system (see Annex 2) is the result of successive changes of the described initial condition. Its characteristics – essential for the present problem – can be summed up as follows: compulsory education was reduced from 10 to 9 years, with the first stage of five years and the second stage of 4 years. In the framework of compulsory education a selective stream was introduced, namely the 8- and 6-year *gymnasiums*: the 8-year *gymnasiums* can be entered after the 5th form and the 6-year *gymnasiums* after the 7th form of basic schools. On average 13–15% of the pupils of the 2nd stage of basic schools enter the 8- and 6-year *gymnasiums* which are attended by about half of all *gymnasium* students. After 9 years of basic school the pupils enter the 4-year *gymnasiums* or 4-year secondary technical schools or secondary vocational schools lasting 3 years in most cases. The liberalisation of the system enabled the secondary technical schools to provide not only their own education programmes but also educational programmes characteristic of the vocational schools and *vice versa* (for some time even the so-called integrated schools were considered). It extended significantly the access on education level 3A, whether in the first choice or as a second chance, i.e. by the broadening of follow-up study (4A) for the students who have completed vocational education of 3C level. However, the relation between the general education and VET, in which the Czech Republic differs from other countries, has not changed: approximately 85% of the students of secondary schools attend VET schools. The post-secondary education, which provided education of ISCED 4A or 5B level (depending on type), developed fast after the drop in the 80s. However, in 1995 it was abolished and replaced with higher professional schools providing education of ISCED 5B level. (The applied ISCED levels are shown in the diagram of the education system in Annex 2. Detailed explanation can be found in [15].)

34. The establishment of non-state schools, i.e. Church schools and private schools (with the right to provide education against partial payment) was enabled as early as 1990, which terminated State monopoly in education. The situation of higher education institutions changed twice in a revolutionary manner by the Higher Education Acts of 1990 and 1998. The former provided the higher education institutions with considerable autonomy and launched the process of study differentiation according to length, the latter further enhanced this autonomy by the de-etatisation of higher education institutions (affording them the status of public institutions), granting them their own property, accentuating study differentiation and enabling to establish private higher education institutions).

35. The development of continuing education was described in Section 1.2.

36. The above mentioned education system modifications describe the changes in its structure, but do not say anything either about the significant changes of the content of education or about the numbers of students and their structure. Moreover, they do not inform about the reasons of these changes and their further interrelations and development trends.

37. As it has been mentioned in the Introduction the symptomatic features of the 90s included profound changes and liberalisation. This applies also to the field of education. The conditions hitherto rigid and controlled were loosened which gave rise to an extraordinary initiative of the pedagogues to achieve principal changes. A typical feature of the described development consisted primarily in the **initiative bottom-top** requiring from the management of the education system, particularly the Ministry of Education, Youth and Sport, the approval and officialisation of their numerous proposals. In this situation the Ministry approved most proposals and sided with the reform initiative. In the social atmosphere calling for change and rejecting control from above it probably could not afford doing anything else.

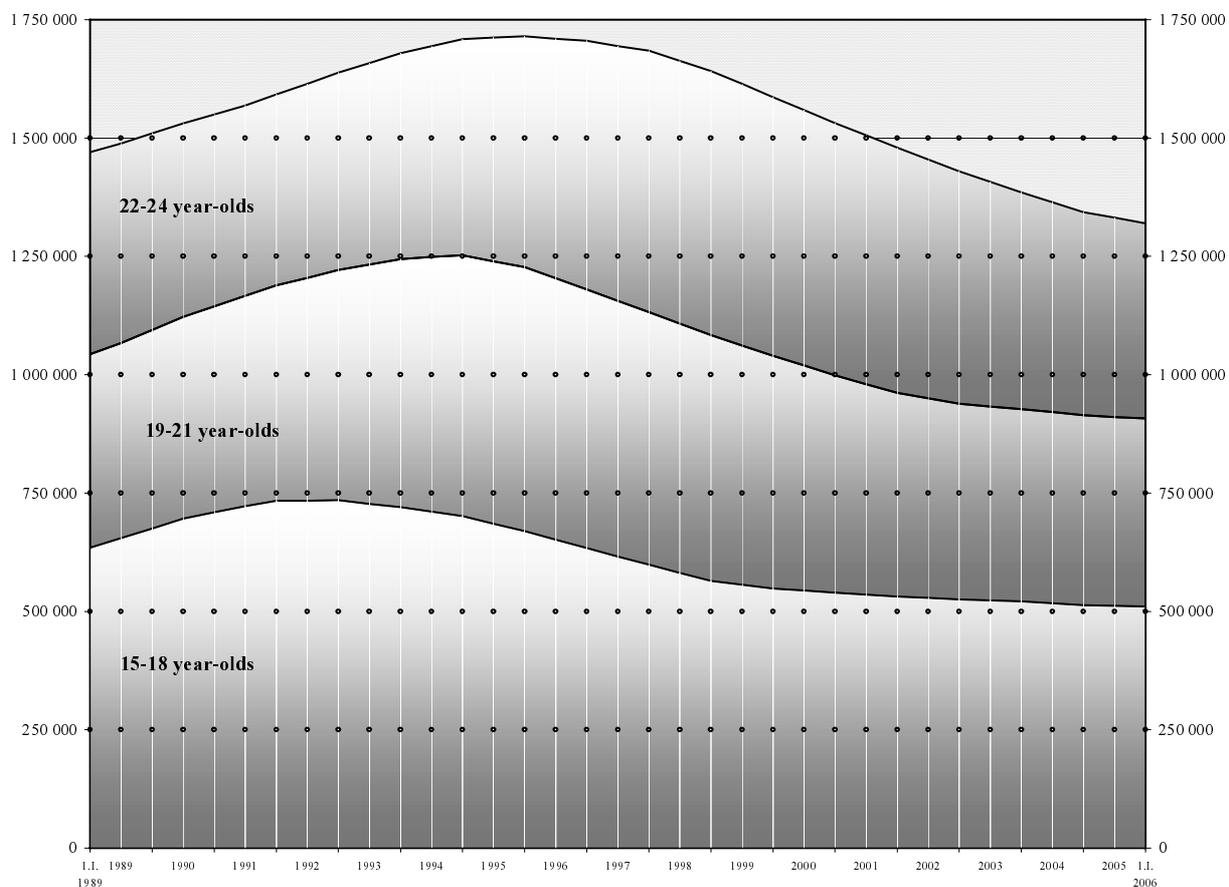
38. As most proposals concerned greater freedom in the modification of the content of education (curricula) and the introduction of new branches of education, the education system managed to innovate fast the content of education and diversify the offer of education provided. This positive result could not be achieved probably by any reform contrived and realised top-bottom. On the other hand the new branches of education and further modifications were introduced without **the existence of any purposive programmes, conceptions and strategies**. That was why this process involved the introduction of both positive changes, corresponding with new social and economic conditions, and the changes, which proved subsequently as negative. For instance, the number of branches of technical and vocational education increased from about 400 to more than 900. This improved the offer on the one hand, but worsened the orientation in this offer both for the intended students and for the personnel managers of the enterprises engaging the graduates on the other hand.

39. The impact of the measures adopted by the Ministry of Education, Youth and Sport was not explicitly positive, either. For the extension of the offer, foremost of secondary education, the Ministry adopted „economic instruments“. In 1992 it introduced *per capita* financing which – apart from transparent distribution of available funds – should have motivated the schools to increase their offer of educational opportunities. Practically identical conditions applied also to private schools the establishment of which was enabled as early as 1990. The success was fast to come: secondary schools became really available and the students' possibilities to chose their study route rose significantly. As a result of the establishment of private schools and the division of state schools into a greater number of autonomous subjects in the period from 1989/1999 to 1997/1998 the number of *gymnasiums* increased from 223 to 368 and the number of secondary technical schools from 375 to 905. The average school size in terms of the number of students fell and the school network became significantly less effective: the efficiency of personnel and funds decreased and the quality of education provided by them were endangered. Moreover the described way of increasing the offer of education was selected in the period of **demographic decline** which was the most marked in the age group corresponding with upper secondary schools. The demographic situation was destabilised by the pro-natality measures of the 70s. The crest of the natality wave launched in the 70s attained secondary schools in 1989. At present this age group is graduating from higher education institutions. The age groups corresponding to secondary schools started dropping steeply in 1993. The situation was further aggravated by the enactment of the compulsory 9th form of basic schools. (Although the nine-year basic school was enacted as early as 1990, the pupils could still spend the last year already in the secondary school.)

40. The interest in the 9th form fluctuated so that the students enrolled in secondary schools at the age of 14 or 15 years during six years (1990–1995). The 9th form did not become compulsory until the 1996/1997 school year. That is why only very few students enrolled in secondary schools from the weak 9th forms of basic schools. In this 1998/1999 school year the pupils of this „empty“ form are in the third year of secondary schools which means that in 1999 only very few learners will leave the vocational schools and in 2000 there will be very few students to enrol in the higher education institutions. The secondary schools had a capacity surplus and because of *per capita* financing „a fight for students“ broke out (for details see the next section of this chapter). The solution of this situation is highly problematic (see Chapter 3).

41. In 1997 the number of young people in the years corresponding with the enrolment in the higher education institutions started falling. In 2000 the „empty“ year of secondary school graduates will try to enrol in the higher education institutions. It is assumed that the „deferred demand“ for tertiary education could be satisfied by 2004. This problem, too, will be investigated in Chapter 3. The demographic development of school age cohorts is shown in the Figure 2.1.

Figure 2.1 Age cohorts at different levels of education (15–17, 18–21, 22–24), 1989–2005



2.1.2 Upper secondary schools

42. Enrolments in upper secondary schools and distribution of students in branches providing education on the ISCED levels 3A and 3C is showed in following table.

Table 2.1 Number of regular students of secondary schools

School year	Number of students	Branches providing "complete" upper secondary education (ISCED 3A)	Branches providing upper secondary education (ISCED 3C)	Follow-up courses (ISCED 4A following ISCED 3C)
1989/90	569 655	293 253	272 719	-
1990/91	577 967	307 057	266 048	-
1991/92	565 011	303 404	253 424	1 275
1992/93	572 407	311 584	242 756	2 985
1993/94	596 934	329 621	240 959	6 058
1994/95	628 881	358 584	229 958	15 965
1995/96	639 965	374 948	207 553	30 747
1996/97	514 811	320 941	133 642	48 275
1997/98	486 435	322 884	114 565	44 634
1998/99	451 070	316 973	100 043	30 951

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998.

43. In a generally rising trend Column 2 shows a sudden drop since 1996/97 reflecting the enrolment of the „empty“ year after the introduction of the compulsory 9th form of basic school which is distinct particularly in Columns 3 and 4. The „empty“ year will reflect in the data for four years. On the other hand, the steep rise of the students of follow-up courses (4A following 3C in terms of ISCED) shows that the students as well as the schools made use of free capacity for the achievement of so-called “complete” upper secondary education ending with a *maturita* examination in the second educational programme. (Before 1991/92 the follow-up courses were not monitored by statistics. They were organised mostly by secondary vocational schools in the form of part-time study in the majority of cases).

44. The number of students can be referred to the respective population cohorts to express the rate of participation in education. This rate in the Czech Republic in 1990/91–1996/97 is shown in Table 2.2 covering all student incl. part-time students, the more accurate data on which will be given in Section 2.1.4.

Table 2.2 Participation in education in the 90s, Net enrolment rates of the age group 15–18

Age	15	16	17	18
1990	94.7%	92.2%	68.7%	37.5%
1991	...	...	...	...
1992	90.7%	83.8%	57.5%	31.8%
1993	98.3%	88.0%	61.0%	35.6%
1994	98.7%	96.9%	71.7%	41.9%
1995	99.7%	99.3%	81.6%	53.9%
1996	99.6%	99.0%	85.3%	59.1%
1997	98.1%	94.9%	89.8%	65.1%

Source: Institute for Information on Education

45. The data of the table show that in the monitored period 95–98% of the 15 year-olds enrolled in secondary schools or, in other words, 2–5% of the 15 year-olds did not continue their education in secondary schools. The participation rate of the 15 year-olds in the Czech Republic is comparable with analogous figure giving the average of EU member states (see [12]). The differences are more obvious in higher age columns. However, it is evident that the **participation rate in all monitored years increased**, particularly in the case of the 17 and 18 year-olds. The principal **causes** of this increase are the aforementioned introduction of the **nine-year basic school** and particularly the change of the **structure of students of VET schools** (see later). This all influenced also the so-called expected length of schooling that increased from 13.7 to 14.7 years in 1990–1997.

46. Although the participation rate in the Czech Republic has been increasing (in the case of the 18 year-olds by more than 20% in three years) it is significantly lower than the average of EU member states or OECD countries, particularly in the case of the 18 year-olds. In the case of 20 year-olds, for instance, the difference between the Czech Republic and the average of EU member states attain about 20%.

47. The low participation rate of higher age groups of young people has several causes. In the first place it is determined by the structure of the education system, particularly the tradition of acquiring certified qualification at upper secondary level, and by the conception of the higher education system as a highly selective, scientific rather than practical preparation with prevalent „long“ programmes.

48. The participation rate is influenced negatively by the numbers of those who have been unsuccessful already in basic schools and have left them immediately after completing compulsory education, even before ending the last form (i.e. without having acquired complete basic education). In recent years these pupils have represented about 5% of all pupils. (They are often older than 15 years, as a result of which their leaving the educational system will not be reflected in the participation of the 15 year-olds.)

49. On the other hand some reasons of low participation are positive:

- The rate of drop-out is very low in Czech schools of all levels. Only 1.3–1.4% of basic school pupils have to repeat the same form. The 1997 drop-out data of secondary schools are as follows: *gymnasiums* 1.87%, secondary technical schools 1.78%, secondary vocational schools 6.07%, total VET 4.39%.
- Even with the 9-year compulsory education a considerable part of the population attended the 9th year at one of the secondary schools; consequently, although their study for the final examination should have taken 13 years, the major part of the population took only 12 years. Mostly the pupils who continued their education at secondary vocational schools attended the 9th form of basic schools.

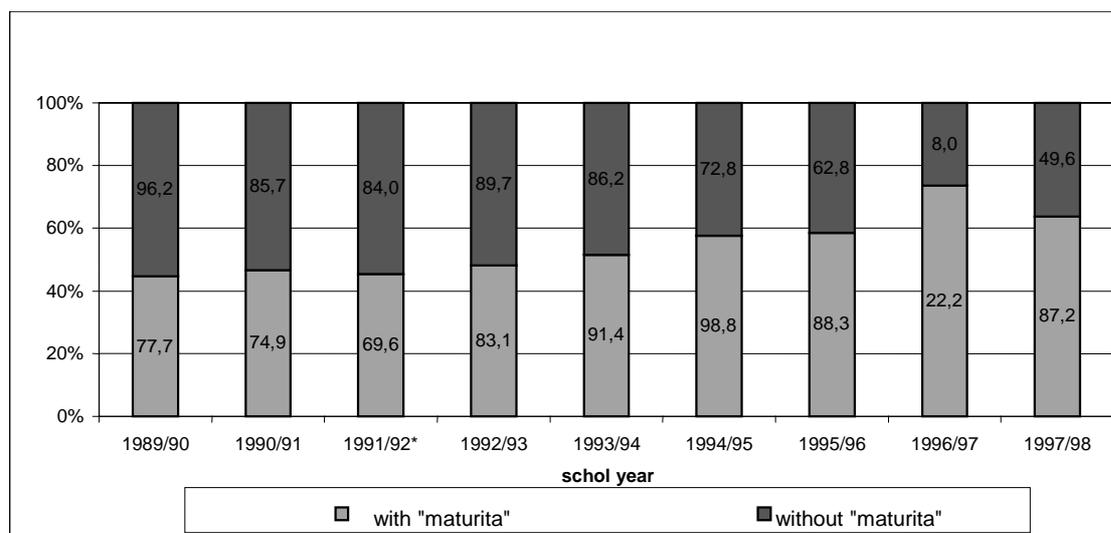
50. Rather difficult is to estimate the impact of another phenomenon: approximately 20% of the 6 year-olds postpone their enrolment in basic schools. This phenomenon started spreading at the beginning of the 80s, because the basic schools requirements was exorbitant and is persevering even at present. The phenomenon deserves a separate social and pedagogical analysis.

51. Although the participation indicators in the relevant age group are not brilliant, it is possible to state that in 1996 **92% of the population of the Czech Republic in the 25–34 age cohort had at least secondary education**, while the average of OECD countries is 71%. Even in the age cohort of 24–64 the share of the population with at least secondary (upper secondary in term of ISCED) education is 83% in the Czech Republic, while the average of the OECD countries is 60% [8].

52. The low participation rates contrasting with the high final secondary education figures make it obvious that it is necessary to pay detailed attention to the **structure of secondary education**, in the first place technical and vocational education acquired (as we have mentioned earlier) by 85% of the population with secondary education. **The shares of young people admitted to secondary technical schools and to secondary vocational schools have changed markedly.** While at the beginning of the 90s it was 40 : 60 (i.e. most students enrolled in vocational schools), in the course of the 90s the long-suppressed demand of secondary technical education was met at an increasing rate and the demand of vocational schools was falling accordingly. At present the number of students admitted to secondary technical schools prevails and the above mentioned ratio has been reversed to about 60 : 40. As the average length of education in secondary technical schools is one year longer than in the vocational schools, these transfers, together with the compulsory attendance of the 9th form, increased the participation rates.

53. The following figure shows the development of the enrolment in branches providing „complete” upper secondary education (lasting 4 years, taught mostly at *gymnasiums* and secondary technical schools and ending with the final examination entitling to enrol in tertiary education) on the one hand, and in schools providing vocational education and training on the other hand. The number of young people monitored in the first group concerns both technical and general secondary schools. The obvious drop of absolute numbers of new enrolments is the consequence of the aforementioned demographic development.

Figure 2.2 Developments in the number of students in the first year of secondary schools with and without “maturita” examination (1st programme only)



Source: Institute for Information on Education

54. The 1995/96 was the first school year with the prevalence of students enrolled in schools with *maturita* examination over those enrolled in schools without *maturita* examination. The diagram includes also the students admitted to 8- and 6-year *gymnasiums*, who represent about one half of the students enrolled in all *gymnasiums*. That means that the figures concerning study branches with *maturita* examination include also the 13–15 year-olds pupils. The non-standard 1996/97 school year reflects, once again, the introduction of the compulsory attendance of the 9th form of basic school. From the 22.2 thousand of students enrolled in secondary schools with *maturita* examination there were 15 thousand of pupils of 2nd stage of basic schools enrolled in 8- and 6-year *gymnasiums* (in comparison with 13 thousand of the preceding school year).

55. The growing rate of satisfaction of the demand of studies illustrated by the diagram has attained the following figures at present: 56% applicants are admitted to *gymnasiums* (80% to 4-year *gymnasiums*, lower percentage to more selective 8- and 6-year *gymnasiums*), 77% of applicants to secondary technical schools and 87% of applicants to vocational schools with *maturita* examination. Practically anyone who wants to study can enrol in some secondary school.

56. Apart from the shift of interest from vocational to technical study programmes also the aforementioned **considerable changes in the structure of secondary school students according to education branches** took place. The branch structure of the Czech education system had been planned obligatorily for decades with the prevalence of engineering branches on all levels. In the 90s the numbers of students in engineering branches fell considerably and the numbers of students in economic and service branches increased. For instance, the numbers of students enrolled in mechanical engineering branches of vocational schools dropped to about one third in the course of 7 years, those enrolled in building branches to one half, etc. On the other hand about 40% of all young people was enrolled in economic and service branches of technical schools. This developments have several causes: increase of the business sector, demand for economic, commercial and financial professions whose content of work has changed fundamentally as well as an increase of the prestige of these professions resulting from economic reform, drop of interest of restructuring enterprises in the employees of traditional technical professions, shift of interest of both young people and of their parents in education in the most speedily developing branches with attractive income conditions (trade, banking). This development marked also the exploitation of the capacity of VET schools. The drop of interest in industrial and handicraft vocations has resulted in the fact that particularly the capacity of vocational schools is not exploited sufficiently. The problems of the change of the branch structure are mentioned here not only to complete the picture of the situation, but also because they exercise considerable influence on costs. The estimate of the further development of the branch structure is very difficult. However, it could be rationally influenced by timely, adequately selected and adequately addressed information on labour market requirements which could contribute considerably also to desirable cost-savings.

2.1.3 Tertiary education

57. Total numbers of regular students of tertiary (or post-secondary) level in 1989/90–1997/98 are shown in Table 2.3.

Table 2.3 Numbers of regular students of tertiary (post-secondary) education level

School year	Number of students total	Post-secondary study (ISCED 4A + 5B)	Higher professional schools (ISCED 5B)	Higher education institutions (ISCED 5A,6)
1989/90	92 853	3 683	-	89 171
1990/91	100 533	4 154	-	96 379
1991/92	100 660	5 937	-	94 723
1992/93	112 844	11 060	1 271	100 513
1993/94	125 182	15 146	2 161	107 875
1994/95	137 224	17 004	4 332	115 888
1995/96	146 989	17 434	6 095	123 460
1996/97	158 364	8 307	12 294	136 763
1997/98	167 546	1 020	21 429	145 097
1998/99	178 546	-	26 827	151 719

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998

58. Column 3 concerns post-secondary studies classified according to ISCED 1997 either as 4A i.e. “post-secondary, non-tertiary” education (qualification studies) or 5B (specialisation and innovation studies). In 1995 this form of education was abolished (the data after that year concern the terminating students only) and a new form – higher professional education – was established. Higher professional schools have been introduced since the 1996/97 school year, until this time they have been operating in experimental verification mode.

59. The number of regular university students increased by 64% in the past decade. Although several new universities were established in the Czech Republic in the 90s (particularly in regional centres), their capacity is still unsatisfactory, because interest in tertiary studies has been increasing faster. At the end of the 80s the number of students interested in enrolment amounted to some 30% of secondary school graduates. At present this figure rose to 47%. The rate of satisfaction of interest in university education was below 50% for several years. In 1994/95 it exceeded 50% and has been decreasing since. In the 1998/99 it amounted to over 42%. The rate of satisfaction of the students interested in the study at higher professional schools was 58%.

60. It should be noted that both types of tertiary education compete to a certain extent: more than a half of the students interested in the study at higher professional schools applied simultaneously for university admittance. From the number of those admitted to both school types more than one half selected the university. Nevertheless the improved access to tertiary education is very important: in 1997 the number of students enrolled in regular tertiary education for the first time represented about 31% of all persons of theoretical admittance age (7% on non-university level, 24% on university level) while at the end of the 80s it was merely 15% (and to long-term university studies only).

