

The Institute of Economics, Zagreb
and
National Observatory

VET Financing Study

(draft)

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1 Introduction

Education and upbringing are the main determinants of a sustainable economy, continuous development of individuals and overall social development. Education is a national priority in developed countries. They develop on an ongoing basis apply strategies of education development and upbringing which in turn make the greatest contribution to economic, social and cultural advancement of society and its individual members. Contemporary strategies of education development are based on life-long-learning and a "learning society" concept. The developed European countries' standpoint is that "Europe should invest in education in order to increase the general level of competencies of its employees and the working part of its population, both during basic education, as well as by supporting acquirement of new knowledge throughout life" European Community Commission, 1996: 55; quoted according: Strategy Office, 2002).

Building up of a "society of knowledge", that is, an "economy based on knowledge", is a necessary condition of development and the meeting of Croatia's strategic goal – accession to the European Union. The Republic of Croatia is faced with the necessity of adjusting its education system to the continuous and intensive changes which take place in contemporary economy and society. Without those adjustments Croatia will lose the link to the company of developed and stable countries. International experience shows that the competitiveness of economy is highly correlated to the level of funds invested in human resource development. In spite of these comprehensions, financing of education and science in Croatia has not been a priority during the transitional period. Allocations from GDP for the needs stated above are much lower (app. 4,5%) than in the EU countries (5,6 – 6%) (cf. Vrgoč, Šokić and Vuković, 2002). The allocation structure is also unfavourable.

Application of the learning society concept also fosters the need for analyses and reform of the education system at all levels. The importance of vocational education and training (VET) is also recognized in this process. Increased competitiveness of the country and higher employability of individuals are the most important factors due to which VET has been given a central place in the European policy and programs (National Observatory, 2001).

The subject of this study is examination of the VET system's functioning and its financing in the Republic of Croatia. The study particularly deals with organization and financing of the secondary education system, adult learning, as well as programs of training and re-training of redundant workers and the unemployed. After basic causes of inefficiency are identified in particular segments of the VET system, recommendations are made in order to reduce or eliminate inefficiencies, with the system being made efficacious and able to reach development priorities. The ultimate goal is to contribute to the development of a modern and efficient VET system which will create an educated, flexible, modern, and productive labour force able to meet the requirements of the European labour market and be a source of Croatian economy competitiveness.

The following Chapter will present the secondary education system in Croatia. Chapter 3 describes financing of the secondary education system with a special accent on VET financing. Chapters 4 and 5 deal with problems of adult learning, the unemployed and people who might soon become unemployed. Chapter 6 lists irrationalities and inefficiencies in financing the secondary education system, with a special accent on VET. Chapter 7 provides a number of recommendations which represent the most important activities for eliminating identified wastefulness. The study ends with a bibliography.

2 Secondary Education

According to the Secondary Education Act (Official Gazette 69/03, final text), secondary education is an activity which enables acquiring knowledge and working skills, and also continuation of learning after completion of basic education. The secondary education programs are as follows:

- general secondary education programs (*gymnasiums*);
- secondary vocational programs (3 and 4-year programs);
- lower vocational programs (1 and 2-year programs);
- training and advanced training programs.

According to the type of curriculum and program, secondary schools are divided into technical schools and related industrial, craft and other VET schools. Duration of curricula may vary from one to five years. Classification of acquired qualifications depends on the curriculum and plan duration. By finishing a secondary vocational school with at least a three-year program, the student attains a secondary vocational education level, while by finishing the same school, but with a one or two-year program, the student attains lower vocational education.

Pupils may enrol in technical and related schools on the basis of their results in basic education, that is, during the 7th and 8th grade, and subjects relevant for continuation of education. At the end of secondary education programs, pupils take final exams which enable them either to enter the labour market, or to continue education at polytechnics and universities.

Industrial and related schools prepare students for work. It is foreseen that pupils who finish secondary vocational schools acquire knowledge and skills enabling them to enter directly the labour market. These schools are linked with the business world and are important for meeting its demands for labour force.

Education for crafts may be organized in two ways. The so-called classic system has been implemented for many years, while the other one, the so-called dual system, was introduced

in 1995. The dual system is the Croatian Chamber of Crafts project. Organization and financing of the dual system is dealt with in detail in items 2.3 and 3.2.