61. Some branch changes mentioned in the section dealing with secondary schools can be observed also in the demand for tertiary education. They include e.g. a drop of interest in technical (engineering) education and an enormous rise of interest in economic and legal studies.

62. The participation rates of the 19 to 24 year-olds in Czech tertiary education in 1990/91 – 1996/97 is illustrated by Table 2.4.

Table 2.4 Participation in education in the 90s, Net enrolment rates of the age group 19–24

Age	19	20	21	22	23	24
1990	22.9%	18.2%	16.0%	13.3%	8.7%	5.6%
1991	...	...	...	...	...	...
1992	19.5%	17.1%	19.3%	17.9%	10.2%	5.7%
1993	22.9%	18.2%	18.7%	17.6%	10.2%	4.2%
1994	26.1%	20.3%	20.1%	18.1%	11.1%	5.1%
1995	33.2%	24.3%	22.3%	19.4%	12.7%	7.0%
1996	34.0%	23.1%	19.7%	20.0%	18.4%	14.3%
1997	36.9%	24.0%	20.2%	19.8%	17.5%	14.3%

Source: Institute for Information on Education

63. The table reveals an **increase of participation rate** also in the cohorts corresponding with the usual age of initial education on the tertiary level. Moreover the increase is **accelerating**. Emerging higher professional schools – a response to the growing demand for higher education in the Czech Republic – contributed to this acceleration.

64. In spite of the described growth the differences between the Czech participation data and analogous EU or OECD data in the 19–24 age group are even greater than in the lower age groups. The present development indicates a considerable lag of the Czech Republic behind the aforementioned groups of countries and without its reversal the lag would increase probably even more in the future.

65. On the other hand, as well as for secondary education, the indicators of achieved tertiary education in the target group are much more favourable than suggested by the participation rate in the age cohort appertaining to the study age. **In 1996 11% of the population of the 25–64 age group completed tertiary education**; in the 25–34 age group it was 12% of the population [8]. **The achievement of the required target namely that 13% of the 30 year-olds should achieve tertiary education on the level of long university programme in 2005 is assured already by the numbers of new students enrolled in universities at present**, given the present structure of studies with prevailing long programmes and the present drop-out rate.

66. The problem of participation rate is due also to the present **structure of tertiary education**: almost all existing **higher education institutions are of university type** featuring almost exclusively long programmes. The recently introduced short (bachelor) programmes represent more or less an interim step on the way to the master degree. This concept is logically linked with the high selectiveness of higher education, defended by arguments anchored in genetics and by the fear that the mass broadening of university education will reduce its standard. The attitude to the diversification of higher education is still dubious, based on the long tradition of education of intermediate occupations on upper secondary level. This hesitant attitude reflects also in the new Higher Education Act. It formulates the bachelor programmes as autonomous studies, but the existing concept of tertiary education as exclusively long-term study of university type (even at the institutions the name of which does not contain the term of „university“), involving a broad theoretical base at the very beginning of the curriculum, is rooted too deep to be changed from one day to another.

67. The non-university sector is only emerging. **Higher professional schools** was founded mostly by secondary technical schools in the period of transformation of the post-secondary studies in 1995, i.e. at the time of other changes, in particular the introduction of the compulsory 9th form of basic schools. The momentary shortage of pupils in secondary schools resulted in the sudden introduction of a great number

of higher professional schools. Their programmes could not always mature enough to attain intended form of professionally profiled tertiary education of non-university type. The education provided by these schools has not been included into the qualification catalogue. Institutionally and legislatively they are linked too closely with secondary schools and have not been codified by any specific legislation. Their hopes were not fulfilled by the new Higher Education Act, either, and their transformation into higher education institutions of non-university type will be long and complicated. The prepared drafts of the new Education Act envisage only very small changes of their status. Moreover, they will be subjected to another trial in 2000, when an „empty“ age group will leave the secondary schools and the availability of university study will rise steeply. It is possible that the interest or disinterest of prospective students will decide the further existence of a number of these schools.

68. The participation rate in higher age cohorts is reduced – like in the case of secondary schools – by the fact that the students enter schools of all post-secondary type shortly after terminating secondary studies. Fresh secondary school graduates represent some 60% of all applicants for universities and 80% of applicants for higher professional schools. The average age of students enrolling in universities and higher professional schools is a little over 19 years. The applicants of 24 years and over cohorts represented less than 3% in 1996/97 and 3.3% one year later. The drop-out rate is very low. The period of studies is longer than before 1989, but it is only partly due to study failures. A certain role is played also by the possibilities of employment and trips abroad during the study period. Even that, however, will be changed by the new Higher Education Act, which provides that a student, who will extend the standard study period without qualified reason by more than one year will have to pay non-negligible fees. Another disadvantage of „slow“ students is also the fact that after the age of 26 years their study costs will increase by the necessity of paying social and health insurance, paid by the state for younger students.

2.1.4 Adult education

69. Adult education – like in other countries – is considerably diversified also in the Czech Republic. (A schematic overview of its operation is given in Annex 1.) In accordance with the requirements of this report this section deals with three components of adult education, namely

- basic literacy programmes,
- retraining programmes,
- job-related education.

70. A survey of labour force structure according to education is given in Table 2.5.

Table 2.5 Labour force in civil sector and its distribution by education in 1997 (thousand of persons)

Indicator	Labour force		Including			
			employed		unemployed	
	thousand	%	thousand	%	thousand	%
Total labour force	5 155.8	100.0	4,875.2	100.0	280.7	100.0
Of which						
No education or not identified	7.0	0.1	6.3	0.1	1.1	0.4
Basic education	542.0	10.5	464.3	9.5	77.7	27.7
<i>Education below ISCED 3 - Total</i>	<i>549.4</i>	<i>10.6</i>	<i>3 868.8</i>	<i>9.6</i>	<i>78.87</i>	<i>28.1</i>
ISCED 3 education	4 060.6	78.8	3 868.8	79.3	191.7	68.3
ISCED 3 + education	545.8	10.6	535.7	11.0	10.1	3.6

Source: Statistical Yearbook of the Czech Republic 1998 Czech Bureau of Statistics/Scientia, Prague 1998

71. The table shows that the share of labour force without any education is negligible and 85% of it are employed. The percentage of adults with lower than ISCED 3 education of the total population and the total labour force of the Czech Republic is relatively low - almost half of the EU average in 1966. For this reason this category is not considered the essential group on which the endeavour to improve lifelong learning should concentrate.

72. **Basic literacy programmes**, therefore, are not very frequent in the Czech Republic. The need of basic literacy programmes has not been felt for a long time. The people who would need them have been finding jobs without any problems for years. However, the unemployment in this group increased substantially and if its members are interested in improving their situation, they have adequate opportunity to do so. If they are not interested in education, there is no pressure to stimulate their interest. The number of illiterates includes most frequently mentally handicapped persons who are almost uneducable, the members of the ethnic Romany minority and immigrants. The number of adepts for basic literacy programmes further includes the persons who have not completed basic education, i.e. terminated compulsory education in a lower than last school form, or possibly attended an ESN school. The types of courses and their attendance are given in Table 2.6.

Table 2.6 Number of participants in the courses supplementing education lower than ISCED 2

Course intended to	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
compensatory basic education	3 754	7 240	8 443	2 937	2 241	3 785
compensatory ESN school education	-	-	-	-	447	1 449

Source: Institute for Information on Education

73. There are also courses intended to supplement the education provided of the so-called auxiliary schools on which no accurate data are available. Young people who are not successful in completing basic school education can use the post-obligatory education on 2C level, provided by vocational schools and/or practical schools.

74. **Data on the education of employed persons in part-time study** on ISCED 3 level are not available in the required age group distribution. These persons are included in Table 2.7. Generally speaking, members of younger age groups prevail.

75. **Mostly the persons registered by Labour Offices as job applicants attend retraining programmes.** This type of adult education is organised by Labour Offices in co-operation with schools and other (private) education institutions that must be accredited for this activity by the Ministry of Education, Youth and Sport. According to the data of the Ministry of Labour and Social Affairs controlling the Labour Offices some 12 000 people start retraining courses every year and approximately the same number of people terminate these courses every year. The retraining programmes last from several weeks to one year. Their participants are mostly the unemployed persons or the employees intended by the employer to re-train for another job.

76. **Job-related education** forms the largest area of adult education in the Czech Republic. Employed people participate in either on the employer's or on their own initiative. This education takes place either in the enterprise or at school or in another (e.g. commercial) educational institution. There are no integral statistical data on the number of participants in job-related education. The data on adult education organised by enterprises can be based only on partial surveys organised by various institutions. According to these surveys the participants represent more than one quarter of the total number of employees. In the 25–35 years age cohort it amounts almost to 34%, in the group of persons with university education almost to 46% regardless of age.

77. **Job-related adult education in schools** is most accurately described by statistical data. It provides mostly the study of the whole curriculum of the respective school. Therefore it is equivalent with regular (day) study of young people and terminates with the achievement of a certain grade. For this reason it is of long-term character (lasting the same number of years as regular education or one year more). The number of adults participating in job-related education in **secondary schools** in the individual programmes described by ISCED classification in 1989/90 – 1998/99 is given in Table 2.7. About 99% of them study technical schools, in the first place the follow-up courses intended for qualified workers to achieve “complete”(i.e. with “*maturita*” exam) upper secondary vocational education.

Table 2.7 Adult part-time students of upper secondary schools

School year	Total number of adult students	Branches providing ISCED 3A	Branches providing ISCED 3C	Follow-up courses (ISCED 4A after 3C)	Higher professional education */ (ISCED 5B)
1991/92	30 799	12 255	2 612	15 823	119
1992/93	26 841	8 346	2 145	15 930	420
1993/94	25 958	6 269	1 450	17 549	690
1994/95	31 965	6 173	1 894	23 292	2606
1995/96	39 059	7 032	1 903	27 807	317
1996/97	41 850	9 705	1 660	30 395	90
1997/98	44 912	10 389	1 318	33 122	83
1998/98	38 154	10 098	1 134	26 802	120

Note: */ Education provided by conservatories and by experimentally operating higher professional schools
Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998.

78. The table reveals that the development of the individual education types differs considerably. In the education programmes terminating with a *maturita* examination (ISCED 3A) the numbers of participants gradually fell as the availability of regular (day) education increased. Their rising numbers since 1995/96 can be attributed to the improved offer used by the schools to make up for the loss of one form of regular (day) studies. The numbers of participants in grade 3C education (apprentice programmes) are not (and have not been recently) high, as the education of this type has been always available. The numbers of participants in follow-up courses rose steeply until 1997, when this type of education was restricted by the Ministry of Education, Youth and Sport by financing rules, *inter alia* also because it was the segment of the education system with the highest drop-out rate – as many as half of the students did not complete their studies.

Table 2.8 Adult part-time students in tertiary education programmes

School year	Total number of adult students	Post-secondary studies (ISCED 4A or 5B)	Higher professional schools (ISCED 5B)	Higher education institutions (ISCED 5A, 6)
1989/90	20 850		-	20 850
1990/91	23 202	4 509	-	18 693
1991/92	18 781	4 285	-	14 496
1992/93	16 361	5 074	120	11 167
1993/94	16 784	5 540	277	10 967
1994/95	16 441	5 448	299	10 694
1995/96	18 694	5 061	207	13 426
1996/97	20 199	2 723	1 637	15 839
1997/98	20 261	899	2 097	17 265
1998/99	21 556	-	2 739	18 817

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998.

79. The numbers of part-time students of **higher professional schools** have been increasing, but are generally low. The history of these schools is too short to allow any conclusions from the tendencies that are only emerging.

80. The numbers of part-time adult students in **higher education institutions** slightly decreased in the monitored period. However, the development in the two halves of the 90s is different: in the first half the numbers fell (to one half of their initial state), but have been rising since the 1995/96 school year. The causes of this development are complex. A number of faculties had a negative attitude to part-time studies of employed adults and did not consider them a full-value education. Therefore they used their new autonomy to abolish this form. The demand for it reduced also with the development of the possibility of regular (day) studies. However, this state proved temporary only and the demand was restored to be satisfied most by the new regional faculties (founded after 1990). On the other hand some faculties with a tradition of part-time studies of long standing (Faculty of Law, Charles University, Faculty of Economy, Prague) did not resume part-time studies.

2.2 Estimates of participation gaps

81. Estimations of participation gaps are dealt with by the respective categories required by project management. So far no concept of further development of continuing education forming an explicit part of overall educational policy has been drafted in the Czech Republic. However some principles are defined and applied, motivated most frequently by the shortage of funds. They are only partial but influence significantly the trend of further development.

82. The estimations are based on the target participation rate of selected age cohorts or other relevant groups until 2005 stated in the instructions for this report:

- a) 90% of the 18 year-olds completed or are to have completed secondary education;
- b) 25% of the 30 year-olds should complete education in non-university programmes, 30% in shorter university programmes and 13% in longer university programmes;

With reference to lifelong learning:

- c) 20% of the relevant group should participate in basic literacy programmes every year;
- d) 100% of the unemployed should participate in retraining programmes for the long-term unemployed;
- e) 40% of employed persons should participate in job-related continuing education courses.

83. The results of the estimations of participation gaps are summarised in Table 2.9. For every one of the five monitored relevant groups (secondary education, tertiary education, basic literacy programmes, retraining programmes and job-related education) the number of people to be educated in 2005 were computed required for the achievement of the stipulated participation rates (see Column 2 of Table 2.9). The first group involves the number of young people of 18 years of age; the second group the number of the 30 year-olds. These two groups were based on expected demographic indicators, while the remaining three groups did not take the age of the education participants into account.

Table 2.9 Enrolment gaps by sector of education

Sector of education	Participants in 2005	Present participation rate	Participation gap (persons)
Secondary	115 000	67	68 000
Tertiary	127 000	10	211 000
Basic literacy programmes	20 000	5	43 000
Retraining programmes	158 000	5	468 000
Job-related education	2 000 000	30	1 753 000

84. The last column of Table 2.9 gives the **participation gaps**. Their estimate is based on the premise that in 1999–2005 the participation rate of every relevant group should develop from its present rate (shown in Column 3) to the target rate. Within this period (theoretically) regular development is assumed. In the case of tertiary education the changes of the distribution of the participants in the three programme types were considered. To achieve the target participation rates, the Czech Republic would

have to increase the participation rate in non-university programmes (provided by higher professional schools) and short higher education programmes, while the participation rate in long university programmes would have to be reduced markedly (to about 38% of the present state).

85. The estimate of participation in basic literacy programmes is based on the premise that the relevant group is about 1% of the total population (i.e. about 100 000 people). In the case of retraining programmes the estimate is based on the premise that about 35% of the unemployed are the long-term unemployed and that the unemployment rate in 1999–2005 will amount to 9%. The estimate of participation gaps in the job-related education is based on the one hand on the total number of employed people (some 5 millions), on the other hand on the hypothesis that some 30% of employed people participate in continuing education at present.

86. The data in the last column of Table 2.9, i.e. the estimated participation gaps, give the **numbers of people which will have to be educated by 2005 to attain the target participation rate**. They are not merely the difference between the number of education participants in the initial and the target years, but cumulated annual gaps in all years between 1999 and 2005. The participation gaps must be considered an **estimate** in several imports. In the first place it is a rough estimate disregarding e.g. the rate of drop-out from the programmes. Moreover, it is based on several premises. Apart from the aforementioned hypothesis of regular development in the course of the monitored period it does not take into account the existing traditions (e.g. the high rate of participation in long university programmes) and does not consider, whether the achievement of outlined targets is realistic. In spite of all that the data confirm the opinion that the **greatest participation gaps** in the Czech Republic are in **tertiary education** on the one hand and in the whole field of **continuing education** on the other hand.

2.3 Estimated costs of closing the participation gap

87. The results of the next estimate step are summarised in Table 2.10. The calculations are based on the estimated participation gaps and the unit costs (explained in some detail in Chapter 3) in current prices of 1998. The estimate of gap closing costs of tertiary education can be considered exaggerated, as the unit costs should decrease in the future due to the changes in the distribution of the students to the three education programme types in favour of shorter programmes.

Table 2.10 Estimated costs of closing participation gaps

Sector of education	Participation gap (persons)	Unit costs (CZK)	Gap closing costs (bill. CZK)	As a percent of current public expenditure
Secondary	68 000	35 000	2.380	13.22
Tertiary	211 000	45 000	9.495	88.79
Basic literacy programmes	43 000	28 000	1.204	5.02
Retraining programmes	468 000	8 000	3.744	3 255.65
Job-related education	1 753 000	5 000	8.765	132.80

88. The data in the last two columns of Table 2.10 confirm, once again, that while in the initial education, particularly on upper secondary level, the present situation in the Czech Republic is highly satisfactory in comparison with the target, there is a **considerable lag in continuing education**.

2.4 Non-public costs

89. Non-public costs needed to close the participation gap are relevant in Czech conditions only in some fields of lifelong learning. That is why not all cells of Table 2.11 have been filled in.

Table 2.11 Estimated direct and indirect non-public costs of closing the participation gap

Sector of education	Private costs, mill. CZK*	
	direct	indirect
Secondary education	12	-
Tertiary education	300	-
Basic literacy programmes	(40)	72
Retraining programmes	-	-
Job-related education	462	462

Note: CZK*= Czech crown (Kč)

Notes on calculations:

- Secondary education: about 6 000 student in private schools x 20 000 CZK of school fees.
- Tertiary education: about 3 000 fee paying students x 10 000 CZK of school fees.
- Basic literacy programmes should be covered by public funds.
Estimate: about 4 000 participants x 10 000 CZK.
Premise: the participants are employed, draw a monthly wage of 6 000 CZK; the lost production value amounts to about one quarter of the wages.
- Direct private costs of enterprises of employees education:
because of information shortage required for a more accurate estimate, the same amount is used as in the preceding item.

90. Direct private costs include the costs of education participants related to school fees or price of courses. Indirect private costs include the costs of lost production due to the absence of education participants. Direct education costs of the enterprises are specified in the preceding two tables, although they are also non-public costs. Another indirect private costs (such as the costs of transport, care of the children, etc.) have not been included, as there are no data for their estimate and particularly because their amount, in comparison with other items, does not represent any barrier to lifelong learning.

2.5 Dynamic evaluation of the costs of lifelong learning

91. As we have considered the changes of the population of the respective age groups already in the preceding section estimating the participation gaps, and as we have expressed the gaps cumulatively, it is not necessary to „dynamicize“ them in this section. Another factor that could dynamicize the preceding data consists in the possible changes of education costs. In the course of the next six years such changes may take place (e.g. due to inflation), but we estimate them as insignificant. However, even if the costs should increase, we consider the closing of the participation gap such a big task as can be fulfilled probably only partly by 2005. Therefore the possible increase of education costs by 2005 will probably be covered by the decrease of the absolute value of these costs due to the reduction of the estimate volume of education.

92. We do not quantify the influence of the third factor pointed out by the project management, namely the likely changes of the concept of lifelong learning, either. However, we shall try to define at least generally the contents of these changes. The full understanding, adoption and implementation of this

concept naturally assumes a certain (relatively extensive) pedagogical support. It does not involve only the development of a separate lifelong learning sector and its links with the education system, but primarily a change in the concept and content of initial education from the transfer of knowledge “once for all” to the transfer of the techniques for knowledge acquisition, a shift from *education* to *learning* in which the student is the subject and not the object of the process, i.e. the generation of the habit and need of lifelong learning. The most important component of the preparations for this condition (and of the costs of its achievement) will be the training of teachers – their both initial and continuing (in-service) education.

2.6 Characteristic of lifelong learning needs by relevant worker groups

2.6.1 Identification of lifelong learning needs of reference groups

93. In accordance with the guidelines for report drafting this section is concerned with four reference groups. The number of obligatory groups includes women returning to work after maternity leave and employed qualified (skilled and professional) workers needed new skills or competences. From the number of alternative groups we have chosen the long-term unemployed and the workers threatened with structural unemployment.

94. **Women returning to work after maternity leave** in the Czech Republic are a group pervading all sectors of economy and all qualification categories. Maternity leave granted to women lasts 28 weeks (or 37 weeks in case of multiple childbirth). On its termination the woman may stay at home until the child has attained 4 years of age. Usually the women return to work at a favourable age, in the first third of their professional career, which they intend to continue. Due to labour regulations most of them return to their former employer, although sometimes to a different job. The women who do not want to or cannot resume work for their former employer enter the labour market, where they represent one of the largest unemployment-threatened groups. Both categories of women returning to work are confronted with the need of further learning. The first group must innovate their knowledge/qualification, the second group must retrain (requalify). Both education needs are satisfied by short-term courses organised either by the employer or by the Labour Office, as a rule.

95. **Employed qualified (skilled and professional) workers** are a group whose principal lifelong learning need consists in the improvement and/or extension of knowledge and/or skill arising from the continuous implementation of new achievements and innovations in their branch or from the implementation of better methods of organisation of work. This group is the largest of all reference groups and its education needs are both permanent and most diverse. They are satisfied, as a rule, by short-term or long-term courses and by part-time studies. In the Czech Republic these courses are organised mostly by employers and take place either directly in the enterprise or in an external institution.

96. **Long-term unemployed workers** include the unemployed registered at the Labour Office for a year and over. Experience has shown that they often include persons of low or no qualification (unskilled labour) as well as persons who do not want to work. The most frequent education need of the first group is the need of qualification improvement. In case of the second group it is (theoretically) a similar need which, however, is difficult to satisfy by standard methods because of unwillingness of these subject.

97. **Workers threatened with structural unemployment** represent a group of workers who are not unemployed, but expect that their jobs will be abolished. The principal education need of this group is the improvement of qualification or, even more frequently, retraining during their present employment, if possible. The workers of major enterprises can satisfy this need, those employed in medium and small enterprises cannot.

2.6.2 Barriers to lifelong learning

98. From the economic view point some of the aforementioned reference groups are dissuaded from lifelong learning by the lack of time and the loss of profit (in the first place the employees of medium and small enterprises) as well as by the preference of activities bringing faster immediate economic benefits, while the benefits of education is often evident only much later.

99. The principal **financial barriers** encountered by almost all reference groups include, in our opinion, the **non-existence of financial incentives** for both the employees and the employers (as well as the unemployed) which would support and facilitate various ways of lifelong learning. We hold it as the **main and fundamental defect of the whole education system in the Czech Republic**.

100. **The non-existence of an integral information system** on the possibilities of continuing education constitutes other than financial barrier to lifelong learning.

101. The majority of present or potential barriers are due to administrative and legislative causes. Of principal significance is the fact that the competences of national authorities in the field of lifelong learning are not clearly defined or co-ordinated. This situation is due to the fact that no integral concept of educational policy has been adopted so far. It causes numerous problems even in initial education. For the development of lifelong learning, however, it represents an insurmountable obstacle. General targets of education related to economic and socio-cultural needs of the country and the strategy of their achievement through initial and continuing education should be defined by the legislation. On the basis of the consensus on the objectives and the strategy of their achievement it would be possible to define the rights and obligations of the individual actors and the ensuing flows of funds required for the achievement of this objective.

CHAPTER 3. INCREASING THE EFFECTIVENESS OF LIFELONG LEARNING

3.1 Costs and benefits of lifelong learning

3.1.1 Secondary education

102. Public expenditure per student in Czech secondary schools is given in Table 3.1 both in current and constant prices.

Table 3.1: Public expenditure per student in secondary schools in 1993–1997

School type	1993	1994	1995	1996	1997	Index 97/93
Expenditure in current prices, thousand CZK						
Gymnasiums	18.1	25.1	30.3	32.3	28.0	155
Secondary technical and higher professional schools	23.2	27.7	28.1	30.4	34.0	147
Secondary vocational schools	24.0	27.9	31.3	36.2	36.4	152
Expenditure in constant prices, 1993=100						
Gymnasiums	18.1	22.8	25.2	24.7	19.8	109
Secondary technical and higher professional schools	23.2	25.2	23.4	23.3	24.0	103
Secondary vocational schools	24.0	25.4	26.1	27.7	25.7	107

Source: Institute for Information on Education

Index of consumer prices	1993	1994	1995	1996	1997
1993 = 100	100.0	110.0	120.0	130.6	141.7

Source: Czech Statistical Office

103. The data in Table 3.1 show that the expenditure per student in the Czech Republic increased (approximately 1.5 times over 5 years), but in constant prices this increase was minimum. Faster growth took place in preceding years. The data further confirm that the highest unit costs are in secondary vocational schools. Between 1989 and 1990 the expenditure on vocational education from state budget jumped as a result of the important change which took place in the Czech Republic at that time. As the interest of enterprises in the training of apprentices during their privatisation and restructuring dropped significantly, secondary vocational schools were exempted from the enterprises and the State undertook to pay for the practical training of apprentices. (Until that time it was funded by the enterprises and their

expenditure, which represented some 20% of total educational costs, was not included in public expenditure on education).

104. In this way this **expenditure was shifted from the business sector to the budget sector** which increased the budget expenditure. In 1989 public expenditure per student of secondary vocational schools was the lowest per student expenditure of all secondary schools. In two years it doubled, while in other two secondary schools types it fell.

105. The **structure of public expenditure** on education in Czech secondary schools is shown in Table 3.2.

Table 3.2: Cost component of public spending on secondary education (%)

Year	Investment cost	Current cost	Share of salaries in current cost
1994	13.2	86.8	65.8
1995	14.3	85.7	70.9
1996	13.7	86.3	73.0

Source: State final accounts

106. Table 3.2 reveals several specific features of the public expenditure on secondary education in the Czech Republic. In the first place it is the **relatively low share of investments expenditure** and the high share of current expenditure. More detailed information on investment expenditure shows that its major part is used for the refurbishment of existing buildings, which has been neglected for a long time, and only a very small part is used on the equipment for the educational innovation. It is to be feared that it will reflect in the quality of education and its results.

107. Table 3.2 further reveals that the **biggest component of current expenditure is the salaries**, which represent about three-quarters of them. Nevertheless the share of salaries in the total expenditure of secondary education in international comparison is the lowest among all OECD countries. The development of secondary teachers' salaries in the Czech Republic is given in Table 3.3

Table 3.3: Secondary school teachers' monthly salaries

	1992	1993	1994	1995	1996	1997
Average wage in the CR	4 790	6 008	7 114	8 438	9 994	11 029
Teachers' salary	5 037	6 459	7 881	9 148	10 956	11 710
Of which:						
<i>Gymnasiums</i>	5 876	7 618	9 397	10 881	12 697	13 505
Secondary technical schools	5 818	7 563	9 126	10 731	12 838	13 391
Secondary vocational schools	6 006	7 800	8 666	10 852	12 676	13 186
Rate of teachers' salary to average wage	1.05	1.08	1.11	1.08	1.10	1.06

Source: Institute for Information on Education

108. The data of Table 3.3 show an **increase of teachers' salaries** in secondary schools in 1992–1997 (index 2.32). However, this increase is almost identical with the increase of average wage in the Czech Republic (index 2.30). This is confirmed by the development of the indicator in the last line of the table – the rate of the teachers' salary to the average wage in the whole economy. The discussion of the teachers'

salaries is the hottest subject in the sector of education in the Czech Republic. Low salaries of teachers not only jeopardise the prestige of the profession, but also cause the exodus of teachers (often of the best) to other vocations. The bargain between the Ministry of Education, Youth and Sport and the Trade Unions on teachers' salaries usually end by a compromise resulting in some increase of teachers' salaries on the one hand, but – due to the limited funds on education in the state budget – causing the reduction of other cost items on the other hand. This applies in the first place, to current costs, important particularly in VET. This development also suggests a low rate of innovation and negative influence on the costs of the continuing education of teachers.

109. Since the school year 1997/98 the Ministry of Education, Youth and Sport decided to improve the effectiveness of the teachers' salaries expenditure by an **increase of their teaching load** per week. In secondary schools the teaching load increased by two hours – from 19 to 21 hours per week. This measure met with a hard opposition of the Trade Unions pointing out the continuously increasing number of teaching hours of Czech teachers. Until 1992 a secondary school teacher taught 570 hours per year on average. In the period of 1993–1997 this figure rose to 627 hour and after 1997 to 687 hours. The analogous indicator of OECD countries as a whole amounts to 688 hours per year [18]. It is obvious that the volume of work of Czech secondary school teachers was previously lower than usual in the OECD countries.

110. Another way to improve the effectiveness of expenditure is an increase of work intensity in terms of the pupil/teacher ratio. Its development is not satisfactory, either. The **pupil/teacher ratio** fell from 12.7 to 10.1 in *Gymnasiums*, from 9.6 to 6.4 in secondary technical schools and from 21.2 to 14.2 in secondary vocational schools (in vocational schools these figures do not include the practical-training instructors). The principal causes of this development include the demographic decline and the frequent division of classes into teaching groups. For this reason the Ministry of Education, Youth and Sport restricted the possibilities of dividing the classes into minor groups. The teachers argue that it reduces the quality of education, but the analyses have shown that this division was often unnecessary and ineffective.

111. An important measure in the improvement of effectiveness of public spending on education is the so-called **programme of school network optimisation** adopted by the Ministry of Education, Youth and Sport. The programme aims to reduce the number of schools by merging several minor schools into a single major subject. The purpose of the programme is **to repair the enormous increase of the number of schools** in the first half of the 90s, i.e. in the period of liberalisation, when the private schools were founded and the state schools were broke-up into several autonomous subject. While in the school year 1989/90 the Czech Republic had 1 246 secondary schools, all of which were state schools, in 1996/97 this figure increased to 1 927, of which 547 were private schools.

112. The result of this process was the fall of the average number of pupils per school from 447 to 342 in *Gymnasiums*, from 414 to 180 in secondary technical schools, and from 480 to 203 in vocational schools. In relative terms the size of *Gymnasiums* in 1996/97 represented 88%, that of secondary technical schools 54% and that of vocational schools 58% of their size in 1989/90. Apart from that, as a response to the previous rigid reglementation of their specialisation by central authorities, the schools started increasing the number of offered specialisation, so that ever smaller schools offered an ever increasing number of study branches.

113. A great number of small schools results in high financial cost of their operation (the high share of fixed cost in total cost of small schools), but primarily in lower possibilities of effective use of the staff and technical equipment of the schools and the danger of unqualified teaching of subject for which the teachers are not qualified. The requirements on the management and administration of the education system as a whole increased and its inner cohesion deteriorated.

114. The objective of optimisation launched in 1997 is not merely a reduction of the number of schools, but also an improvement of their branch structure while preserving the availability of educational opportunities. These objectives require a strategic approach on the part of School Offices, co-operation with local government authorities and with the Labour Offices, which have information on the chances of the graduates of the respective schools and branches on the labour market. All these partners are only starting learning their new roles in an environment characterised by extraordinary dynamism and non-transparency. Therefore, a satisfactory solution is difficult to find. Moreover, the concept of optimisation has not taken into account the needs of lifelong learning. Another negative aspect consists in the fact that the process of optimisation involves only state schools, which are bigger in most cases, and does not involve private schools, which are usually very small.

115. In recent years the increase of the number of schools has been stopped successfully and several dozens of schools have merged. However, the results have not fulfilled expectations so far. The expenditure was reduced even faster than expected, but the reduction of the number of schools represents merely one third to one half of the initial expectations. The average size of secondary schools in the Czech Republic has remained extremely low, due above all to small private and Church schools.

116. In the field of **teaching innovations** which would result in the reduction of expenditure e.g. by a better use of distance teaching, a greater use of computers or the application of better teaching methods no remarkable results can be observed in the Czech Republic in the 90s. The opinion prevails that teaching innovations are due to the initiative of enthusiastic individuals (and not to the support from the „top” of the system or the results of strategic steps) in the majority of cases and that these innovations which are of small-scale only are not transferred to the mainstream on adequate extent.

117. For secondary schools a **quasi-competitive environment** has been created. The schools try to attract the highest possible number of students, because it is on the basis of their number that they obtain funds from the state. Due to the demographic development, however, the overall number of enrolled in and the demand for secondary education is falling. On the other hand the increasing number of secondary schools has resulted in a higher offer of education which has increased the competition among schools. This positive feature, however, is weakened by the fact that some schools, trying to admit the highest possible number of students, have reduced their admission requirements and so threatened the quality of education.

118. The prerequisites for the use of the competitive environment to the **benefit of the quality of education** have not been created in the Czech Republic so far. Even the monitoring of the quality is not satisfactory. Information on the quality of education in the individual schools is not accessible to the public, if it exists at all. The public can read only the annual reports, which the schools must present obligatorily, and the reports on the results of school inspections. Neither report type, however, can be considered a satisfactory source of information on the quality of education provided by the respective school. The Institute for Information on Education has been implementing so-called *SET programme* (Segmental Evaluation and Typology of Secondary Schools). In the framework of this programme it ascertains selected indicators of every general and technical secondary school (such as language education, provision with computers, success of the transition of its graduates on higher education institutions, etc.). Their summary is published every year in a form of ranking list. Although the participation of schools in this programme is voluntary, about 90% of all secondary schools participate. Even though the results of the programme do not inform about the quality of individual schools, they provide information enabling to compare individual schools in terms of selected indicators or to choose from them according to selected criteria.

119. More significant information on school quality may be expected from the implementation of the intended standardisation of the final (*maturita*) examination.

3.1.2 Tertiary education

120. Public expenditure per student of Czech higher education institutions in 1989–1996 is shown in Table 3.4

Table 3.4 Public spending per student of higher education institutions in 1993–1997 (thousand CZK)

Public expenditure	1993	1994	1995	1996	1997	Index 1997/1993
In current prices	60.8	72.9	77.7	83.2	76.8	126
In constant prices	60.8	66.3	64.7	63.7	54.2	89

Source: Institute for Information on Education

Index of consumer prices	1993	1994	1995	1996	1997
1993 = 100	100.0	110.0	120.0	130.6	141.7

Source: Czech Statistical Office

121. The table gives the data on higher education institutions, but does not include the higher professional schools (see later). The development shows an important fact, namely the **real reduction of expenditure**. In Chapter 2 of this report we have mentioned the fast increase of the number of students in the sector of higher education where demand exceeds supply. However, the development of expenditure per student shows that, given the restricted financial resources, this increase of the number of students was attained at the cost of the reduction of spending per student.

122. The expenditure on higher professional schools is not included in the Table 3.4 for multiple reasons. They were only being introduced, in the period under consideration have operated on a small scale only and their per student cost are not available because it is included in the costs of secondary technical schools (see Table 3.1). These schools operate mostly in secondary schools, are subject to the same law as the secondary schools, are granted identical financial quotas and are allocated funds through Schools Offices. They differ from the secondary schools by the fact that their students have to pay fees even in state (communal) schools. The fees are intended to cover higher costs of these schools (as compared with secondary schools). The fee must not exceed half the calculated costs per student.

123. The structure of public expenditure on higher education institutions is given in Table 3.5

Table 3.5 Structure of public expenditure on higher education institutions (%)

	1989	1990	1991	1992	1993	1994	1995	1996
Share of investment cost	8.3	10.7	9.1	8.3	12.1	20.3	15.6	17.0
Share of current expenditure	91.7	89.3	89.9	91.7	87.9	79.7	84.4	83.0
Of which: share of salaries	..	..	43.3	57.6	67.4	65.4	58.6	..

Source: State final accounts

124. The data of Table 3.5 show that the current expenditure highly exceeds investment expenditure also in higher education, although its share is slowly decreasing. Limited amount of investment expenditure results in the deterioration of the equipment of schools, which can reflect negatively in the quality of teaching. Although the share of teachers' salaries in higher education is slightly lower than in the secondary one, it represents the decisive item of total expenditure. Its share is increasing which limits, once

again, the scope of other current expenditure. In comparison with OECD countries the Czech Republic, once again, ranks among the countries in which the salaries represent approximately one half of total expenditure. Information on the salaries of teachers in tertiary sector is given in Table 3.6

Table 3.6 Higher education teachers' salaries (CZK)

	1992	1993	1994	1995	1996	1997
Average wage in the CR	4 790	6 008	7 114	8 438	9 994	11 029
Higher education teachers' salaries	7 183	8 841	10 438	12 259	14 751	15 229
of which:						
professors	10 439	12 312	15 208	18 332	21 569	22 389
associate professors	8 668	10 650	12 955	15 393	18 354	19 014
Rate of teachers' salary to average wage	1.50	1.47	1.47	1.45	1.48	1.38

Source: Institute for Information on Education

125. Table 3.6 shows that the **university teachers' average salary** in the period under review **increased** (index 2.12), but the average wage in the Czech Republic increased faster (index 2.30). That is why the ratio university teachers' salary/average wage has mildly decreased. In comparison with the salaries of secondary schools teachers the salaries of higher education teachers are more markedly differentiated, because the categorisation of higher education teachers (professors, associate professors, etc.) is stricter and is more closely related to salaries. The relatively small difference between the salaries of university teachers and the average wage in the Czech Republic makes this profession not very attractive. It is also the cause of the departure of some university teachers from the sector of education or that is why they take-up another part-time job apart from their pedagogical activities. The number of teaching hours in tertiary sector usually amounts to 15 hours per week in case of assistant lecturers and 4 hours per week in case of professors, who represent about one tenth of the total teaching staff. The number of students per teacher is relatively low, varying from 9.4 in 1989/90 to 10.6 in 1995/96. The lowest number – 9.1 – was attained in 1993/92. A certain increase in recent years gives evidence of a mild increase of effectiveness of tertiary education in this respect.

126. During the preparations of the new Higher Education Act the endeavour to reduce public expenditure on tertiary education in the Czech Republic initiated the discussion on the introduction of **school fees** which became one of the hottest subjects with numerous *pro* and *contra* opinions. In the end the school fees were not introduced, but the new Act provided the possibility for the higher education institutions to charge non-negligible fees, if the student extends his studies for more than one year beyond the official duration of the study programme.

127. The new Higher Education Act, which has entered into force on January 1, 1999, changed the status of higher education institutions from state ones to public ones. The Act gives the higher education institutions greater competences in various fields, including **finance**. School buildings and their equipment, formerly the property of the State, have become the property of the individual higher education institutions, which can manage it autonomously and try to obtain further funds in the framework of this management. Although the higher education institutions co-operate with further institutions including enterprises, particularly in the field of research, this co-operation is less usual and less extensive than in West European countries. That is why it forms only a modest source of their revenue.

128. **The Accreditation Commission** that is a Government body performs **quality control** of higher education institutions in the Czech Republic. Its principal task is to grant and withdraw accreditation of study programmes to individual faculties and to assess the quality of education provided by them. In the sector of higher professional schools the Association of Higher Professional Schools initiated the preparation and implementation of the *EVOS programme* concerned with the evaluation of higher professional schools on the basis of defined rules. The individual higher professional schools apply for evaluation voluntarily and in case of successful results they obtain a certificate of quality.

129. While in the sector of higher professional education the **competition** is provided by the parallel existence of state and private schools, in the field of higher education the State retained monopoly until 1998. The new Higher Education Act, however, permits to establish non-state higher education institutions. The discussion on this subject, which has taken place in the years preceding the adoption of the Act, has shown that the universities defend their position and do not favour any extension of the higher education institutions network. The same tendency is manifested also in the discussion of the **diversification of tertiary education** in the Czech Republic. Higher education institutions, for instance, do not recognise the studies at higher professional schools, thus hindering greater accessibility of tertiary education. As the studies at higher professional schools are less expensive than university studies, this attitude influences not only the rate of participation in tertiary education, but also total public expenditure on tertiary education.

3.1.3 Adult education and training

130. Adult education in the Czech Republic – like in other countries – forms a large and highly **diversified** component of lifelong learning. Provision of education to adults is the task of various institutions that can be classified into four groups. The first group includes **schools**, in particular secondary, post-secondary and tertiary, offering both long-term (several years) programmes resulting in the acquisition of a certain generally recognised education grade, and short-term training courses. The second group includes **non-profit organisations**, such as foundations, Churches, Trade Unions, providing mostly short-term training courses. The third group covers **enterprises and other institutions** (such as public administration bodies) organising training courses for their employees. Some of these organisations (particularly bigger companies) use their own educational facilities or purchase the required training courses from schools or other educational institutions. The fourth group consists in **commercial educational institutions**, offering training courses on supply and demand basis. These institutions engage in all fields of adult education specified in the guidelines for the preparation of this report: in basic literacy programmes, in retraining programmes and in job-related education.

3.1.3.1 Basic literacy programmes

131. The basic literacy programmes represent a relatively small fraction of adult education in the Czech Republic, where the illiteracy percentage is very low (it is estimated at about 1% of the population) so that the target group is not very large. The reason of illiteracy of this target group does not consist in insufficient availability of education, but primarily in the unwillingness to learn. In 1996 the Ministry of Education, Youth and Sport launched a special basic literacy programme for entirely illiterate or partly literate persons who had not completed basic education or attended an ESN school, concerned with the education of mentally retarded or socially endangered children. The programme enables the acquisition of basic literacy in a one-year or several years training course organised at a basic or an ESN school. The network of schools, where it is possible to attend these basic literacy courses, is so organised as to provide at least one school in every district (with the mean population of some 130 000). There are also cases when the institutes of social care provide these courses for handicapped persons. Children, young people and

adults can attend these courses. The attendance is free of charge and the costs are covered by the State like the costs of compulsory education or upper secondary education. The data on the numbers of people attending these courses were given in Section 2.1.4. Public expenditure per one participant in these courses can be estimated at about 30 000 CZK per year.

132. Like in the case of public expenditure per secondary school student the biggest cost item of basic literacy courses consists in the teachers' salaries. The teachers in these courses are often not only those qualified for general education, but also those qualified for more exacting work with specific health and social group which considerably increases the expenditure on these courses.

133. It is not assumed that the expenditure on basic literacy courses will be reduced in the future. It is impossible to count on the introduction of more economic teaching methods applicable to the majority of the population or with a better organisation of work. Shortening of courses is not envisaged, either; it is desirable to extend rather than shorten their duration. Certain economy of unit costs (although not very significant) could be obtained by an increase of the number of participants in one group.

3.1.3.2 Retraining programmes

134. **Retraining programmes** in the Czech Republic are attended primarily by the unemployed registered at the Labour Offices and, in a smaller extent, by employed people threatened with the loss of job or envisaging a change of job with the same employer. Although the numbers of the unemployed in the individual regions differ, at the beginning of 1999 the mean unemployment rate attained about 7.5%. As for the distribution of the unemployed by the length of unemployment, according to a sample survey made by the Czech Statistical Office in the summer of 1995 [35] and further data of the Ministry of Labour and Social Affairs the largest group of the unemployed consists of the people seeking employment for less than six months. The share of the long-term unemployed, i.e. those seeking employment one year and over, represents about one quarter of the whole number of the unemployed. The distribution by age of the unemployed is generally regular. The development of the structure of the unemployed in the past five years is shown in Table 3.7.

Table 3.7 Development of the structure of the unemployed

Category	Number 1993	Share 1993	Number 1997	Share 1997	Number IX/1998	Share IX/1998
Total	185 216	100.0	268 902	100.0	350 690	100.0
Unskilled	69 512	37.5	89 683	33.4	102 115	29.1
Handicapped	20 016	10.8	40 460	15.0	45 720	13.0
School graduates	23 859	12.9	44 174	16.4	77 115	22.0
Over 50 years of age	16 984	9.2	39 112	14.5	47 097	13.4

Source: Ministry of Labour and Social Affairs

135. The retraining programmes are provided – in agreement with the Labour Offices – by schools or other educational institutions accredited by the Ministry of Education, Youth and Sport. At present they number about 1 000 and offer some 1 500 retraining programmes. The data on the expenditure of retraining programmes in the Czech Republic in 1993 – 1998 are given in Table 3.8.

Table 3.8 Expenditure on retraining programmes

Year	Number of participants	Total expenditure (mill. CZK)	Expenditure per participant
1993	11 352	73.36	6 462
1994	15 167	103.25	6 807
1995	14 034	100.09	7 132
1996	12 133	91.73	7 560
1997	11 918	90.42	7 587
1998	16 381	115	7 541

Note: The data for 1998 are estimated.

Source: Ministry of Labour and Social Affairs

136. The data of Table 3.8 show a **rising trend** of most indicators. This is due to the rising unemployment rate and the endeavour of the Labour Offices to mediate a greater number of retraining programmes. In the future further increase of retraining can be expected and consequently an **increase of expenditure**. In 1999 the Ministry of Labour and Social Affairs envisages, for instance, an increase of the so-called non-specific retraining programmes, i.e. programmes concentrating on the acquisition of broader skills applicable to several professions. As these non-specific training programmes are longer, as a rule, than the so-called specific retraining programmes (concerned with the acquisition of skills required by a specific profession), it is possible to expect further increase of retraining costs also for this reason.