Secondary education for adults includes special programs for acquiring general secondary education and secondary vocational education, lower vocational education, training and advanced training programs. Programs have to be adjusted to the age, previous education, knowledge, skills and competencies of adults. The above mentioned programs are designed by institutions implementing them on the basis of the curriculum of regular secondary schools, while the conditions and methods of program implementation, as well as of acquiring secondary education qualifications for adults are prescribed by the Minister of Education.

2.1 Secondary Education Programs

Secondary Education Programs are classified into several groups according to the type of programs provided and their duration.

(A) four-year programs:

a. gymnasiums

b. art schools (visual-art and design, music, ballet and dance)

c. technical and related schools (all four-year VET programs except cosmetics)

(B) three-year programs for industry and economy

(C) three-year programs for crafts:

a. classical

b. dual

c. integrated

(D) up to two-year programs for acquiring lower vocational education

(E) programs for persons with special needs for acquiring secondary or lower vocational education.

Table 1: Number of pupils in secondary education programs

	2000/2001	2001/2002	2002/2003	2003/2004
<i>Gymnasiums</i> (total)	50.165	50.465	50.450	50.738
Art and design (total)	1.955	2.646	4.211	4.290
4-year vocational programs (total)	81.041	82.820	84.486	85.849
3-year vocational programs (total)	57.079	55.334	53.947	51.802
Programs for industry	25.445	24.372	23.789	23.324
Programs for crafts (classical)	21.138	20.287	19.330	14.664
Programs for crafts (dual)	10.496	10.675	10.828	8.100
Programs for crafts (integrated)				5.714
Lower vocational programs	118	144	149	138
Programs for children with special needs	1.240	1.270	1.712	1.756
TOTAL	191.598	192.679	194.955	194.573

Source: Ministry of Education and Sport

The tables show a slight increase in the number of pupils in secondary schools in the last four school years. Secondary schools were attended by app 195,000 pupils over the period of the last two years. Four-year VET school programs were attended by the greatest number of pupils, showing an increase of attendants and thus the greatest share of total number of secondary school pupils. Three year VET schools are the second most numerous, but the number of their pupils shows a continuous decrease. The number of gymnasiums is stable. The number of pupils with special needs shows an increase, but the share of these in the total number of pupils is very low.

Table 2: The trend in the share of pupils enrolled in individual secondary school programs in the total number of pupils in secondary education

	2000/2001	2001/2002	2002/2003	2003/2004
<i>Gymnasiums</i> (total)	26,18	26,19	25,88	26,08
Art and design (total)	1,02	1,37	2,16	2,20
4-year vocational programs (total)	42,30	42,98	43,34	44,12
3-year vocational programs (total)	29,79	28,72	27,67	26,62
Programs for industry	13,28	12,65	12,20	11,99
Programs for crafts (classical)	11,03	10,53	9,92	7,54
Programs for crafts (dual)	5,48	5,54	5,55	4,16
Programs for crafts (integrated)	0,00	0,00	0,00	2,94
Lower vocational programs	0,06	0,07	0,08	0,07
Programs for children with special needs	0,65	0,66	0,88	0,90
TOTAL	100,00	100,00	100,00	100,00

Source: Ministry of Education and Sports

2.2 Secondary Vocational Education and Training (VET)

Secondary education is organized through three and four year program schools. There are also programs for semi-qualified workers and pupils with special needs. There are 273 schools¹ in Croatia providing VET programs. The number of 137,651 pupils was enrolled in VET school programs in the 2003/2004 school year, which made up 71% of the total secondary school pupils.

All programs have common general courses, common VET courses (for particular specialisations or qualifications) and an optional part closely related to the choice of specialisation. In some educational fields pupils can choose optional programs even within the particular profession. Four-year VET programs offer an opportunity to continue education

¹ According to 2002 data given by the former Ministry of Education and Sport.

in polytechnics or at universities, while after completion of three-year programs pupils have to attend an additional year before continuation of education.