137. Most of retraining costs represent public expenditure, private expenditure representing only a small part. The latter includes the cases, when the employer participates in the funding of a retraining programme for his own employee whom he intends to transfer to another job; his expenditure consequently, is private expenditure. In these cases the employer incurs also further private costs due to the loss of the work of the retrained employee during his retraining period. There are no statistical data on such expenditure. Schools and other educational institutions providing retraining courses generate revenue the amount of which can be derived approximately from the costs per retraining participant and the number of participants. For the schools the participation in retraining means a better use of their classrooms and equipment in the afternoon or evening hours. The retraining courses do not use the distance learning methods rather at all, particularly because of the absence of adequate teaching materials.

138. In 1999 two significant measures concerning retraining are expected. The first concerns an amendment of the **Employment Act** which should make it possible, *inter alia*, to direct retraining also at unemployment prevention; therefore, it should concern with ever increasing frequency, also the people who have not lost their jobs yet, but are threatened with it. The second is the approval of the **National Employment Plan of the Czech Republic**. Its working version proposes, for instance, the introduction of a modular system of continuing education for various target groups in productive age, particularly for fresh school graduates, employees threatened with unemployment and job applicants. Important for finances is the proposal that the employer should be bound either to spend 1% of paid wages on the training of his employees or to pay this amount to the envisaged Education Fund. As the retraining costs are mostly funded by the state budget through the Ministry of Labour and Social Affairs (and by the employers to a smaller extent), the adoption of both measures would mean an increase of both public and private expenditure on lifelong learning.

3.1.3.3 Job-related education

139. **Job-related education of employed adults** in the Czech Republic is effected most frequently as continuing education of employees of enterprises. There are no general statistical data on this sector of education; for this reason it is possible to use only the results of ad hoc surveys organised by various institutions.

140. Since 1993 the Czech Republic has been taking part in the international project „The Cranfield Project on European Human Resources Management“ co-ordinated by the British Cranfield University. In the framework of this project the first round of selective research took place in 1993 with the participation of 193 Czech enterprises, followed by the second round in 1996 with the participation of 407 enterprises [29]. The survey ascertained also the expenditure of the enterprises on the education and training of their employees. In 1996 the survey ascertained that **23% of all enterprise employees participated in continuing education**. Similar quota was ascertained also e.g. in German, Dutch or Danish enterprises; however, it was only half as high as the quota of the employees of French, Swedish or Irish enterprises. The mean duration of continuing professional education in Czech enterprises ascertained at that time was 8 days per year in the case of managers, about 7 days in the case of technicians, 5 days in the case of administrative staff and 3 days in the case of workers, which was approximately comparable with other West European countries. However, the number of cases in which the scope of employees' education in Czech enterprises fell has been increasing recently.

141. **Expenditure of enterprises** on employees' education and training was expressed in the quoted project as a percentage of the total volume of wages. In 1996 this percentage amounted to **about 1% of wages**. It is an average varying in the individual enterprises considerably (from 0 to 4%). The analogous indicator in West European countries was about twice as high. On the basis of these data it is possible to estimate the expenditure of Czech enterprises on the education of their employees as follows: on the basis of average wage, further employment cost items of employers (mandatory health and social insurance of employees) and the number of trained employees these costs amounted to about 8.1 bill. CZK in 1996, and about 9.7 bill. CZK in 1998. The development of average wage rather than the increase of the percentage of trained employees influence the difference between the two figures.

142. At the end of 1997 the Faculty of Social Sciences, Charles University, Prague, made a research of school graduates of 20–29 years of age on a sample numbering 1 900 graduates of secondary and higher education [13]. The survey showed approximately the same percentage of trained adult workers as the preceding survey, but a higher share of technicians and tertiary education graduates (45%). However, as the average age of respondents was lower than in the preceding survey, it is not necessary to correct the above mentioned estimates of education and training expenditure in enterprises.

143. Similar data resulted also from the survey made by the AMD Agency [5] in 1996 on a sample of 995 respondents. According to this survey **30% of employees** stated that in the course of the past year they participated in continuing professional education organised by their employer and related to their jobs. The survey also confirmed that the frequency of continuing professional education of employees increased with the level of their school education and fell with their increasing age. Similar data resulted also from the survey made in 1998 by the Association of Industry and Transport of the Czech Republic, the most important organisation of employers, on a sample of about 400 industrial enterprises.

144. As we have mentioned in Chapter 2, the employees of enterprises also attend the part-time study in secondary schools, higher professional schools and higher education institutions. Their numbers were given in Tables 2.7 and 2.8.

145. The trends of the participation in these studies have been mentioned in Chapter 2. The expenditure on this education is funded from public sources. As we shall show in greater detail later on, the expenditure of part-time studies amounts to **about one third of the expenditure on regular studies** (see Chapter 4). As the expenditure on part-time studies of employed people is derived from the expenditure on regular education, the trends of their development are the same. The principal cost item is the teachers' salaries. Apart from public expenditure, however, this sector includes also private expenditure, namely the employers' costs of work not performed by the employees during their education or training. The amount of this expenditure is not monitored by statistics.

146. A comparison of the data on the development of the number of trained enterprise employees in both principal sectors of job-related education (i.e. in the enterprises and in schools), taking into account information obtained from interviews with staff managers, reveals a **mild transition from long-term education programmes to short-term training courses**. The reasons are better initial education of younger generations, the endeavour to satisfy educational demand soon and the growing need of made-to-measure training courses. This need is satisfied better by short-term, usually more specialised courses than by long-term educational programmes provided by schools. With reference to education expenditure this trend means the **transfer of expenditure from the public to the private sector**.

3.1.4 Other factors affecting expenditure on lifelong learning

147. **Innovative teaching technologies** are applied also to lifelong learning in the Czech Republic. Their scope is mildly increasing, but they remain an exception rather than the rule. As these teaching technologies are connected with the application of computers, Internet and distance learning, requiring corresponding software, they are used rather by the education institutions which have acquired some foreign software or adapted its foreign version to Czech conditions.

148. The barriers in this respect consist, on the one hand, in the high costs of generation of teaching materials for innovative teaching technologies, on the other hand in the improving, but still not very dense computer network in schools and continuing education institutions. That is why some incentives are needed facilitating the connection of schools and education institutions to Internet, such as reduced charges for Internet connection, price intervention in case of educational software, reduced duty for its import, etc.

149. The application of **incentives and supporting mechanisms** to lifelong learning in the Czech Republic is very small. They do exist, e.g. in the form of part-time studies of employed people in state schools which is free of charge, but the extent of these incentives and supporting mechanisms **should be much greater**. The very fact that no serious incentives have been introduced in the course of whole 90s, showing a complete absence of intervention both by the State and by the social partners, leaving the development to the initiative from below, is alarming. This applies to the incentives of both financial and non-financial character, such as assurance of education quality. The discussion on lifelong learning taking place in professional public often point out that the State and the social partners are taking a **passive attitude** to lifelong learning. The OECD experts assessing the Czech educational system in the middle of the 90s [36] stated *inter alia* that „latest developments (in the field of continuing education of adults) can be attributed to individual demand for courses from adults, endeavouring to improve their career outlook rather than to strategies of Czech enterprises aiming to improve the qualification standard of their employees. ... At present the Czech Republic lacks any integral system of adult education corresponding to the needs of industrial restructuring.“

150. This is also apparent in several aspects of management and co-ordination of individual areas of lifelong learning. In the Czech Republic, the individual areas of lifelong learning have, in most cases, been developing separately – i.e. independently of the other areas. This is why, in 1995, OECD evaluators stated

in their report [36] that „one of the lessons that must be learned from OECD countries lies in the need to ensure better cohesion between three subsystems of vocational education: those for young people, adults and the unemployed... In consequence of unemployment, decreasing levels of funding and growing importance of continuing education, educational policy makers have begun to address the issue of setting-up of new links between various separate infrastructures of vocational education.”

151. Poor co-ordination and steering of individual sectors of lifelong learning reflects e.g. in the different rules for financing educational activities in the individual sectors and in different decision competences of education providers on the use of funds. The sector of initial education in the Czech Republic is typical by its closed character with regard to its environment. This is manifested not only by the collision of the branch distribution of the students with the needs of the labour market and the employers, but also in the effectiveness of the use of funds. As the structure of school graduates differs markedly from the labour market requirements, it is necessary to subject the graduates of expensive initial education to retraining. It demands further funds, the effectiveness of the initial education system being reduced. It could be improved by a better co-ordination of the initial education sector with the retraining sector, e.g. by a **greater power of the labour sector, local or regional government authorities and employers in the decisions-making on initial education.**

152. Decision-making on the allocation of funds to lifelong learning on national, regional and local levels will be described later on. However, it is possible to state already here that **there is no mechanism on any of these levels which would enable the co-ordination of the use of funds in all sectors of lifelong learning** and result either in the costs saving or in a rising return of expenditure.

3.1.5 Assessment of cost savings to close the finance gap

153. The Czech Republic has a certain potential enabling to close the finance gaps, identified in Chapter 2. The lowest potential exists in the **short-term** outlook, because only the approval and implementation of the National Employment Plan is expected in the nearest future, which will influence the retraining first. In **medium-term** outlook it is possible to expect the adoption and implementation of a new Education Act which will provide an adequate opportunity for an improvement of co-ordination of the principal sectors of lifelong learning and for an improvement of financial flows and the use of funds. The present drafts of this Act, however, do not reveal any intention to introduce significant measures initiating and supporting the development of lifelong learning. Nevertheless this outlook could enable the implementation of incentives for the employers contained in the draft of the National Employment Plan which could enhance the development of job-related education of employees and partly also the development of retraining programmes. Also the Government could start implementing its intentions outlined in its programme declaration (see Chapter 1) in the medium-term outlook. In the **long-term** perspective it is possible to expect, apart from the effect of the aforementioned factors, also the use of European Structural Funds, particularly the European Social Fund.

3.2 Increasing the benefits of lifelong learning

154. An indirect incentive to increase the investments in lifelong learning in the Czech Republic consists in the improvement of its benefits through the increase of the income of individuals. The influence of education on career advancement and on the income of the individual in the Czech Republic has been increasing in the 90s. While before 1990 the principal role was played by the proof of completed formal education, at present the role of real knowledge and skills has been increasing. According to sociological research [31] in 1988 one year of education brought about a wage increase of 4% for men and 5.7% for women. By 1996 these percentages increased to 5.3% for men and 6.7% for women. On the other hand, the

influence of the length of employment on the earnings decreased in both genders. While in 1988 the length of employment dominated over education in career advancement, in 1996 the relation was reversed. Another favourable feature consists in the willingness of Czech population to invest in continuing education. According to the same sociological research about two thirds of Czech population were willing to invest in continuing education in the interest of personal career; however, this share increases more slowly than the growing need of continuing education.

155. The increase of the benefits of lifelong learning in the Czech Republic will depend to a considerable extent on whether we shall succeed – through taxation system, employment support system and other systems – in implementing incentives for individuals and/or employers to invest in lifelong learning. Apart from this principal method, but in a smaller extent, the return of lifelong learning may be increased also by an improvement of guidance and counselling services on the possibilities of continuing education for adults, the improvement of the availability of educational programmes for adults, the proliferation of model programmes of development of human resources, etc.

4. MOBILISING RESOURCES FOR LIFELONG LEARNING

4.1 Main financing principles

156. The main principles of financing of lifelong learning in the Czech Republic differ in the individual sectors of lifelong learning, thus reflecting the existing weak links among these sectors. The differences concern not only the financing principles, but also the role of their principal actors – the State, the social partners and the individuals.

157. **Initial education**, whether on higher secondary or tertiary levels, is **funded** almost exclusively **by the state authorities** even in the cases when education is provided by non-state schools. For this purpose, the state authorities use the funds allocated to education in the state budget and distribute them to the very level of individual schools. Other actors than the state authorities do not participate in this process practically at all. (Different situation exists on the level of pre-school and basic education which is funded also by the communes using, on the one hand, the funds allocated to education by the central budget, on the other hand the funds of their own budgets.) The expenditure on this education is public expenditure. Apart from public expenditure also private expenditure participates in initial education in a small extent, namely in the cases when the students of non-state secondary schools and higher professional schools pay school fees which these schools may require according to law.

158. The methods of financing in the field of **adult education** differ according to sectors. The financing of basic literacy programmes is analogous with that of initial education on the level of pre-school or basic education. The education of the long-term unemployed, forming part of retraining programmes, is financed from the state budget chapter of the Ministry of Labour and Social Affairs. State authorities „buy“ educational services for the (long-term) unemployed from schools or other educational institutions and pay for them. In this case, too, the expenditure on education is public expenditure.

159. The job-related adult education makes use of two ways of financing depending on the group of adults concerned. If the employees study externally in state (as well as non-state) schools, the financing is analogous with that of initial education. If the employees are trained in short-term courses organised by the employer, or train on their own initiative, but with the employer's consent and support, the sources of the financing are mostly the employer's sources and the expenditure on this education is private expenditure. Also the training of adults in the courses at their own costs represents private expenditure.

160. The mechanisms used for financing education from public sources are so regulated in the Czech Republic at present that the funds for education are allocated to schools or other educational institutions according to the number of students. The mechanisms of education funding from private sources are not regulated by any law and are decided by those who generate these sources (e.g. enterprises). The advantages and disadvantages and defects of these financing mechanisms will be presented in the next parts of this chapter.

4.2 Funding of lifelong learning in the Czech Republic

4.2.1 Funding of secondary education

161. The principal source of funding secondary education is the state budget. The total state budget expenditure is divided into chapters, one of which is the chapter of the Ministry of Education, Youth and Sport. The distribution of the funds of this chapter (in 1998 it amounted to 61.7 bill. CZK, in 1999 to 68.9 bill CZK) is decided by the Ministry. Apart from the budget of the Ministry of Education, Youth and Sport education is funded also from communal budgets, funding investment cost and a part of the current expenditure on institutions whom communes are organising bodies, namely on kindergarten and basic schools, but not expenditure on higher secondary education. The expenditure of both of these budgets represents public expenditure on education. The development of the indicator expressing the amount of public expenditure on education as compared with the Gross Domestic Product is shown in Table 4.1.

Table 4.1 Public spending on education and his relation to GDP in 1989–1999

Year	Public spending on education (mill. CZK)	Ratio of education expenditure to GDP (%)
1998	21 720	4.09
1990	24 166	4.12
1991	31 936	4.17
1992	39 239	4.52
1993	53 622	5.21
1994	63 225	4.82
1995	71 862	4.67
1996	82 583	5.21
1997	78 069	4.64
1998 */	61 723	-
1999 */	68 872	-

Note: */Only Ministry of Education, Youth and Sport

Source: Historical Yearbook of Education, Institute for Information on Education, Prague 1998

162. The data of Table 4.1 show that in the past decade public expenditure on education in the Czech Republic **stagnated**. Analogous indicators for the group of OECD countries amounted to 5.8% in 1993 and increased by 1% in the past decade. Analyses of education funding (see e.g. [2]) have proved that the relation of education expenditure to GDP does not inform necessarily on the priorities, scope, quality and effectiveness of education, yet shows distinctly the differences in the shares and different development of the Czech Republic values and the OECD average.

163. The methods of financing upper secondary education in the Czech Republic were changing in the course of the 90s. Some reasons of these changes resulted from the changes in the structure of regional bodies and their competences, concerned the whole organisation of State and local government authorities and were external to the field of education and transcended it. Further reasons, however, were the result of the intentions initiated in the field of education. Particularly in 1991 and 1992, when most democratic methods of management and financing were sought which would stimulate the expansion of education offer, a fundamental change of financing was prepared and implemented. While before that time the main criterion of fund distribution from the state budget was the amount allocated to the individual schools in the preceding year, the new criterion consisted in the **number of students**. This ranged the Czech Republic

among the countries using the **per capita method** in education financing. To enable the application of this method, it was necessary to establish a system of bodies for fund distribution on the one hand, and to draft a methodology of computation of per capita allocations on the other hand.

164. The **bodies** distributing the state budget funds to the individual schools in the Czech Republic form a **two-level system**. The first level of distribution is national level on the Ministry of Education, Youth and Sport, the second level are the School Offices in the individual districts (divisions in Prague). Czech Republic has 77 districts with an average population of 130 000 which represent NUTS 3 in regional classification of EU countries. The School Offices are the bodies of the Ministry of Education, Youth and Sport, i.e. specialised bodies of the educational sector of state administration and not the bodies of regional self-government.

165. After 1992 the methodology of fund distribution was refined every year, although its kernel remained the same. Since 1992 the decisive part of non-investment funds has been distributed on the basis of the formula funding – by intermediary of so-called „**normative cost**“. The normative cost is the quota specified by the Ministry of Education, Youth and Sport defining the amount of non-investment expenditure per student of a school of a certain type for the purpose of budget funds distribution. The normative cost were introduced to eliminate subjective factors from fund distribution and to give greater power to district bodies.

166. In 1995 the Ministry of Education, Youth and Sport incorporated into the formula funding methodology also the **standardisation of the number of school employees**. Since that year fund allocation includes also the calculation of the standard number of school employees determined on the basis of three indicators: the average number of students per class, the average number of teaching hours per week taught in a class and the average teaching load of teachers. The reason for the introduction of the standardised number of school employees was the pressure of the Ministry of Finance requiring wage regulation in all branches of economy on the one hand, and the endeavour of the Ministry of Education, Youth and Sport to motivate the schools for the reduction of the number of their employees and the differentiation of their salaries. If the school managed to provide the required performance with a lower number of employees, it could divide the „saved“ amount among the remaining employees in the form of a higher bonuses added to their tariff salaries.

167. In the first years of normative costs application their calculation took into account the different costs of education in the schools of individual types. Therefore, the **normative costs** were **differentiated** according to school type. This approach did not prove well, because even within the same school types (e.g. secondary technical schools) there were considerable differences in education costs **according to education branch** (specialisation). For this reason the normative costs were differentiated subsequently according to related education branches.

168. On the first level of fund distribution, i.e. the distribution of the whole budget among the districts, the „national“ normative costs, identical for all, are used. On the second level, i.e. the allocation of the means to the individual schools within the district, the „national“ normative costs are not binding for the distributing authorities. The School Offices use their own „district“ normative costs different from one district to another. In the calculation of their „district“ normative costs the School Offices must observe certain binding rules, but may apply their own priorities.

169. Although the formula funding changed during the years and amounts of quotas in individual years are not comparable, we give a survey of the normative costs for some types of higher secondary schools in Table 4.2

Table 4.2 Current normative costs for secondary schools

	1992	1993	1994	1995	1996	1997	1998
<i>Gymnasiums</i>	9 490	13 794	17 094	20 120	21 560	26 366	22 419
Commercial schools	8 900	14 581	17 094	19 742	21 669	23 374	23 478
Pedagogical schools	8 035	14 353	17 574	20 555	23 518	26 567	24 236
Schools for librarians	8 035	14 353	17 094	19 742	21 831	26 256	22 459
Industrial schools	11 125	17 598	21 781	24 472	27 012	31 953	27 188
Arts and Crafts schools	x	40 838	42 495	36 436	44 356	48 764	48 778
Agricultural schools	14 833	24 485	25 449	29 679	32 959	38 676	30 908
Forestry schools	14 833	24 485	26 410	29 679	32 959	38 193	30 611
Conservatories	19 777	38 057	40 200	46 050	69 505	70 830	65 302

Source: State budget, Chapter 333, Ministry of Education, Youth and Sport of the Czech Republic

170. The normative costs for secondary schools of the respective branches apply also to higher professional schools of the same branch (specialisation).

171. In the first years of application of formula funding the Ministry of Education, Youth and Sport distributed to the districts about 90% of the whole volume of funds allocated from the state budget. In the years to follow this figure rose to about 97%. At present the methodology is refined to the minute details. The cost requirements of education in the individual branch groups are differentiated by several dozens of normative costs.

172. According to the present methodology and above mentioned normative costs the funds are distributed by the Ministry of Education, Youth and Sport to the districts as follows:

First the standardised number of teachers (employees) is computed using the formula: $U = V : n$

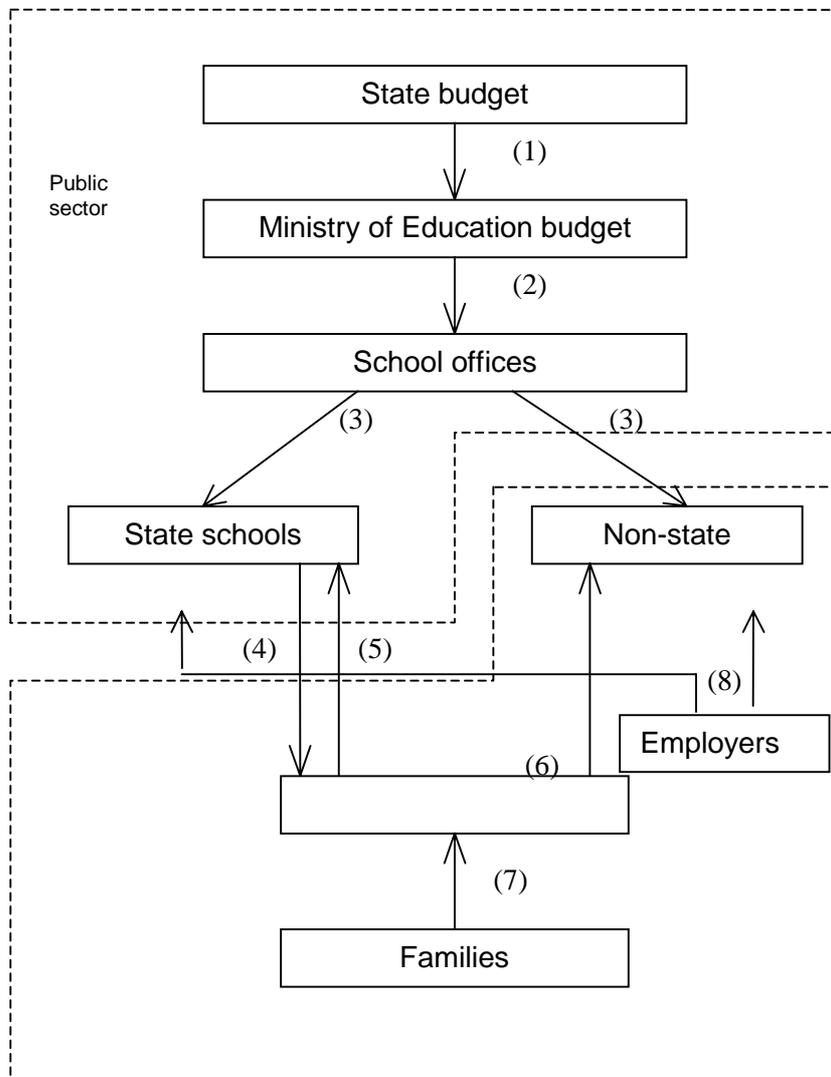
where: U = standardised number of teachers (employees),

V - performance (i.e. the number of students)

n - normative costs

173. On the basis of the standardised number of teachers (employees) the amount of salaries of this staff is computed by the multiplication of this figure by the normative cost. The methodology enables corrections arising from the differences between teachers and other staff. The whole process is shown in Figure 4.1.

Figure 4.1 - Flows of funds to upper secondary education



Explanatory notes:

- (1) Allocations to education from the state budget
- (2) Amount allocated by the Ministry of Education on the upper secondary education
- (3) Amount allocate by the School Offices to schools in the district
- (4) Scholarships disbursed to students
- (5) Payments for catering and accommodations
- (6) Tuition fee payments
- (7) Family expenditure on education
- (8) Employers' payments for the training of „non-state apprentices”.

174. Since 1992, when the formula funding of education was introduced, it has been not only improved and detailed, but also used by the Ministry of Education, Youth and Sport to realise some measures in the field of **education policy**. In 1995 the Ministry decided that the normative costs for post-secondary studies and follow-up studies would be reduced only to 50% of standard normative costs. In the case of post-secondary studies, which did not admit new students after its abolishment and only the students admitted in preceding years were completing their studies, it was no substantial interference. In the case of follow-up studies, in which the graduates of upper secondary vocational schools could achieve “complete” upper secondary education, which had developed considerably in preceding years, however, this decision restricted considerably the education offer. The schools providing formerly this education were forced to radically reduce the number of students for financial reasons. For this reason this measure can be interpreted as a **serious restriction of lifelong learning**. The Ministry of Education, Youth and Sport substantiated its decision by stating that some schools provided follow-up courses of poor quality, but applied an economic instrument instead of quality control instruments. This discriminating measure is still in force, although formally special normative costs were stated for follow-up courses in 1998. However, in comparison with the normative costs for analogous specialisation (branches) of secondary technical schools (for the pupils leaving basic schools) they are approximately half as high. Further measures followed: normative costs for follow-up courses organised by private schools are half as high, and those for part-time studies (of employed people) represent merely one third of the normative costs of standard study. Regular studies of students over 21 years of age have been financed only by 50% normative cost since 1998. These financial measures have been supplemented also with some administrative measures: since 1998 students can be admitted to regular follow-up courses only in such number as will enable that in 1999/2000 maximally 10% students who had completed secondary vocational schools will attend follow-up courses.

175. Another example of the application of the formula funding of education was the measure of the Ministry of Education, Youth and Sport of 1996 **changing the financing rules of non-state schools**. While previously granting the non-state schools the funds amounted to 90% of normative costs of state schools, in 1996 the ministry reduced the basic grant to non-state schools to 40–80% of normative costs according to school type and stated administrative and pedagogical conditions of 90% granting (for special schools 100%). In the years to follow the rules for non-state school financing were further amended. This aroused discontent of these schools, which objected that due to the instability of the rules they were unable to prepare adequate strategy of their further development. The tension between the Ministry of Education, Youth and Sport and non-state schools continues. For 1999, for instance, the salaries of teachers of state schools were increased and the normative costs were adjusted. As the teachers of non-state schools are not paid according to the same salary ordinance, the normative costs for private schools were not adjusted. The development of state subsidies to non-state schools is given in Table 4.3.

Table 4.3 State subsidies to non-state schools (thousands CZK, for all school types)

Schools	1992	1993	1994	1995	1996	1997
Private	148 376	624 607	907 052	983 007	1 961 440	1 842 575
Church	19 473	124 671	192 614	241 547	299 795	311 678
Non-state, total	167 849	749 278	1 099 666	1 224 554	2 261 235	2 154 253

Source: State final account - Education, Chapter 333, Ministry of Education, Youth and Sport

176. Funds for investment expenditure are distributed by the Ministry of Education, Youth and Sport without the application of quotas by direct allocation to individual investment projects.

177. Apart from budget funds secondary schools may acquire further revenue by their **economic activities** related to education they provide. This concerns particularly the secondary vocational schools, which can manufacture simple products or provide services against payment in the framework of vocational training. The possibilities of these activities depend on the education branch. The revenue obtained by economic activities may be used by the schools, in agreement with the respective School Office, for the financing of their investment or non-investment expenditure. The school usually discusses the amount of this revenue and its use with the School Office at the time of annual budget preparation. However, the revenue of schools from economic activities is not high and represents maximally 10% of their overall revenue.

178. **The formula funding** has several **advantages**. The distribution of funds is governed by strict rules known to all institutions concerned. The method reduces greatly the subjective factors of fund allocation and enables the balancing of needs and resources. It enables an analysis of the economic behaviour of every school. It enables to ascertain the causes of the deviation of individual school from „national“ (or district) normative costs and so to discover defects in the economic behaviour of the school e.g. in the determination of the number of students in classes, in the proportion between the number of teachers and other school employees, in the break-up of classes into groups, in the proportion between the tariff and extra-tariff salary components, etc. The method also enhances competition among individual schools.

179. Apart from these advantages the method has also its **disadvantages**. In the Czech Republic it was introduced only as a method of the *distribution* of the funds allocated to education by the state budget, but not as a method of its *preparation*. In the field of education the budget is still prepared by the verbally condemned index method which **does not enable objective determination of the need of funds**. That is also the cause of annually repeated discussions about the expenditure on education during the budget debate in the Parliament which are not based on the needs of education, but represents merely the haggling of the representatives of political parties and individual ministries.

180. Another shortcoming of the formula funding is the fact that it is based on the belief in the rational user of educational services and considers all learners equivalent regardless of the situation on the labour market. It invites schools to admit the maximum number of students even in the branches in which the unemployment of school-leavers increases, even in the situation characterised by the predominance of supply over demand due to demographic decline, and results in the reduction of the requirements imposed on applicants. Another shortcoming of the method is also the fact that it is based on quantitative (and not qualitative) indicators. Its adoption was not accompanied with further measures in the field of quality of education. It is also highly exacting from the administrative point of view – the district School Offices, which are actually regional departments of the Ministry of Education, Youth and Sport, have about 2 200 employees.

181. The description of the financing of upper secondary education in the Czech Republic reveals the crucial role played by **state authorities**, while the communal and regional self-government bodies do not take part in it. As this condition has a negative effect e.g. in the one-sided decisions on the school network, on the numbers of learners in the individual branches without any links with the regional labour market and regional development in general, the response is informal co-operation between relevant regional or local institutions. In several districts informal bodies have originated spontaneously to provide the forum for the much needed discussions and consultations of the representatives of various formal bodies and authorities, schools and important employers in the region.

182. The formula funding enables the education applicants a free choice of school. At present, however, they **lack information on the quality of education** provided by individual schools. Pupils/students of private schools and their families play a more active role in relation to schools, because they participate in their financing. The school fees in private secondary schools vary at present between 10 and 30 thousand CZK per year and are increasing continuously. The data ascertained by sample surveys have revealed that the highest fees are required by private *gymnasiums* (some 17 thousand CZK on average).

183. Education provided by state secondary schools is free of charge. If the students take their meals at school or are accommodated in the school hostels, they pay certain charges for these services, which are subsidised by the state, so that the charges remain acceptable. Transport to school is subsidised on the basis of rules provided by the Act on State Social Support and is funded from the chapter of the Ministry of Labour and Social Affairs of the state budget. Similar rules exist also to support the students from socially disadvantaged families. They may obtain scholarships funded by the state the amounts of which are stepped not only according to the income of the student's parents, but also according to the student's marks to motivate the students for best achievement.

184. **Access** to secondary education is open to all and does not show any inequalities. The shares of boys and girls are generally balanced, but differ according to study branches. Handicapped students can attend special schools. The share of national minorities in the Czech Republic is low (about 6.5% of the whole population). In regions with a higher concentration of these minorities there are schools with the teaching language of these minorities. The share of immigrants has been low so far, but is increasing.

185. **Education expenditure** is recorded by every school. The development of this expenditure is monitored by the School Offices, by Ministry of Education, Youth and Sport and globally by the Ministry of Finance. Quality monitoring is at the very beginning.

186. The applied **system of financing** is based on the distribution of state budget funds to the school level. However, this function, which is generally fulfilled by the present system, **does not include any incentives** motivating schools to achieve higher effectiveness, better links with the regional labour market, higher quality of education and purposeful development of individual schools. The system **does not define any priorities**, either, the achievement of which should be motivated by the system. At the beginning of adoption of the formula funding there was some endeavour in this respect, but the promising projects degenerated fast and their failure was not analysed. There is no other than financial incentives.

187. In the **future** it is possible to expect a change resulting from the intended establishment of regions and their authorities. After January 1, 2000, the break-up of the Czech Republic into 14 regions the size of which should comply with the NUTS 2 criteria should take place. The competences of new regional authorities are being drafted at present. It is envisaged that regional authorities should become the organising bodies of secondary schools (it has been the Ministry of Education, Youth and Sport so far). The discussions concern also the question, whether the School Offices in the capitals of new regions will be state administration or regional self-government authorities. According to the alternative adopted the role of the regions in the funding of education will be strengthened or weakened. Together with state administration reform also the budget rules and the redistribution of funds between the state and the regions should take place.

4.2.2 Funding of tertiary education

188. As we have mentioned in Chapter 2, tertiary education in the Czech Republic is provided by the schools of two types: higher professional schools and higher education institutions. Both types of institutions are financed by the method of normative cost, but the fund flows to the institutions are somewhat different.

189. **Higher professional schools** are financed in the same way as secondary schools (see section 4.2.1). In 1996 the funds allocated to higher professional schools were distributed from the state budget for the first time after the establishment of these schools. The amount allocated to the individual schools was computed on the basis of the same normative cost as for secondary technical schools of analogous branches. However, in exceptional cases the School Offices had the power to increase these quotas by as many as 20%. The data on these quotas are given in Table 4.2. Moreover, the higher professional schools are the only segment of the state education system authorised to charge school fees. Their amount was provided by an Order of the Government and stepped in accordance with the education branch; it varies between 2 000 and 5 000 per year.

190. The financing of **higher education** underwent similar development as the financing of upper secondary education, i.e. the transition from the index method to formula funding (in 1992), but in accordance with the administrative competences the funds were distributed by the Ministry of Education, Youth and Sport directly to the individual schools. The performance of higher education in terms of the number of students takes into account not only the total number of students, but also three student categories according to the degree they intend to achieve. The students in the Czech Republic can attain 3 degrees: the bachelor degree (lasts usually three years), the master degree (lasts usually five years or two years, if it follows after the bachelor degree) and post-graduate doctor (PhD) degree (lasts usually three years after the achievement of the master degree). Part-time studies of employed adults are financed at the rate of 40% of the normative cost of regular studies. The different cost requirements of the individual branches were taken into account by the distribution of all branches into seven (later in six) groups.

191. By comparison with lower levels of education the higher education funding has a special feature: the normative cost are modified by the **stimulation coefficient** which takes into account the involvement of the individual higher education institutions in scientific research activities. In 1995 the share of funds distributed on the basis of normative cost amounted to about 95% of all funds allocated to higher education institutions. This amount was composed of three parts: the biggest part consisted in the amount intended for education purposes (about 65%), the second biggest amount was allocated to creative and scientific work (about 11%) and the remaining 19% consisted in the funds intended for catering, accommodation, foreign students, etc. The normative costs of higher education are given in Table 4.4.

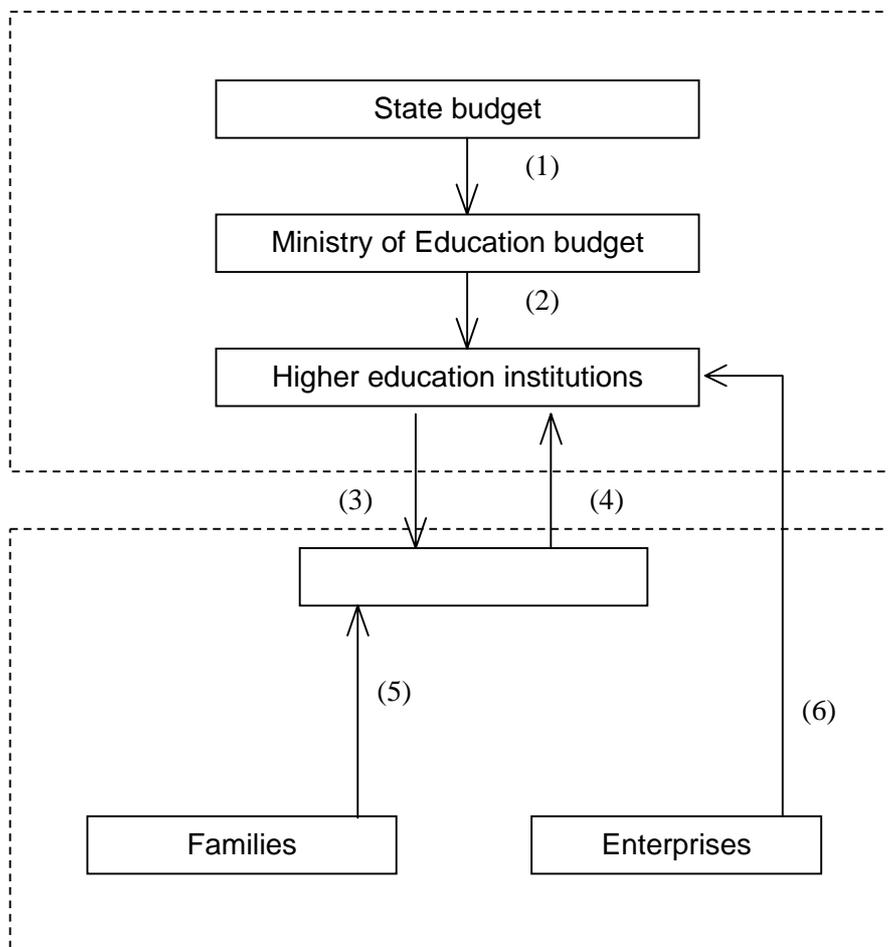
Table 4.4 Current normative cost of higher education (in CZK)

Branch	1992	1993	1994	1995	1996	1997	1998
Philosophy, law, theology, economy, social sciences	16 921	25 391	24 523	23 300	25 824	24 520	24 704
Pedagogy				*27967	30 989	29 424	29 645
Pedagogy and some economic branches	21 151	28 769	27 897				
Technical branches, PT and sport, informatics				*38445	42 609	40 459	40 762
Technical branches	27 920	37 463	36 323				
Agriculture	32 150						
Medicine, pharmacy, natural science, agriculture, social health		49 356	47 867				
Natural science, agriculture, pharmacy, architecture social health				52 425	58 104	55 170	55 584
Medicine, natural science, PT, chemical technology	43 149						
Chemical technology, math. and physics, nuclear physics		60 505	58 676				
Medicine, chemistry, math. and physics, nuclear physics				65 240	72 307	68 638	69 171
veterinary med., arts, veterinary med.	50 763	69 000	66 925	81 550	90 383	85 821	86 464
arts	59 224	81 474	79 015				

Source: State budget, chapter 333, Ministry of Education, Youth and Sport

192. The flows of funds to higher education are shown in Figure 4.2.

Figure 4.2 Flows of funds on higher education



Explanatory notes:

- (1) Allocation from the state budget on the education
- (2) Amount allocated by the Ministry of Education to the higher education institutions
- (3) Scholarships disbursed to students
- (4) Payments for catering and accommodation
- (5) Family expenditure on education
- (6) Payments of enterprises to higher education institutions for research

4.2.3 Funding of adult education

4.2.3.1 Basic literacy programmes

193. Basic literacy programmes in the Czech Republic are provided by basic or special schools. The necessary number of schools providing these services is available in every district. Programmes are financed from the state budget in their full amount, regardless of the school founder. The normative cost for 1998 amounted to 27 993 CZK with the assumption of classes numbering 20 pupils.

194. The financing of basic schools (providing primary and lower secondary education) is based on the fact that their organising bodies are the **communes**, which are obliged *ex lege* to fund fully the investment and non-investment expenditure except for salaries, textbooks and teaching materials (paid by the State). The state funding is based, once again, on the normative cost. In the case of basic schools the normative costs are differentiated according to basic school stages on the one hand and according to school size in terms of the number of pupils on the other hand. The amounts of current normative costs for basic schools are shown in Table 4.5

Table 4.5 Amounts of national current normative costs for basic schools (CZK)

	1992	1993	1994	1995	1996	1997	1998
Basic schools	3 709	6 946	x	x	x	x	
Autonomous 1st stage up to 50 pupils	x	x	14 087	14 899	18 010	19 608	20 104
Autonomous 1st stage from 51 to 150 pupils	x	x	10 676	11 174	13 701	13 878	13 451
1st to 9th forms up to 150 pupils	x	x	13 515	14 477	17 797	19 100	19 601
1st to 9th forms from 151 to 250 pupils	x	x	12 070	12 769	14 849	14 737	14 545
1st to 9th forms 251 pupils and over	x	x	9 191	9 703	12 532	12 729	12 709

Note: The 1st stage includes the 1st to 5th forms (1st to 4th forms until 1995), the 2nd step the 5th to 9th forms (6th to 9th forms until 1995).

Source: State budget, Chapter 333, Ministry of Education, Youth and Sport

195. The relation between state and communal expenditure is illustrated e.g. by the 1995 data, when the expenditure on basic schools (without pupils catering) funded by the State budget amounted to 13 046 mill. CZK and the communal expenditure to about 7 874 mill. CZK. The Ministry of Education, Youth and Sport allocates funds of the State budget to individual schools by the School Offices in districts (like in the case of secondary schools).

4.2.3.2 Education and training of the long-term unemployed

196. The funding of the education of the long-term unemployed in the Czech Republic forms part of the funding of the **general employment policy**. Under the appropriate laws since 1992 all employers and employees have been making **obligatory transfers** to the state budget for three principal purposes: social

insurance, health insurance and state employment policy. The transfers for the state employment policy amount to 3.6% of wage volume, of which 3.2% are the transfers of employers and 0.4% the payment of employees. During state budget preparation the Government decides what part of these funds will be allocated to the state employment policy.

197. As the responsibility for the state employment policy has been entrusted to the Ministry of Labour and Social Affairs, according to the Government decision this Ministry obtains also the funds for its financing from the state budget. Their amount is not identical with the amount corresponding with the 3.6% of wage volume, because the Government, having taken account of its priorities, may use the amount generated by the transfers on state employment policy for other purposes. So far the Government has been allocating to the state employment policy only a part of the funds generated by these addressed transfers. The amount allocated to the Ministry of Labour and Social Affairs from the state budget for the state employment policy is used, on the one hand, for the so-called **active** employment policy, on the other hand for the so-called **passive** employment policy. While the passive employment policy is aimed mostly at the payment of the unemployment grants (dole), the active employment policy is aimed at unemployment prevention or reduction. A survey of the funds for state employment policy is given in Table 4.6.

Table 4.6 State employment policy expenditure

	1992	1993	1994	1995	1996	1997
Total expenditure (thousand CZK)	3 141 449	2 166 078	2 562 590	2 413 739	2 658 937	3 964 790
Share of active employment policy (%)	54.7	13.6	28.0	26.2	20.8	13.7

Source: Active Employment Policy in the Czech Republic, Ministry of Labour and Social Affairs, Prague, 1998

198. The data of the table reveal several trends due, on the one hand, to the development of unemployment in the Czech Republic, on the other hand to the development of the state employment policy. In 1991–1993, i.e. in the period when the most important steps of economic reform were launched, a high unemployment rate was expected as a result of privatisation and restructuring of enterprises. For that reason a large amount of funds was allocated to the state employment policy and more than one half of it was used for active employment policy. That measure helped to reduce the unemployment rate from the initial 4% to less than 3%. In the years to follow, when the unemployment rate was maintained at about 3%, the amount of funds allocated to employment policy decreased and the **share allocated to active employment policy decreased** as well. Since 1996 the unemployment rate has been rising at an ever increasing speed.

199. For this reason the amount of funds for employment policy has been increasing, but the share of funds for active employment policy has been falling continuously. A significant reduction of the share of active employment policy was influenced negatively also by the Government economy measures in 1997, when the amount of funds for active employment policy attained its lowest point. The situation should improve in 1999 after adopting the National Employment Plan.

200. The amount of state budget funds allocated to the Ministry of Labour and Social Affairs for state employment policy is distributed to the Labour Offices in the districts. While the funds for passive employment policy are distributed generally according to the number of people entitled by the law to the dole, the allocation of the funds for active employment policy is subject to certain rules. The procedure

applied at present has been adopted in 1995. It is based on the funding of **purpose-oriented projects** intended by Labour Offices **according to regional needs**. The Ministry of Labour and Social Affairs invites the Labour Offices to submit their **active employment policy programmes** for the current year by the end of every February.

201. The programmes of active employment policy are prepared by the Labour Offices on the basis of annual analyses and predictions of the labour market in their regions and on the basis of the priorities of the respective year defined by the Ministry of Labour and Social Affairs or its Department of Employment Services. In 1998 the number of priorities included the care of the long-term unemployed, the physically handicapped job applicants and the school-leavers. From the number of instruments of active employment policy to be applied in the individual projects it recommended above all retraining which is considered one of the most effective instruments.