VET schools provide 438 programs in 28 fields. Substantial technological development has changed the economic structure of Croatia in the period of the last 15 years. There is, therefore, no need for part of the above mentioned specialisations, while there are needs for new occupations and specialisations. However, the adjustment of the VET system to the requirements of the economy and the labour market is unfolding very slowly. **Analyses show that some of the programs produce more and more unemployed from year to year.**

Transition, marked by the consequences of war and restructuring of the economy, and, particularly privatisation of large State companies, resulted in reduction of links between industry and VET schools. VET schools have not adjusted themselves quickly enough to the needs of small and medium businesses. **A substantial restructuring of VET schools is needed in terms of quality and decentralization. Curricula should be far less specialized, while industry and trade should fully participate in the process of education program design.**

2.3 Dual Education System for Craft Occupations

Education for craft occupations (57 occupations) can be organized in two ways and is part of the secondary education system. The first one, the so-called classical model, has been implemented for many years, while the so-called dual system was introduced some 10 years ago. The Ministry of Education and Sport² has prescribed the general education part of the program, while the Ministry of Crafts, Small and Medium Enterprises have prescribed vocational/theoretical and practical parts. Curricula for crafts in dual system consist of general education, vocational/theoretical and practical parts. The particularity of the dual system is that the VET school itself carries out the vocational/theoretical part, while the

² A restructuring of the ministries' scope of activities has been introduced by the Act on Structuring and Scope of Activities of Ministries and State Administrative Organizations Act (Official Gazette 199/03). The former Ministry of Education and Sports continued its activities as the Ministry of Science, Education and Sport, while the Ministry of Economy and the Ministry of Crafts, Small and Medium Enterprises have been integrated into the Ministry of Economy, Labour and Entrepreneurship. However, the text of this study adheres to the original legal terminology.

practical apprenticeship is conducted by a licensed (authorised) craft or other workshop. A VET school pupil is, at the same time, an apprentice with the craft business with which he has a Contract. The regional Chambers of Crafts keeps a registry of craft workshops which meet requirements for taking apprentices and which can conduct practical classes in the dual system.

The share of the practical part of the curriculum is greater in the dual system than in the classical (1,080 school hours of practical classes in the first two grades and 960 in the third grade) in relation to 560 hours in the classical system. The pupil (actually the pupil's parent or guardian) concludes a Contract on Apprenticeship with a craftsman who conducts the practical part of classes. The craftsman in question is responsible for making the pupil capable for independent work. The Contract is approved by the regional Chamber of Crafts and, after a one-month probation period, it can be cancelled only for a good reason. The difference also lies in the fact that the pupil is not obliged to take the general- education part of the exam in order to take the practical part.

The contract defines the rights and obligations of the pupil and of the craftsman and must be in accordance with the By-Law on Minimum Conditions on Apprenticeship (Official Gazette 62/02). The above mentioned By-Law also regulates the amount of the monthly allowance for the time spent on practical courses. The allowance is 15% of the previous year's average net salary in Croatia in the first grade, 20% in the second, 25% in the third and 30% in the fourth grade. Practice show that a number of craftsmen do not meet their contractual responsibilities or do not pay apprentice allowance (Rebić-Jovičić, 2003).

Education within the dual system is completed by taking a final exam, part of which is also the so-called journey-man exam, taken in front of the Croatian Chamber of Crafts commission, the members of which are craftsmen and VET school teachers. After successfully passing the exam pupils get journey-man certificates for a particular occupation. By passing the journey-man exam and the final exam, pupils attain the secondary education level which enables them employment in crafts. The continuation of education at polytechnics is also possible after passing final exams and under certain circumstances. After three years work in a particular occupation, it is possible to take the master's exam.

Talking about advantages, the dual system shows stronger interconnectedness of the education system and future employment, because apprentices learn necessary skills in

practice from the very beginning of classes. It gives them more chances for suitable employment, either with the craftsman with whom they did their apprenticeship, or elsewhere. However, it should be noted that the workshop's owner is not obliged to employ the apprentice after the completed apprenticeship if he doesn't want to do so.

Difficulties in application of the dual system are reflected in insufficient acquaintedness with the system on the part of parents and pupils, non-existence of appropriate text-books, unwillingness and absence of motivation on the part of school principals and teachers, and excessive scope of the practical part of apprenticeship curricula (Vrgoč, 2001). The above mentioned problems have organizational and financial dimensions, solving of which could increase the quality of the system.