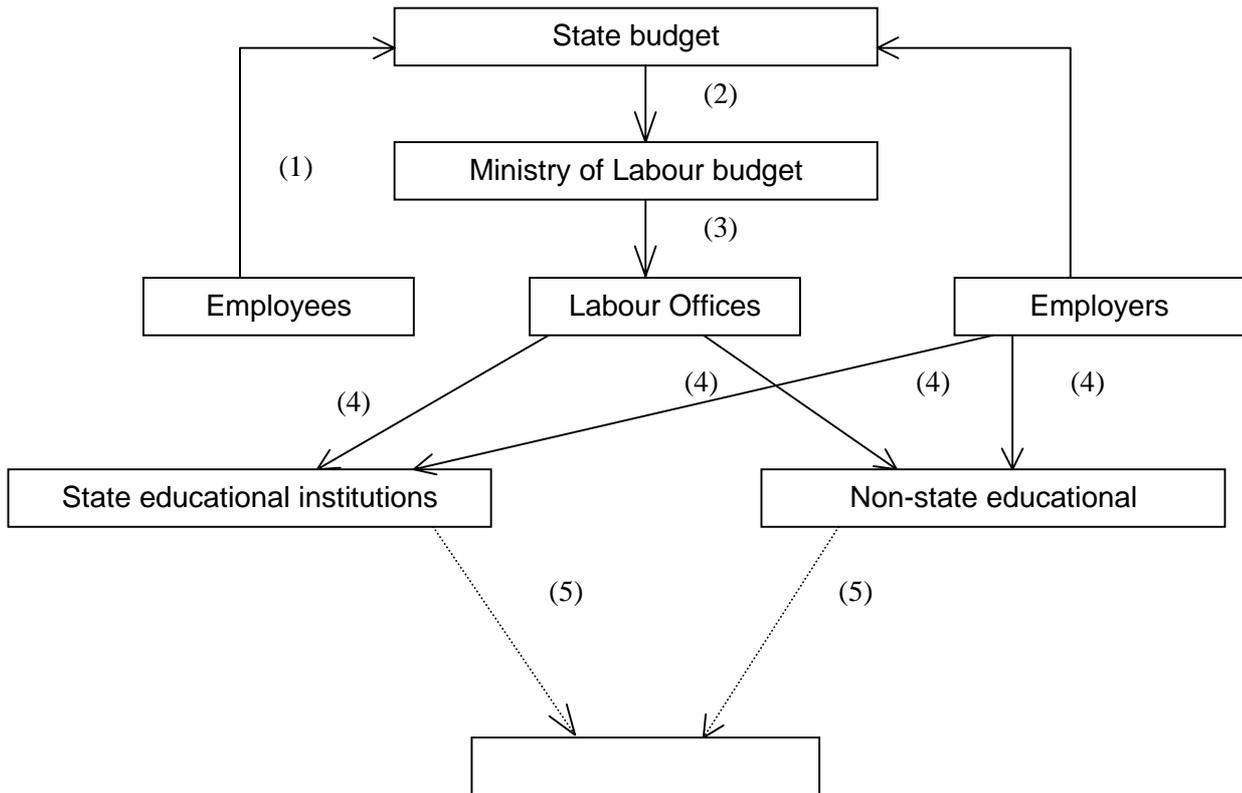
202. In the draft of their programmes the Labour Offices quantify the numbers of persons to be included in the individual measures (e.g. retraining) in the respective year, calculating simultaneously the costs of the individual instruments of active employment policy used in the programme including the **retraining costs**. The Ministry of Labour and Social Affairs approves the programme, observing that a certain percentage of total funds should be intended for the priorities declared for the given year. On programme approval it grants every Labour Office an advance of 50% of the annual amount, disbursing the remainder in the course of the year.

203. Retraining provided by the Labour Offices in the Czech Republic focuses particularly on the following types:

- retraining of job applicants in standard retraining courses,
- retraining of groups which are difficult to place (e.g. school-leavers),
- support of retraining organised by employers,
- retraining of the long-term unemployed.

204. The flow of funds for retraining purposes is shown in Figure 4.3.

Figure 4.3 Flows of funds for retraining courses



Explanatory notes:

- (1) Payments on state employment policy
- (2) Amount allocated to the state employment policy
- (3) Amounts distributed to Labour Offices
- (4) Payment for retraining
- (5) Retraining services

205. Selected indicators of active employment policy are given in Table 4.7.

Table 4.7 Development of selected active employment policy indicators

Year	Number of programme participants	Share of total number of the unemployed (%)	Expenditure per programme participant (thousand CZK)
1992	126 678	77,6	13,6
1993	44 432	28,6	16,9
1994	45 214	26,3	15,9
1995	36 894	23,7	17,1
1996	31 924	19,9	17,3
1997	30 275	13,8	18,0
1998	46 549	14,9	11,7

Source: Active Employment Policy in the Czech Republic. Ministry of Labour and Social Affairs, Prague 1998

206. The data in the table show a **falling effectiveness** of active employment policy in the Czech Republic expressed both by the share of participants in active employment policy programmes from the total number of the unemployed and by the development of expenditure per one programme participant. The decreasing participation rate of the unemployed in 1997 and in the first half of 1998 was influenced negatively by the economy measures of the Government and the previous low unemployment rate. As the unemployment rate increased its reduction has become a priority of the Government. This increase has become one of the principal reasons for the drafting of the National Employment Plan as well. This large-scale plan is a substantial response to the shortcomings of the present employment policy and intends to approximate it to the European methods of employment support.

207. The analytical part of the National Employment Plan points, *inter alia*, to the **unsatisfactory motivation of the unemployed to enter/return to the labour market** due to the inadequate ratio of the social security benefits to the wage level in lower qualification groups. It points out also that the education system „produces“ school-leavers regardless of the demand on the labour market and **the absence of involvement of employers in education management and financing**. The plan points out the **long-term low share of funds allocated to active employment policy** and criticises the prevalence of **passive policy**. Very important in our opinion is the conclusion that **the solution of unemployment can no longer be the responsibility of the Ministry of Labour and Social Affairs and its bodies alone, but must become the objective of all sectors and social partners**.

208. The draft of the National Employment Plan requires also the amendment of the Employment Act which would, for instance, extend the competence of the Labour Offices in retraining also to job applicants and enable them to exercise greater influence on the qualification structure of the population. It recommends to adopt an Act on Continuing Education of Citizens by the end of 2000 which would impose on the employers the duty to improve the skills of their employees and establish an Education Fund generated by mandatory transfers by the employers.

209. The adoption and implementation of the National Employment Plan in the Czech Republic will extend the competences of Employment Services in continuing education and will transfer the responsibility for education of citizens in productive age from the state sector to public sector. Simultaneously with the envisaged enhancement of the competences of regional authorities it will provide greater involvement of communal and regional authorities in the retraining programmes.

4.2.3.3 Job-related training of employees

210. The employees in the Czech Republic are trained both on the initiative of employers and on their own initiative, the former case prevailing. The training of employees is effected in one of the following three educational institutions: firstly in schools (state and private secondary and tertiary schools), secondly in other (usually commercial) educational institutions, and thirdly in the educational facilities of the enterprises themselves.

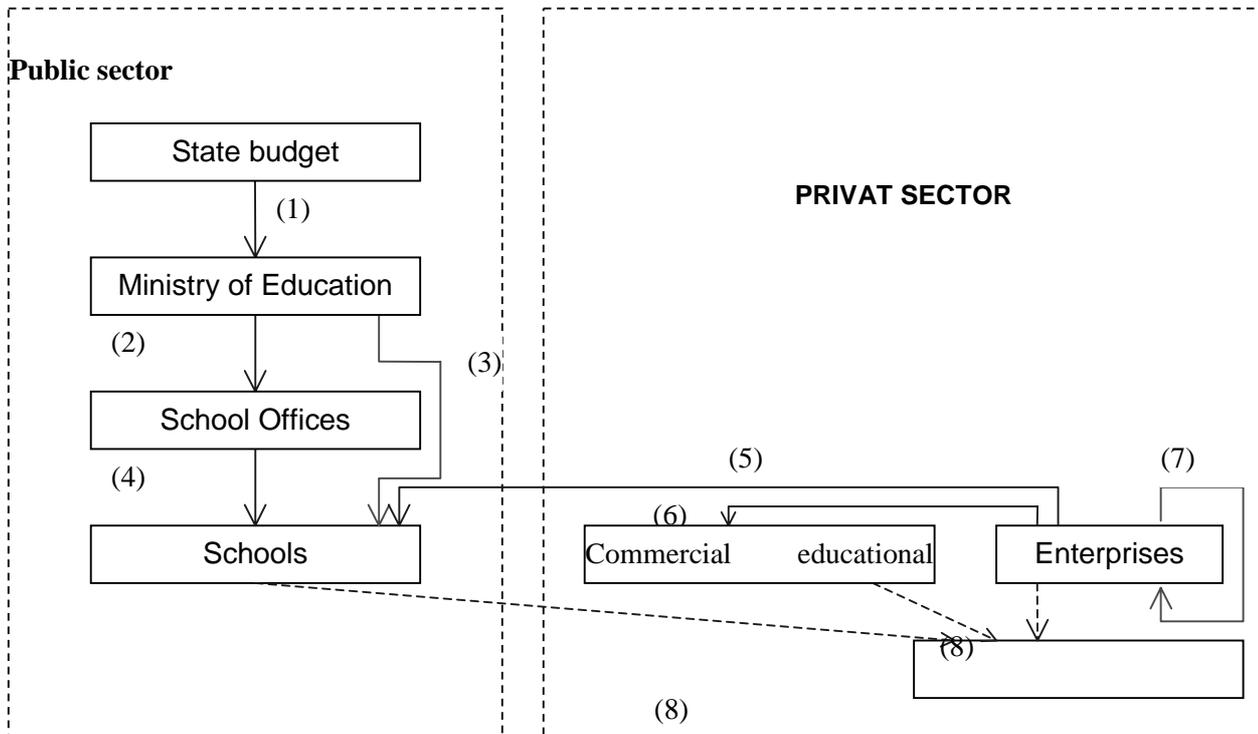
211. According to the research made in the framework of the international project „The Cranfield Project on European Human Resource Management“ (see section 3.1.3.3 and [29]) about 56% of Czech enterprises involved in the research analysed the need of continuing education of their employees. This percentage has a mildly rising tendency (by 7% in the course of three years). In international comparison, however, it is almost the lowest share of all participating countries. The share of Czech enterprises with a written policy of the continuing education of their employees is similar (57%). In contrast to their West European counterparts Czech enterprises prefer external training courses or courses with external lecturers. The scope of internal training in the Czech Republic increased somewhat, but the scope of external training underwent a much greater increase. The **employers usually decide themselves on the provider of training** of their employees.

212. The training of enterprise employees, in the form of part-time secondary or tertiary studies providing the corresponding qualification grade, is financed in the same way as the initial education, the regular study of young people, i.e. from state (public) sources. If the employees attend short-term courses organised by these schools, these courses are financed by the employers, i.e. from private sources. For the schools this education represents another source of revenue supplementing the state budget funds. Commercial educational institutions are financed from their own revenue, i.e. from private sources. The educational facilities of enterprises are financed by the enterprises themselves. The **role of the Government** in this respect is limited merely to the provision of the rules for school financing that, however, do not motivate the development of lifelong learning. **Communal or regional authorities do not play any role** in the financing of the training of employed people.

213. The employee studying in part-time at any school with the consent of his/her employer is granted by the employers the study leave – partly paid, partly unpaid – according to the law. In the case of paid study leave the employee obtains the wage compensation on the level of his/her average earnings. During the unpaid study leave he/she is paid a study contribution. If the employer has not expressed his consent with the studies of his employee, the employee has to cover the costs of his studies himself. If the employee trains at an external commercial educational institution, the financing is subjected to the same principles as those applicable to the studies at a school. If the employee is trained in an internal training facility of the enterprises, the training is financed by his/her employer. The role of the Government, communal or regional authorities in these cases is minimum.

214. Although the expenditure on job-related training of employees is covered partly from state (public) and partly from private sources, **they are not complementary**. The flow of funds is shown by Figure 4.4

Figure 4.4 Flows of funds for job-related education of employees



Explanatory notes:

- (1) Amount allocated from the state budget to the part-time study of employees at all levels of education
- (2) Amount distributed by the Ministry of Education to School Offices for part-time study at secondary schools
- (3) Amount distributed by the Ministry of Education for part time study to higher education institutions
- (4) Amount distributed by School Offices for part time study among secondary schools
- (5) Payments of enterprises to schools for the training of their employees in short-term courses
- (6) Payments of enterprises to commercial educational institutions for the training of their employees in short-term courses
- (7) Expenditures of enterprises on the training of their employees in the internal training facilities
- (8) Educational services

215. The contemporary method of job-related training of employees has **developed** in the course of the 90s. In the frame of the general transition of the country from detailed dirigist planning to the application of the principles of market economy the responsibility for the training of employees was shifted to the employers at the beginning of the 90s. The privatisation of the educational institutions existing previously in individual sectors (branches) and controlled by the respective ministries, gave usually rise to commercial educational institutions offering their educational services to enterprises on supply and demand basis. Jointly with this change the coverage of expenditure for job-related training of employees was shifted from state (public) sources to private sources. The **positive** feature of this development was the approximation of educational services to the training needs of the enterprises and better possibilities to provide made-to-measure training courses. The **negative** feature consists in the fact that in this period small enterprises are only rising and even big enterprises lack the capital, so the private education sources are limited.

216. On the level of **education providers** the present system of financing is based on fund allocation in dependence on educational performance, regardless of whether the subject is a state or a non-state institution. The amounts obtained by individual providers do not depend on the historical level of expenditure, but on present circumstances. Information on them is summarised and further processed only for state and private schools within the education system. Information on education expenditure of commercial educational institutions and enterprises is not monitored which represents a considerable barrier for any finance analysis. The quality of education provided is not monitored. In the field of job-related training the supply exceeds the demand.

217. On the level of the **learners** the present condition of financing job-related training does not take into account the performance of the learner. The system does not offer the learners adequate incentives, which would motivate them to use the training opportunities available. The potential learners suffer from the shortage of available and systematic information on the possibilities of education, because no such information system has been established as yet even on local or regional level.

218. On the level of the **educational system** the present financing system enhances competition among education providers. However, it supports mostly the competition among providers of the same type (e.g. schools or commercial educational institutions), but does not enhance the competition among the individual types of providers because of the differences in the financing of education provided e.g. by schools and by enterprises. This also shows the mutually isolated character of the individual sectors of lifelong learning. Another shortcoming consists in the so far unsatisfactory requirements on the quality of education.

219. A serious shortcoming of the present method of financing of job-related training consists in the fact that it is concerned with the **methods of fund distribution, but not with the methods of extension of fund sources.**

220. In the near future it is possible to expect discussions about the possible changes in the financing system, in the first place in connection with the preparation of the new Education Act and the National Employment Plan. Particularly the drafts of the National Employment Plan promise the introduction of the so far missing education incentives.

4.3 Further finance sources

221. The survey of financing of the respective lifelong learning sectors given in the preceding sections has shown that although the financing methods used have their advantages, they suffer from several shortcomings. That was why several proposals have been drafted in the Czech Republic in recent years aimed at the elimination of these defects.

222. In 1994–1998 the PHARE-financed programme of **VET Reform** took place in the Czech Republic. Its objective was to elaborate and verify the proposals of improvement of the initial vocational education on upper secondary level which – thanks to its position in the educational system as a whole – plays a more significant role in the Czech Republic than in other countries. This programme can be considered one of the biggest educational programmes of the 90s. It gave rise, *inter alia*, to educational standards, new curricula for several dozens of branches, etc. The programme evaluation included also the financing of initial education on upper secondary level.

223. Finance analyses (such as [16]) came to the conclusion that the Czech Republic is characterised by an ever increasing pressure at education financing from the state budget; at the same time they pointed out also ineffective fund use. These analyses formed the basis of the proposals published in 1998 in the programme document „Further Transformation Steps“ [7]. In the field of finance five measures were proposed:

- a) **improvement of the use of the formula funding**, on the one hand by its application also to the phase of budget preparation, on the other hand by the differentiation of the normative costs not only according to cost requirements of education branches, but also with regard to the labour market demand for the school-leavers of the respective branches;
- b) **introduction of financial incentives** motivating the employers to the participation in the financing of initial and continuing VET to extend the sources of finance on the one hand, and to improve the relevance of programme education to the employers' needs on the other hand;
- c) **enhancement of the role of regional authorities** in the future self-governing regions **in fund allocation to education** in the framework of the expected public finance reform;
- d) **establishment of near links between schools and enterprises** and improvement of the use of educational capacity for initial and continuing VET by the simplification of the conditions of transfer of some state schools to bigger enterprises, associations of enterprises, regional authorities and further non-state public subjects;
- e) **merging of small vocational schools into major units** to enable better concentration of staff, funds and other means and improve the effectiveness of their use.

224. The proposed measures, which were supported also by the results of a broad public discussion, were submitted to the Ministry of Education, Youth and Sport at the end of 1998 with the recommendation to discuss them with further relevant institutions and social partners. The Ministry continues the modifications of the school network and considers also greater involvement of enterprises in the vocational training of apprentices, but has not given any signs of serious attention afforded to the above mentioned measures.

225. In the field of **adult education** it is possible to inform about several activities requesting the state authorities to grant greater support to the development of this sector of education incl. its financing. As early as 1994, for instance, a research of adult education in the Czech Republic was made with the participation of experts of the French National Association of Vocational Adult education. The results (see [21]), apart from appreciating positive features, state that the number of weak points includes also the non-existence of state policy in the field of adult education. In 1998 the results of an international research of adult education were published [9] in which the experts agreed that the role of the state should consist primarily in the creation of a legal framework, the definition of financing rules, and the definition of standards. At the same time they stated that these tasks were not fulfilled in the Czech Republic.

226. Consequently, it is obvious that although the methods of financing of lifelong learning in the Czech Republic have improved in the course of the 90s, there is still a number of problems requiring a solution, although several proposals of their solution have been suggested particularly by non-state institutions.

5. CASE STUDIES OF GOOD PRACTICE

5.1 Introduction

227. This chapter presents two case studies of successful practice. According to the project organiser's requirements each concern a concrete case of practice successfully applied in Czech conditions to the financing of lifelong learning. Moreover, since the conditions in **adult education** have changed in the Czech Republic in the 90s, both case studies were selected from this sector with the intention to show the development attained in **private** sector, i.e. in the sector established in the Czech Republic only in this very decade.

228. **The first case study** tries to show the development of employees training in one of the important economic sectors – the power industry. It wants to illustrate the situation in the sector, which underwent substantial changes in enterprise organisation and the transfer of responsibility from national level to enterprise level. Due to the location of most power plants generating electric power by the combustion of fossil fuel in the proximity of brown coal opencast mines the case study shows also the situation caused by the restriction of coal mining with serious consequences for employment. This case study perhaps does not contain any excellent methods for experts to admire or any information on results of particularly good quality. However, it does show the procedures applied in difficult and complex conditions and it is these very difficult conditions in which the job-related training of employees of Czech power industry has been developing that may give a realistic idea on similar development in other sectors. Moreover, it illustrates the endeavour to achieve better returns of lifelong learning.

229. **The second case study** shows the procedures applied on the initiative of a non-state institution to the enhancement of the development of manager training. Manager training can be considered one of the typical training fields, which the transforming countries had to develop as soon and as fast as possible with limited financial resources. The case study describes the methods endeavouring to combine the satisfaction of several exacting requirements, including both easy access to manager training and the assurance of high quality of this education. Apart from the compliance with these requirements it was also necessary to use a motivating financing method. The described methods were elaborated and introduced in the framework of a concrete project. In contrast to the first case study it is possible to believe that the results of the described situation have been so successful that they could play the role of example worth following. That was the opinion expressed by experts from various countries and international organisations. In this report the second case study fulfils the role of example illustrating the mobilisation of financial resources for the development of lifelong learning.

230. While the first case study shows the procedures, which could be found, with certain deviations, also in other sector and, therefore, could find broader application, the second case study gives an exceptional rather than common example. Unfortunately, neither case can be said to further the priorities of national education policy. It is not their fault, but the consequence of the non-existence of such priorities.

5.2 Case Study No. 1

231. This case study is concerned with job-related employees training and the financing of this training in the sector of **power industry**. The sector performs primarily the operations connected with the generation and distribution of electric power and heat.

232. In 1997 Czech power industry enterprises generated some 65 million kWh of electric power, three quarters of which in steam power plant fired mostly by brown coal, and about one fifth in a nuclear power plant. The *per capita* indicator of electric power generation in the Czech Republic is about 6.4 thousand kWh, which is comparable with Germany (6.7) or Austria (6.8), lower than in France (8.4) and higher than e.g. in the United Kingdom (5.7). The power industry enterprises in the Czech Republic employ almost 85 000 people.

233. Before 1990 all power industry enterprises in the Czech Republic were state enterprises. Power industry, together with heavy industry, ranked among economic sectors prioritised in state investments and in other respects. The period of economic reform of the 90s resulted in far-reaching changes also for the enterprises of the power industry. Apart from the fundamental change of economic conditions in general, privatisation which touched them only partly, and organisational changes the power industry had to cope also with the new exacting environment protection requirements. The number of employees of power enterprises slightly rose in the first half of the 90s and has been slowly decreasing in the second half of the decade.

234. In 1991 the Czech Employers Association in Power Industry was founded as an entirely new organisation of employers which had not existed before. This Association is a voluntary, independent trade organisation of employers and entrepreneurs in the field of generation and distribution of electric power and heat and of some other subjects incl. VET schools. It associates 46 organisations employing some 33 000 people. The Association is a collective member of the Association of Industry and Transport of the Czech Republic. The number of principal objectives of the Czech Employers Association in Power Industry includes the furtherance and defence of interests, requirements and needs of employers and entrepreneurs in this sector in a dialogue with state authorities, the contribution to an effective energy policy and efficient legislation and the support of its members. The objectives of the Association include also the support of professional foundation and further education of its employees. The Association co-operates with secondary schools and higher education institutions with energy specialisation.

235. To support vocational and technical education the Association established a commission of experts. The Association co-operates with secondary and tertiary education institutions providing initial VET in the branches of power industry and with other educational institutions providing continuing VET. It participates e.g. in the drafting of educational standards of initial VET on the level of upper secondary schools. It co-operates also with the Ministry of Labour and Social Affairs in the definition of qualification requirements for relevant professions. In comparison with other employers associations in the Czech Republic its activities in the field of education are more committed and intensive. This is testified to also by the results of its activities in this field. The co-operation of the Association with the sector of education proceeds in several directions.

236. In the field of **initial vocational and technical education** the Association maintains permanent contacts with nine schools providing secondary education in all regions of the Czech Republic. All these schools are members of the Association. Their number includes both types of Czech VET schools: secondary technical schools and secondary vocational schools.

237. These schools provide initial VET in several branches. They include 2–4 branches in four-year schools providing “complete” secondary education enabling its graduates to apply for study at a higher professional schools or at higher education institutions, further 3–5 branches of three-year schools for apprentice training and 1–3 branches of follow-up courses for vocational schools leavers enabling the achievement of complete secondary education. The four-year branches include e.g. the mechanic of high-tension equipment, mechanic of high-tension facilities, mechanic of electronic facilities, the three-year branches e.g. the electrician of power distribution facilities, repairman of gas facilities, electrician of machines. The number of follow-up courses includes e.g. electrical engineering, operative electrical engineering. The education in these branches is financed by the methods described in Section 4.2.1, i.e. from the state budget, with the exception of infrequent cases of three years vocational training schools for apprentices in which the enterprises, for which the school-leavers are intended, participate in the financing of their training. Some of these schools provide education also for adult employees in the form of part-time studies. The co-operation of the Czech Employers Association in Power Industry with these schools in initial secondary education focuses particularly on the support of organised practical training of students in power industry enterprises. The Association also grants scholarships to some students and sponsors useful school projects.

238. In the field of **retraining** the aforementioned schools co-operate with Labour Offices. This co-operation can be illustrated by a concrete example of co-operation of one of them, the secondary school in Chomutov (North Bohemia). In agreement with the Chomutov Labour Office this school organises **retraining courses for the unemployed**. One of them is concerned with the profession of electrical mechanic, the other with the acquisition of basic skills in electrical and mechanical engineering, the third with the broadening of skills enabling better employability. The first course is intended for unemployed graduates of secondary electrical engineering schools. It has 1 140 hours. The training proceeds as a regular study lasting one year. In conclusion the participants pass a final examination and obtain a generally recognised qualification certificate of a skilled worker. The second course lasts 10 months (7 months theoretical education, 3 months practical training). It is intended for unemployed graduates of any secondary school. The participant obtains a training course certificate. The third course is of similar character. The Labour Offices pay the expenditure of these retraining courses from the funds obtained from the Ministry of Labour and Social Affairs (and coming from the State budget – see Section 4.2.3.2). These or similar cases of retraining did not exist in the Czech Republic at the beginning of the 90s, because formally there were no unemployed or Labour Offices, both of which developed only in the course of the nineties. Further development of retraining of this character can be expected in the future.

239. Another example of co-operation of several institutions in the field of continuing VET is the education aimed at the acquisition of professional competences for the work on electrical engineering facilities. According to the respective regulations this competences can be obtained by the attendance of an appropriate training course, passing of the appropriate examination and obtaining the appropriate certificate representing the essential qualification for the work on electrical engineering appliances. The contents of the training course are concerned particularly with the knowledge of electrical engineering standards. It is a short-term (one-week) course provided both by VET schools and by other educational institutions authorised for it. It can be organised also as a retraining course in co-operation with the Labour Offices. In that case the Labour Office pays the participant’s fee to the school or any other education institution. If this course is organised not as a retraining course, but as a qualification course attended by employed people, the fees are paid by the participants themselves.

240. **Adult education** in power industry is assured by two private educational institutions providing educational services to the enterprises of the power industry and their employees on the one hand and offering further educational services on the other. One of these institutions is the Power Industry Training Centre in Kadaň (North Bohemia). Its principal activities include e.g. the provision of educational courses

for heating block operators, for fluid-bed boiler operators, operators of desulphurisation plants of power plant blocks, verification examination courses for stokers, mechanics, operators and heads of power plant blocks, and other training courses. For these courses and further educational and other services the Centre is provided with classrooms with the necessary equipment incl. a training power block mock-up. It provides its services according to the requirements of the individual enterprises. In 1997 its services were used by 1 915 employees, in 1998 by 2 002 employees. The related expenditure is paid by the individual power industry enterprises that cover also the travel expenses of the participants. The scope of this education is gradually broadening. The Centre provides educational and consulting services also to other enterprises and to the public, such as psycho-diagnostical services, assessment of promotion campaigns, market research for enterprises, or basic or specialised computer courses for broader public. The costs of these courses are covered by the enterprises or by their individual participants. In co-operation with the Labour Offices the Centre organises also retraining courses paid by the Labour Offices.

241. Another type of adult education in power industry consists in the training courses provided by VET schools to power industry enterprises in **co-operation with the suppliers of products** used in the power industry. By way of example it is possible to mention the training courses provided by the secondary vocational school of power engineering in Sokolnice (South Moravia). In co-operation with the regional power distribution enterprise, South-Moravian Power Company, and the supplying firms of Raychem, Cellpack and Arcus, the school provides innovation courses for cable fitters and courses on works carried out on live power installations. There are several courses for cable fitters (differing according to cable types of different voltage). They last several days. For instance, the course for the fitters of HV cables lasts three days and is concerned particularly with the handling of cable ends and couplers of different types. The price of the course (about 4 200 K•) is paid either by the employer of the fitters or by the course participants themselves. The co-operating firms provide the necessary material and sometimes even pay the course expenditure. The school provides similar courses for technicians and designers of power distribution enterprises. Generally these courses focus on innovation of knowledge of qualified (skilled) workers or other groups of employees due to the application of new technology. Every year some 900 employees of the South Moravian power enterprises or the enterprises providing the power enterprises with fitting services attend the courses.

242. The aforementioned examples concerned the education needs specific for the power industry. Apart from that there are **further education courses** concerned e.g. with the innovation of labour law and technical standards, energy saving, etc. These courses are organised by the Czech Employers Association in Power Industry, the Power Managers Association and the Czech Energy Agency. The employees of power industry enterprises attend the courses. Although the costs of these courses are covered by the employers or their participants, the Czech Employers Association in Power Industry grants its members **substantial reductions** of attendance fees amounting to 50% of the price of the course, as a rule. Some courses are even free of charge to facilitate access to further education.

243. The most important enterprise in the Czech power industry is the •EZ (Czech Power Works), joint-stock company, which produces more than three quarters of electric power generated in the Czech Republic. The company operates one nuclear power plant, 10 coal-fired and 13 water power plants, 2 heating plants, 2 wind power plants and 1 photovoltaic power plant and is building further power plants. The company also owns and operates the 400 kV and 220 kV VHV power distribution systems. On the world scale the •EZ company with 10 685 employees and 10 949 MW capacity represents a medium-size power company. One of the eight regional power distribution enterprises (servicing regions with about 1.25 mill. people) is the Central Bohemian Power joint-stock company with some 1 800 employees, servicing Central Bohemia. The most frequent educational activities organised by this company are one day to one week training courses or seminars on the subject concerning company operation, law, taxes and accountancy, personnel management, quality management, etc. The second most frequent case are regular training courses and verification examination courses for employees of the most varied professions in

which this training and verification is mandatory (such as building machine operators, crane load binders, etc.). Frequent are also the computer courses and the courses for the employees of power distribution enterprises concerning negotiations with customers. The number of participants in these courses in 1998 was by 2 108 employees, i.e. by more than the total number of the company employees which testifies to the above-average frequency of education. In the same year the company spent some 5.2 mill. Kč on education which represented about 1.5% of the total volume of wages. In 1999 the enterprise is planning a mild increase of education expenditure, because it will start a system of personnel substitution programme. All training costs of its employees are covered by the enterprise. The only exception is language courses: the company covers 50% of expenditure of those employees who need language skills for the performance of their work.

5.3 Case Study No. 2

244. In the first half of the 90s, at the time of the most important steps of economic reform, the Czech Republic was confronted with an **extremely acute need of manager training**. This need originated in extensive privatisation of former state enterprises connected with their restructuring and a wave of establishment of new enterprises on the one hand, and the until then underdeveloped managerial training on the other. Although numerous, usually newly established educational institutions reacted fast to this need by developing and offering manager-training courses, the people interested in this training had no information on the quality of these courses. Apart from that some of them were offered at prices not acceptable for a broader range of interested parties. The initiative of educational institutions was limited also by the lack of funds that would enable a continuous improvement of offered courses and employment of high-quality lecturers.

245. In this situation, in the middle of 1994, the Minister of Labour and Social Affairs, on the proposal of a group of experts, established a non-state non-profit organisation – the National Training Fund (NTF). The principal objectives of the NTF was a fast improvement of the training of Czech managers, the creation of a network of training institutions providing managerial training with a set of high-quality programmes for managers and an improvement of the development of human resource management in Czech enterprises and other institutions.

246. The NTF established a Board of Directors as its supreme management body, comprising the representatives of the Ministry of Education, Youth and Physical Training, the then Ministry of Economy, the Association of Industry and Transport of the Czech Republic, the Association of Entrepreneurs of the Czech Republic, the Czech-Moravian Confederation of Trade Unions, the Economic Chamber of the Czech Republic, Charles University, Prague, and the Czech Association for Adult Education. The composition of the Board has to enable to focus its activities not only on the needs of enterprises, but also on the needs and priorities of the individual ministries and social partners. Apart from that the NTF established also an advisory group of experts in the field of manager training. At the same time the Government decided to allocate a part of the funds obtained from the PHARE programme (intended for the support of economic reform in transforming countries) to the support of the development of human resources incl. manager training and entrusted the NTF with the management of the appropriate project.

247. In the very first months of its existence the NTF drafted a project concerned with the **support of manager training** and started implementing it. With reference to the principal tasks of the NTF and the existing needs the project aimed at several objectives:

- to facilitate the availability of high-quality training courses for managers and to facilitate access to them to potential participants,

- to support the improvement of existing training courses for managers and the development of new courses,
- to assist in the identification and selection of adequate manager training courses,
- to enhance co-operation of and exchange of experience among the institutions concerned with manager training.

248. In the framework of this project the NTF invited, through the publication in relevant periodicals, the providers of manager training to show their interest in their involvement in the project and apply for financial grants. On the basis of this invitation 40 manager training providers showed their interest and submitted information on their courses in accordance with project rules. On the basis of painstaking assessment the NTF experts selected 13 educational institutions. The selection was based on the **combination of several criteria**: the relevance of training programmes, their quality, possibilities of their further improvement, geographic distribution. The training programmes of selected providers represented a group of the highest quality and most needed programmes. In the majority of cases more than one programme (most frequently 3–4) of one provider was selected. Further progress and the required technical and financial support were discussed with the representatives of every selected educational institution. Agreements signed with these institutions were followed by an exchange of training materials and experience among all selected institutions. Although private firms dominated the group of the selected educational institutions, it included also one university and the training institute of the Association of Industry and Transport of the Czech Republic.

249. In respect of the use of project funds the NTF decided to adopt two principal methods. To facilitate access to manager training courses it **granted a financial subsidy to the participants in selected courses**. The subsidy was granted intentionally to course participants and not to educational institutions. It represented 60% of the course price, but not more than 8 000 K• per participant and course. As the course prices varied between 4 683 and 25 200 K• (between 10 and 15 thousand K• in most cases), the subsidy was a substantial help to course participants.

250. **The first phase (round)** of the project took place from November 1994 to May 1995. The results exceeded all expectations. The 38 training programmes provided by 13 selected educational institutions were participated in by 1 919 people. The participation in the individual programmes varied between 15 and 220 people (most frequently between 20 and 60 people). The number of participants in the individual institutions varied from 40 to 225 people, the total amount of subsidies attained 294 617 ECU, i.e. 10 082 676 K• at the then rate of exchange.

251. The above-mentioned 1 919 participants took part in the training programmes on various **management subjects**: 26.9% participated in the programmes concerned with strategic management and the management of change and innovation. The other subjects included quality management with 14.3%, marketing with 14.3%, trade management with 11.9%, financial management with 9.5%, control management and logistics with 4.3% each, top management and informatics for managers with 2.4% each, general management with 2.1% and human resources management and production management with 1.4% each. Due to the growing need 4.8% of participants attended also the course of English for managers.

252. Together with the support of the participants in the selected training courses, aimed at achieving fast results, the NTF started further work aimed at the **improvement of manager training** and the **human resource development in general**. In co-operation with the Czech Committee for Scientific Management and the Czech Manager Association it elaborated e.g. a study of the training needs of Czech managers and started preparations for the elaboration of a new modular training programme for managers which would improve manager training both in educational institutions and in enterprises. The NTF also evaluated the

needs of manager training in several sectors requiring specific approach and started working on the specific training programmes for these sectors, such as banking, public health and small and medium enterprises. Simultaneously the NTF established contacts with other similar domestic and foreign institutions with the intention to exchange experience and enhance mutual co-operation. It became an associate member of the European Foundation for Management Development (EFMD) and the European Training Foundation (ETF).

253. After the first year of its operation and the termination of the first round of manager training support the NTF opened the **second round** which proceeded from September 1995 to February 1996. By similar methods as those used in the first round it selected high-quality educational institutions and their training programmes. In comparison with the first round the number of selected institutions and programmes **increased** to 25 educational institutions and 75 training programmes. Although private institutions prevailed also in the second round, the number of selected institutions included also the Institute of Education of the Ministry of Agriculture and the training institution of Škoda Plzeň. Some institutions, which took part in the first round, did not enlist for the second round. The participation of regional educational institutions increased substantially, particularly from North Moravia, which was most highly affected by the restructuring of industry.

254. The total number of participants in selected training programmes in the second round attained 3 131 people. The **structure of training programmes** was approximately the same as in the first round. The greatest number of participants took part in the programmes concerned with strategic management and change and innovation management (20.3%), followed by marketing (13.6%) and quality management (12.8%). The number of participants in the programmes concerned with human resources management (9.8%) and general management (9.6%) increased substantially. The project was enriched with new programmes concerned with the management of small and medium enterprises (attended by 8.0% of participants) and foreign trade. The programmes concerned with marketing mostly corresponded with standardised requirements of the Czech Institute for Marketing (CIMA). The duration of the training programmes varied between 32 hours to 18 days. The total amount of subsidies to participants attained 18 559 200 CZK.

255. As the second round of the project received a highly positive assessment too and because the demand for high-quality manager training courses remained high, the NTF Board of Directors decided to provide another round of subsidies and to proceed with the work on the improvement of the quality and relevance of manager training. Therefore, the third invitation to educational institutions was published. The selection applied the successively refined criteria under which those institutions were successful which had proved long-term strategy in manager training, provided a broader offer of training programmes, had a qualified team of methodologists and lecturers, developed new programmes, applied modern training methods, were willing to co-operate and were open to changes. Also the willingness of the educational institutions to accept the rules concerning the development of new educational projects, an assessment of subsidised programmes, an inspection of their documentation, the participation in common projects and mutual transfer of experience represented important selection criteria.

256. The **third round** of the project took place from March to August 1996 with the participation of 33 educational institutions with 89 training programmes. As some programmes were repeated for several groups, the subsidy was granted to the participants in 150 courses. Total number of participants was 2 854 and the total amount of disbursed subsidies was 18 385 484 CZK.

257. The data on the participants in the individual training courses in the third round enabled a comparison of the changes in the structure of participants and an estimate of the development of the training needs of managers. A comparison of this structure in the first three rounds revealed that the **greatest interest** was shown in the training programmes concerned with marketing, quality management,

financial management, strategic management and human resources management. Interest in the programmes concerning the management of small and medium enterprises increased, while interest in general management dropped. The demand for individual specialised programmes applying modern management method to the specific features of individual sectors also increased.

258. The **fourth round** of the project took place from September 1996 to February 1997. In this round 323 educational institutions with 105 training programmes participated. The number of learners attained 3 925 people and the total subsidy amounted to 23 141 736 CZK. In 1996 the NTF further increased the work aimed at the improvement of the manager training courses and the proliferation of results. The institutions included in the project were granted a subsidy for the improvement of textbooks, case studies and methodological materials. The textbooks elaborated with NTF support were handed over to the recently established Management Development Information Centre. The NTF also started working on a **modular manager-training** programme in co-operation with the British Ashridge Management College. In the field of marketing the NTF co-operated, after the successful use of the CIMA A training programme, in the modification of the Dutch higher-grade training programme to Czech conditions (CIMA B) for which the required textbooks were drafted and the basic team of 32 lecturers trained.

259. In 1997 the **fifth round** and the major part of the **sixth round** of the project (which terminated in February 1998) was realised. The fifth round included 126 training courses with 89 educational programmes provided by 32 educational institutions for 2 285 participants. The total subsidy amounted to 15 203 816 K•. The sixth round comprised 155 training courses with 84 educational programmes provided by 27 educational institutions for 2 718 learners. The total subsidy amounted to 6 899 950 K•. In comparison with the preceding rounds the amount of subsidy was lower, because the amount of funds available was limited. Therefore the Board of Directors decided to reduce the subsidy to 20% of the course price, but not more than 3 000 CZK per participant.

260. In December 1997 the work on the project aimed at the generation of a modular training programme for Czech managers terminated. The project provided an **integral set of teaching and methodological materials concerning all fundamental management problems**. The training programme comprises six basic modules in Series A (introduction to management, marketing, finance management, operations management, human resources management, overall strategic management and enterprise development) and 9 special modules in Series B (enterprise transformation, people's management and leading style, productivity and efficiency, quality management, information technology, innovation management, project management, management of joint-stock companies, European integration). This training programme for medium and high level management corresponds with contemporary European practice, while taking into account the specific condition of the Czech Republic. It is intended for a broader range of manager training providers, lecturers and consultants as well as personnel managers and human resource managers. The modular programme provides the educational institutes with a programme of European standard for the training of Czech managers. Its methodological concept represents an important product in the NTF strategy of influencing the quality of the offer of manager training in the Czech Republic. It is available in the Czech and the English versions.

261. In December 1997 the first phase of the project „Qualify and Improvement of Programmes for Human Resources Management“ was terminated on the NTF initiative. The project was prepared by a consortium of two Czech institutions under the management of a British institution (Cranfield School of Management). The principal project output is a **modular training programme in the field of human resources, management and development**. It comprises 9 modules on the subjects of strategic human resources management, organisational culture and management of change, labour force formation, education and training, manager development and teamwork, motivation and performance management, remuneration and working conditions, labour relations. One specific module is concerned with human resources management in small enterprises. Every module comprises methodological materials for the

lecturer, study materials for the learner incl. texts for foils, case studies, selected articles and bibliography of recommended books. The programme is intended for personnel managers and specialists in the field of human resources management and development. In 1998 a team of lecturers and consultants was trained, a pilot verification of the programme was made and the programme was finalised. The NTF organised workshops for enterprise managers and educators on contemporary international experience in the field of human resources management and development and on the practical problems of Czech enterprises which will have to form the focus of the future programmes of manager training in the field of human resources development.

262. A survey of principal indicators of the project-supporting manager training is given in Table 5.1.

Table 5.1 Principal indicators of the manager training support project

Project phase	No. of providers	No. of training programmes	No. of participants	Amount of subsidy (K•)
1st round	13	38	1 919	10 082 676
2nd round	25	75	3 131	18 559 200
3rd round	33	87	2 854	18 385 484
4th round	32	105	3 925	23 141 736
5th round	29	87	2 185	15 203 816
6th round	27	84	2 718	6 899 950

Source: National Training Fund

263. In the course of the six rounds the training courses were attended by **16 732 participants** and the total subsidy amounted to 92 272 062 CZK so that the average *per capita* subsidy was about 5 515 K•. Taking into account the period in which the six project rounds took place it is possible to say that more than 5 000 people participated in the NTF-supported manager training courses every year. This figure corresponds to almost one half of the whole number of participants in retraining courses in the Czech Republic organised by the Labour Offices or almost one third of the total number of graduates of higher education institutions.

264. With reference to finance the project represents an example of the **combination of public and private resources for a fast satisfaction of training needs**. Approximately half of the expenditure was covered by the resources of foreign aid to the Czech Republic through a non-state institution, the other half by the participants in the training courses or their employers. Should the project not be realised, the number of training programme users would have been probably by 10 000 lower. The above data testify to a high effectiveness of the project which will become even more obvious, if the purely economic and quantifiable data are supplemented with the criteria of quality of training programmes and further results of the project e.g. in the form of a set of broadly available teaching materials or its successive expansion to the whole field of human resources.

265. The number of **positive** features of the project includes:

- fast satisfaction of extensive training needs,
- facilitation of access to further education,
- continuous identification of training needs,
- emphasis laid on the quality of education institutions and their training programmes,
- use of funds from several sources.

266. The number of **negative** features of the project may include:

- insufficient reaction of local institutions,
- impossibility of implementation without foreign aid resources.

267. Information on the project proliferated from the Czech Republic to other countries. Apart from information on the project in professional seminars with foreign participation the project also attracted attention of international institutions concerned with human resource development. In 1996 the U.S. Education Development Centre – Centre for Workforce Development published a set of materials (handbook, analytical study, videotape cassette) called *Compass to Workforce Development Toolkit* [4] informing about the starting points, principles, works, examples and inspiration useful for the introduction of the projects in the field of workforce development.

268. The handbook forming part of the kit contains *inter alia* also case studies of suitable procedures. A broad team of authors, associating experts from all continents, was to select **twenty best cases in the field of workforce development**. The team first drafted the criteria to be satisfied by these cases. From the data bases of the most important international donor organisations (such as the World Bank, United Nations, International Labour Organisation, Organisation for Economic Co-operation and Development), their own investigations based on the contact with experts and the study of literature the team collected information on the basis of which it selected more than one hundred cases. Having assessed these cases according to defined criteria the team selected further 50 cases. In the next step it reduced this selection to 30 by the application of further more exacting criteria. In the last phase, when the experts further assessed the individual cases using a sixty-item questionnaire and discussions with the representatives of the individual institutions, the team arrived at the final selection of the 20 best cases.

269. The selected best cases come from four continents, four of them from Europe. Every case is introduced by such information, as why it was selected, what is its relation to the needs, whether it enables an open approach, continuous improvement, economic and social impact, influence of financing, etc. The described project of the National Training Fund of the Czech Republic was included among the twenty best.

5.4 Lessons from the Case Studies

270. Although each case study describes different conditions for the training of enterprise employees and its different results, they enable several conclusions, particularly with reference to the possibilities of their broader application in the Czech Republic and the endeavour to improve their contribution to lifelong learning.

271. The **first case study** shows that the Czech power industry enterprises pay attention to the training of their employees. However, this training is a response to the most acute needs of the nearest future rather than an important component of the strategy of the further development of the enterprise. However, this situation must be assessed with regard to general economic conditions, which are not favourable. In the period of economic recession the priority of the enterprises is to survive the unfavourable period and since they suffer from the shortage of funds, they provide training in the minimum necessary extent only. As we have mentioned in the proceeding chapters there are no incentives on national level, which would advantage the enterprises expending funds on the training of their employees. In comparison with the power sector the situation of other sectors is no better. On the contrary, most other sectors do not even show the activities of such employers associations as the Czech Employers Association in Power Industry which makes at least the obvious endeavour to support the employees education with the meagre funds

available. In the future it is possible to expect that the present generally unfavourable state will improve, provided the general economic situation will improve and provided education will acquire higher priority than at present in the eyes of the state and the social partners and provided the more active approach to the support of lifelong learning will be accompanied with the introduction of effective incentives.

272. The **second case study** shows that given the necessary financial resources and the initiative of relevant actors it is possible to achieve exceptional results even in a generally unfavourable situation. Symptomatic for this second case study is that its decisive actors work in a non-state sector, i.e. mostly independently from state/government institutions. The co-operation of the National Training Fund with other educational institutions shows that initiative experts from the field of education can be found in numerous sectors and regions, which is promising for the future. However, apart from the enthusiasm to support education also the ability to provide the necessary funds is necessary. This ability includes and will always include the skill of drafting high-quality training projects, because this skill will represent e.g. one of the prerequisites necessary for the use of the European Structural Funds. In spite of all positive features of the described case study it is necessary to admit that the NTF project did help to improve the training of the managers of Czech enterprises, but has remained a rather exceptional and solitary case.

273. Also the description of two concrete cases has shown that on the one hand the Czech Republic has initiative high-quality experts in the field of education and training, high-quality educational institutions and even progressive enterprises concerned consistently with the training of their employees. On the other hand their endeavour and achievements are the result of a limited number of actors rather than the expression of an integral strategy and support of lifelong learning on the part of the State and the bodies of social partners on national level.

6. CONCLUSIONS

274. The preceding chapters tried to describe the state and the problems of funding lifelong learning in the Czech Republic and to outline the ways which could make it possible to close or at least reduce the gaps in lifelong learning and/or improve its effectiveness. These chapters make it possible to draw some conclusions that we shall sum up first according to the individual sectors of lifelong learning.

275. In **initial education on upper secondary level** the situation in the Czech Republic is relatively most favourable. The participation in education on this level achieves the figures comparable with the figures of European countries, particularly in the education of the group below 16–17 years of age. The fact that the participation in initial education in the Czech Republic is lower is due primarily to the structure of the education system and the fact that the decisive part of the population acquires vocational qualification on the upper secondary education level. A much higher age cohort fulfils the target set in the guidelines for the 18-year olds. The absolutely prevailing source of funds consists in the state budget financing an enormously high share of total expenditure. The number of young people of the corresponding age groups is decreasing and will continue to do so also in the future. A mild increase of participation rate can be expected particularly in the case of students 18-year olds, possibly 19-year olds. This should be *positively* influenced by the declared intention of the Government to increase the expenditure on education and by the fall of the number of young people in the respective age groups. With regard to the trends arising in the structure of the learners an increase of the number of young people participating in four-year educational programmes can be expected. As the high interest in education on this level is likely to continue, it is possible to assume that the identified participation gaps could be reduced by the end of the period under consideration, i.e. by 2000. On the other hand, also some *negative* effects must be considered. Prolonged economic recession may prevent the Government from implementing its intention to increase the expenditure on education, as a result of which the growth of education expenditure would decelerate. In the situation of neglected investments into school equipment this trend would exercise a negative influence on the improvement of education quality which is the principal object in this phase.

276. Greater **diversification of financial resources** for initial education on secondary level is desirable. It could be achieved, on the one hand, by a **higher participation of communal or regional authorities**, on the other hand (and particularly) by a **greater participation of employers**. That would require changes in existing legislation for which there is not sufficient political will. The prepared new Education Act does not consider, unfortunately, the participation of employers and the participation of regions is only in the phase of deliberations.

277. The effectiveness of education could be increased by the **involvement of social partners** and the representatives of the regional labour markets in the decisions on the future development of education which could contribute, apart from an improvement of the branch structure of the learners and school-leavers, also to an increase of their employment and limit the scope of additional retraining. In Czech conditions with an extraordinarily high share of young people with secondary vocational and technical education this involvement would be particularly effective. Also the approval of the intention of the Ministry of Labour and Social Affairs that the financial subsidies to vocational training of the pupils of

secondary vocational schools (apprentices) would be granted to the respective schools by the Labour Offices, would be beneficial, because the Labour Offices know best the labour market situation and could thus influence the branch structure of vocational training in the branches in demand on the labour market. A higher effect of initial education expenditure would be achieved also by the rationalisation of the school network, which would not be limited merely to the merging of existing small schools into a smaller number of bigger schools, but would affect also their branch structure. The effectiveness of the use of schools could be increased also by the links with lifelong learning.

278. In **initial education on tertiary level** the situation is more complex and more difficult. In comparison with EU or OECD countries the education participation is markedly lower and its structure is entirely different. For this reason the gap to be closed is considerable. On this level, too, the state budget represents the absolutely prevalent source of funding and lower numbers of young people in the corresponding age groups can be expected.

279. The filling of participation gaps in the future years will be influenced *positively* by the permanently high interest in tertiary education. Although the declared intention of the Government to increase expenditure on education applies also to tertiary education, it will not be easy to achieve the target participation rate in tertiary education even if the state expenditure increased. This is prevented primarily by two *negative* factors. The first is the limited capacity of schools providing tertiary education. It could be increased by an extension of existing schools or the construction of new ones, but the results would come only after several years. Moreover such capacity increase would represent merely a small percentage. Every capacity increase, naturally, could help at least reducing the participation gap and, therefore, would be desirable. The second and a more serious factor is the fact that the Czech Republic has no clear concept of further development of tertiary education. The network of higher professional schools established several years ago did not develop. It does not concern quantity – like in the case of secondary schools there are many small schools – but quality. These schools have not managed to „mature“ yet and the process of their development has not sufficient support. This is due *inter alia* to the fact that most pupils leave the secondary schools with the qualification recognised on the labour market and that the qualification status of the graduates of higher professional schools has not been regulated yet. The relation between the education provided by higher professional schools and higher education institutions is not clear, either. Higher education institutions do not recognise education obtained at higher professional schools as the first grade of higher education system. The increase of participation in tertiary education, consequently, does not require only an increase of expenditure. It is also necessary to **diversify tertiary education**. This diversification should be founded on clear priorities determined in co-operation with the labour market and should be accompanied also with the amendment of the respective legislation. An improvement of existing situation could be contributed to also by a **more intensive co-operation of higher professional schools and higher education institutions with enterprises** and further organisations in the solution of common projects which would not only broaden the sources of funds for the financing of tertiary education, but also provide the schools with new impulses for further development.

280. In **adult education** the crucial role is and will be played also in the future by retraining and job-related training of employees. Retraining shows a considerable participation gap – the quota of retrained people is low and is decreasing continuously. Although the Labour Offices exert considerable effort to include the highest possible numbers of job applicants into retraining courses, in the period of increasing unemployment their effort is hindered by the overloading of their capacity on the one hand and by the shortage of funds on the other. If the National Employment Plan prepared by the Ministry of Labour and Social Affairs is adopted in 1999, it could result *inter alia* in an increase of the capacity of the Labour Offices enabling them the mediation of retraining of a higher number of job applicants. An increase of fund sources for retraining could be achieved also by a **better use of the employment policy funds** only a part of that has been used for this purpose so far. The financial resources could be increased also by the establishment of the Education Fund, proposed in the draft version of the National Employment Plan. In

the long run it would be possible to reduce the gap in retraining on the one hand by the reduction of the overall unemployment rate (and, consequently, the reduction of the number of retraining people), on the other hand by the measures in initial education aimed at an improvement of the branch structure of the learners and school-leavers.

281. Considerable participation gap exists in the Czech Republic also in job-related training of employees. While the capacity of educational institutions would be able to accommodate a greater number of learners and the willingness of the employees, the **crucial issue** in this field is the **lack of motivation** for continuing education of employers and employees alike. Without the introduction of effective motivation instruments and incentives on national level, contained in the respective legislation, no substantial improvement of existing situation can be expected. The present system, based merely on spontaneous initiative and supply and demand principle, has not shown desirable results. In the long run a gradual increase of the number of enterprises considering the education of their employees and human resources development in general as a substantial part of the strategy of their development can be expected.

282. The improvement of the general atmosphere required for the development a lifelong learning in the Czech Republic necessitates the adoption of several **fundamental measures also in the non-financial field**. Of fundamental significance is the **explicit expression of the interest of the State in the lifelong learning of its citizens not in a declaratory, but in the legislative manner**.

283. One of the first concrete measures should be the **improvement of co-ordination of the bodies responsible** for the principal sectors of education. This co-ordination could be enhanced – apart from an improvement of mutual co-operation of several ministries and social partners – also by the establishment of a consultative body (Education Council), as used in developed countries. Another fundamental measure should include the **introduction of consistent statistical monitoring** of all sectors of lifelong learning. While the sector of initial education is statistically well monitored on the whole, the field of adult education is practically devoid of any information. The number of fundamental measures should include also **the establishment of an information system** on continuing education providers and their training programmes.

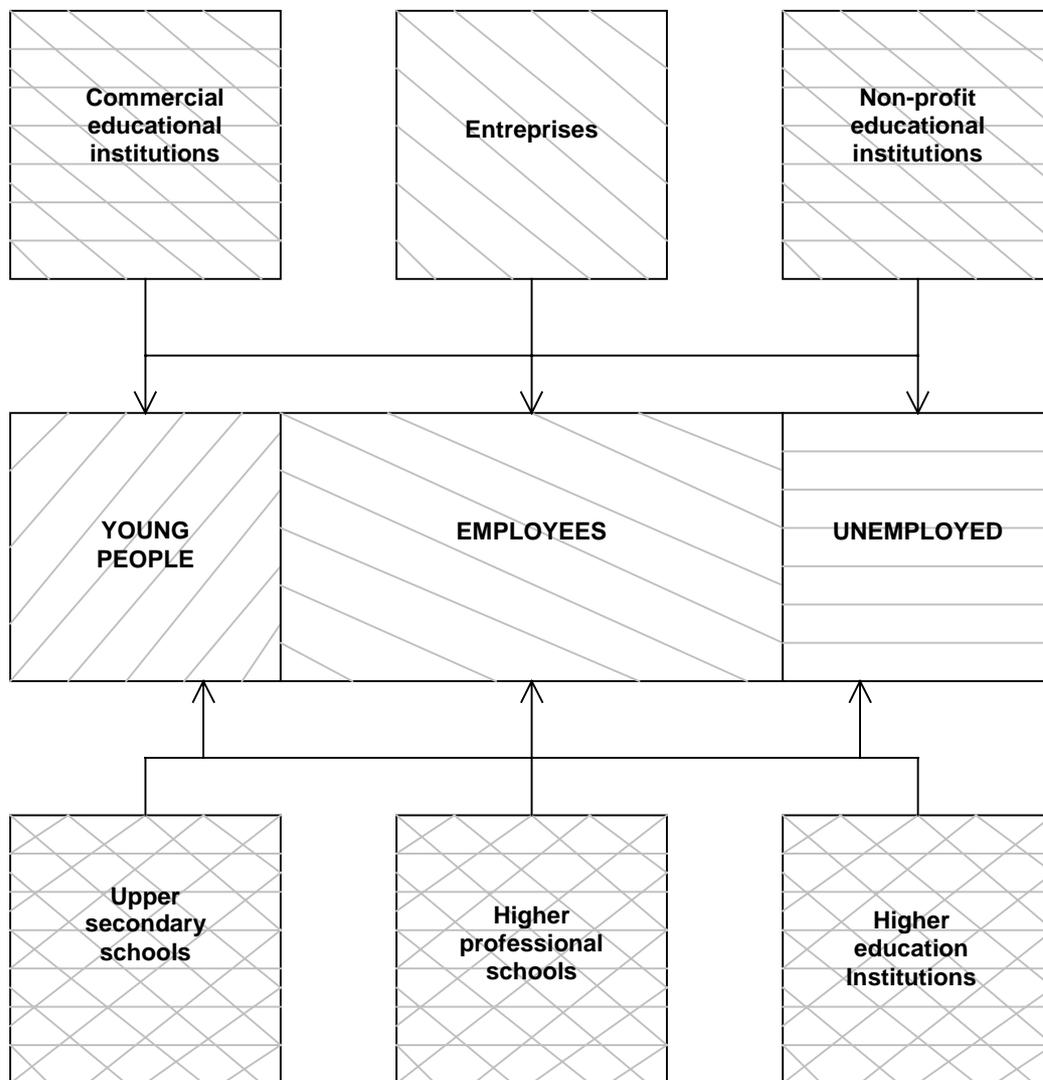
284. In the course of the 90s the Czech Republic, in spite of difficult conditions, succeeded in achieving remarkable results in the field of lifelong learning. They can be highlighted by a comparison with initial conditions, which are not always considered adequately in international comparison. However, if the Czech Republic aspires at comparability with the EU or OECD countries, its national authorities must do more for the development of lifelong learning than they have done so far.

285. It seems that the expected decisions will be made finally. At the time of completion of this study the Ministry of Education, Youth and Sport submitted to the Government the concept of the sector of education for the period terminating 2002, comprising also the Principal Aims of the Education Policy of the Government of the Czech Republic. The Government approved this material. An important part of these aims is linked with lifelong learning and the increase of participation rate, from which we quote:

- to effect changes of the education system enabling access to higher education also to the children from disadvantaged social environment,
- to assure the access to any form of tertiary education for a half of the age cohort by 2005,
- to extend by 2005 the average duration of education from the present 14.7 to 16.7 years, thus achieving the present average of the EU countries,

- to create a diversified and permeable education system developing the key competencies and opportunities for lifelong learning,
- to prepare a concept and a development strategy of continuing education (adult education) including the necessary legislation and financing,
- to establish and implement development and innovation programmes supporting particularly the creative work of schools and the development of continuing education;
- to increase public expenditure on education from less than 4.5 % of GDP to 6 % in 2002.

ANNEX 1. LIFELONG LEARNING DIAGRAM



Initial education

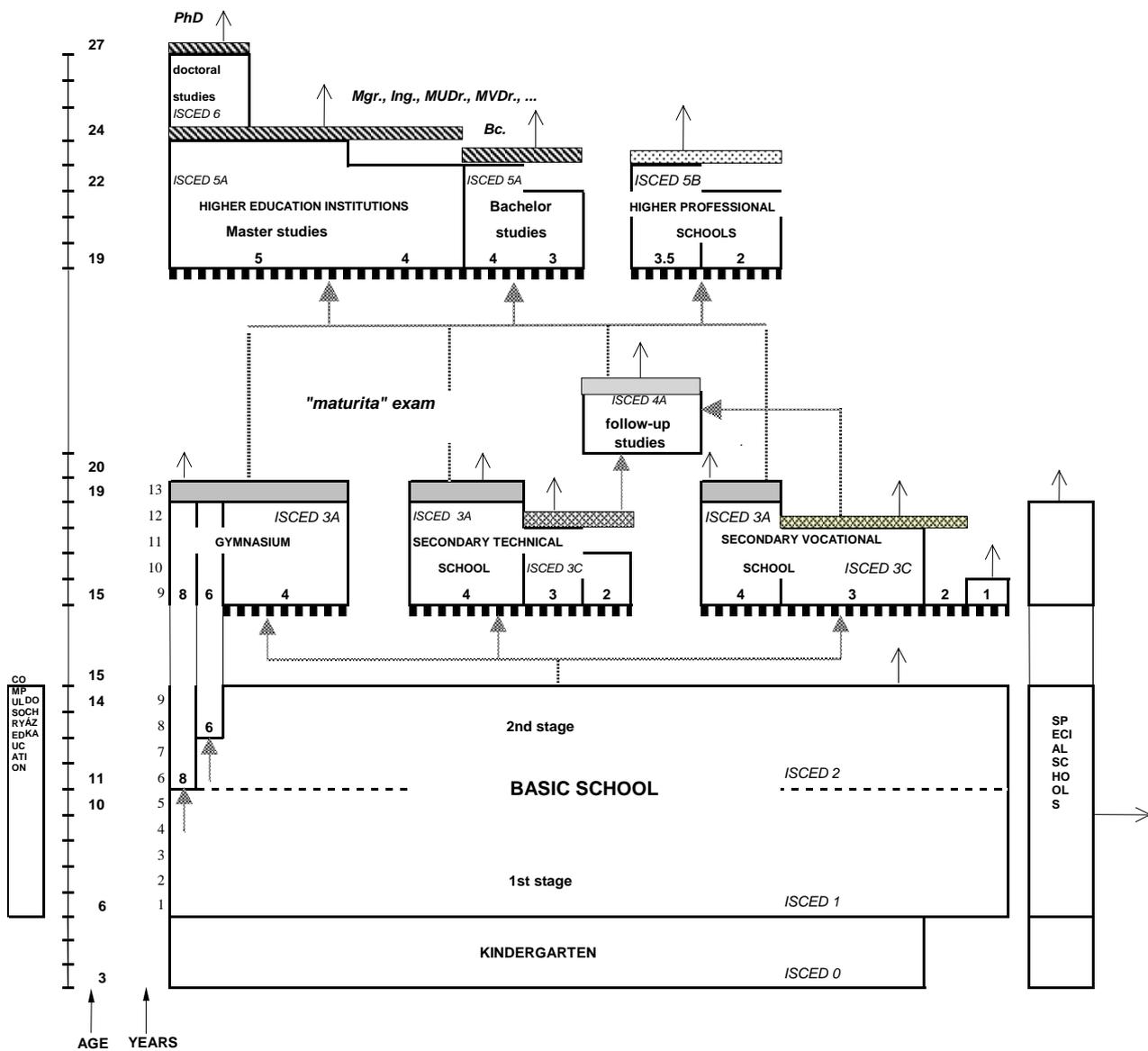


Continuing education (job-related)



Retraining programmes of the unemployed

ANNEX 2. EDUCATION SYSTEM OF THE CZECH REPUBLIC (FROM 1996/97)



BIBLIOGRAPHY

- Aktivní politika zaměstnanosti v České republice. [Active employment policy in the Czech Republic.] Ministry of Labour and Social Affairs, Prague 1998. ISBN 80-85529-48-3.
- Education Policy Analysis. 1997. OECD, Paris 1997. ISBN 92-64-15682-8.
- Lifelong Learning for All. OECD, Paris 1996. ISBN 92-64-14815-9
- Compass to Workforce Development Toolkit. Center for Workforce Development, Education Development Center, Newtown 1996.
- Continuing Vocational Training. Result of Research, AMD Agency, Prague 1996.
- The Cranfield Project on European Human Resources Management - Research Results 1995 - 1996. Economic University Prague 1997.
- Czech education and Europe. Educational Policy Centre, Faculty of Education, Charles University, Prague 1999.
- Další kroky transformace. [Further transformation steps. Part of the results of the PHARE Programme VET Reform.] Fragment, Prague 1998. ISBN 80-7200-290-2.
- Education at a Glance. Analysis. OECD, Paris 1996. ISBN 92-64-15357-8.
- Education at a Glance. OECD Indicators 1998. OECD, Paris 1998. ISBN 92-64-16127-9.
- Hartl, P., Štěpánek, Z., Reichel, K., Brejchová, D.: Budoucnost vzdělávání dospělých v Evropě. [The future of adult education in Europe.] Eurodelphi 1993-1996. National Training Fund and Charles University, Prague 1998.
- Historická ročenka školství v České republice. [Historical school yearbook of the Czech Republic.] Institut for Information on Education, Prague 1998. ISBN 80-211-0291-B.
- International Standard Classification of Education. UNESCO, Paris 1997.
- Key Data on Education in the European Union. Office for Official Publications of the European Communities, Luxembourg 1998. ISBN 92-828-1884-5.
- Key Indicators, Vocational Education and Training in Central and Eastern Europe. Office for Official Publications of the European Communities, European Training Foundation, Luxembourg 1998. ISBN 92-9157-162-8.

Kuchař, P.: Absolventi škol. Řízení a klasifikace dat sociologického výzkumu. [School-leavers in the Czech Republic. Data Classification of Sociological Research.] Universitas, Prague 1998.

Labour Force Statistics 1976–1996, OECD, Paris 1997.

Od pilotních škol k reformní strategii. [From pilot schools to reform strategy.] Fragment, Prague 1997. ISBN 80-7200-167-1.

Počáteční odborné vzdělávání v rámci celoživotního učení. Syntetická studie. [Initial vocational education in the framework of lifelong learning. A synthetic study.] Research Institute of Technical and Vocational Education, Prague 1998. ISBN 80-85118-31-9.

Průša, M., Průšová, P.: Přístup mladých lidí ke vzdělávání. [Access of Young people to education.] Education Policy Centre, Faculty of Education, Charles University, Prague 1997.

Pechod mezi počátečním vzděláváním a zaměstnáním. Rozbor situace: Česká republika. [Transition from initial education to employment. A situation analysis: Czech Republic.] National Training Fund - National Observatory of VET and Labour Market, Prague 1998.

Reviews of National Policies for Education: Czech Republic. OECD, Paris 1996. ISBN 92-64-15307-1.

Ročenka vzdělávání dospělých '95 [Adult Education Yearbook '95]. Czech Society for Adult Education.] Prague 1995.

Ročenka vzdělávání dospělých '96 [Adult Education Yearbook '96.] Vipera, Prague 1996

Rozpočet resortu školství, kapitola 333 - Ministerstvo školství, mládeže a tělovýchovy České republiky na rok 1998 [State budget for education - Chapter 333 - Ministry of Education, Youth and Sport of the Czech Republic for 1998.] Ministry of Education, Youth and Sport, Prague 1998.

Sborník ze semináře „Úloha sociálních partnerů ve vývoji kvalifikačních standardů a ve financování odborného vzdělávání [Papers of the seminar „Role of social partners in the development of qualification standards and in the financing of VET.] National Training Fund - National Observatory of VET and Labour Market, Prague 1998.

Statistická ročenka školství 1996. Soubor ekonomických ukazatelů resortu školství [Statistical yearbook of education 1996. Economic indicators of education.] Institut for Information on Education, Prague 1998. ISBN 80-211-0288-8.

Statistická ročenka trhu práce v ČR. [Statistical labour market yearbook of the Czech Republic). Ministry of Labour and Social Affairs, Prague 1998.

Studie o dalším odborném vzdělávání v České republice [Report on Continuing VET in the Czech Republic.] National Training Fund - National Observatory of VET and Labour Market, Prague 1998.

Školství v pohybu. Výroční zpráva o stavu a rozvoji výchovně vzdělávací soustavy v letech 1995 - 1996. [Education in motion. Annual report on the state and development of the education and training system in 1995 – 1996.] Institut for Information on Education, Prague 1996.

Teaching and learning. Towards a learning society. White Paper on education and training. Luxembourg Office for Official Publications of the European Communities, 1996.

Třetí mezinárodní výzkum matematického a přírodovědeckého vzdělávání. Výsledky žáků posledních ročníků středních škol. [Third International Mathematics and Science Study. Achievement of students of last year of upper secondary schools.] Pedagogical Research Institute, Prague 1998.

Vešterník, J.: Změny na trhu práce a v materiálních podmínkách života v České republice v období 1989 - 1995 [Changes on labour market and in material living conditions in the Czech Republic 1989 - 1995.] J. Hlávka Economic Institute, Prague 1996

Vývojová ročenka školství v České republice [Education development yearbook of the Czech Republic.] Institut for Information on Education, Prague 1997, ISBN 20-211-0258-6.

Who pays for training? Some policy approaches to financing vocational training. No. 13, CEDEFOP, Thessaloniki 1998.

Zaměstnanost a nezaměstnanost v České republice [Employment and unemployment in the Czech Republic). Czech Statistical Office, Prague 1997.