The dual system covered 97 out of the 273 secondary VET schools in the year 2000, and was not the most often applied model in any of the VET fields. It is most frequently used in the field of mechanical engineering, personal services, wood-processing and electrical engineering, covering 82% of schools participating in the dual education program (cf. Miliša et al, 2000)

3 Financing of Secondary VET

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3.1 Secondary VET Financing Sources

Funds for financing secondary education, as well as secondary VET, are allocated from the State Budget, budgets of units of local and regional self-government and other sources (school income, donations, subsidies and the like). This chapter deals with the most essential secondary education financing issues with the accent on VET. However, available data have been rather scarce and show that they have not been collected systematically.

Decentralization of Secondary Education Financing

Financing of secondary education system and of VET schools was covered by the State Budget until 2001. Financing of the secondary education system has been partly decentralized since July 1st 2001. The responsibility for financing of public needs in secondary education, defined by means of the pedagogical standard, is distributed between the central State and units of local and regional self-government, which are obliged to ensure the corresponding funds from their budgets. Decentralized functions are prescribed by special acts, while criteria of minimum standards in a particular year are defined by the Government's decisions. The Act on Secondary Education (Official Gazette 69/03) precisely regulates which public needs of the secondary education are covered by the State Budget, and which are covered from the counties' budgets and the budget of the City of Zagreb.

The State Budget funds cover the following:

- Teacher salaries
- Remuneration for secondary school employees as defined by the Collective Agreement;
- Advanced teachers' training
- Increased expenditures for education of national minority pupils in their own language;
- Talented pupils' programs;
- Secondary school IT programs;
- School library equipping programs;

- Increased expenditures for education of pupils with special needs;
- Co-financing of private school programs;
- Capital construction project as defined by a particular part of the 2001 State Budget
- Other programs of joint interest for the secondary education activities (IT systems, professional journals and books, institutional and professional association programs, anniversaries and special events, extra-activity programs).

The counties and the City of Zagreb cover funding for the following:

- Investment maintenance of school premises, teaching equipment;
- Procurement of teaching equipment
- Secondary school material costs;
- Transport for secondary school employees;
- Subsidies for co-financing accommodation and meals in pupils' hostels;
- Capital construction of school premises and equipment according to standards defined by the Minister.

Secondary Education Financing Decision-Makers

Together with defining the State Budget Proposal every year, the Croatian Government sets criteria and measures for ensuring the minimum financial standard for meeting public needs, one of which is the secondary education. Public needs in secondary education are defined by the secondary education pedagogical standard specifying material, human resources and other conditions for implementing education activities and ensuring equal development of the secondary education in the medium term. The pedagogical standard is enacted by the Croatian Parliament.

This means that all secondary education financing decision-making is centralized. The same applies to VET. Local and regional self-government units do not have the opportunity of direct participation in setting the financial standard, but accept it as a given. This defect should be rectified, because local and regional self-government units have much better insight into the secondary education and labour market situation in their own regions. **More active participation of local and regional self-government units in decision-making** would add to better transparency of fund allocation and thus also to the efficiency of the entire system of secondary education. However, this implies a competent and responsible administration at all levels of government and self-government.

A local and regional self-government unit may, according to the Secondary Education Act, identify a wider scope of public needs than defined for secondary education (co-financing of private school programs, other secondary education programs of interest for local and regional self-government units) and provide funds for them from their respective budgets. If a secondary school generates a profit, it must be used exclusively for implementation and development of the school's activities, in accordance with the law, the establishment act and the Statute of the institution.

Local and Regional Self-Government Unit Budgets

According to the Act on Financing Local Government and Self-Government Units (Official Gazette 117/93, 69/97, 33/2000, 73/2000, 127/2000, 59/2001, 107/2001, 117/2001, 150/2002 and 147/2003), local government and self-government units acquire income from their own sources, from common taxes, and State and County Budget subsidies. The relatively largest income share of local and regional self-government units comes from common taxes. They are as follows:

1. income tax
2. profit tax
3. real estate sales tax

Income tax is distributed between the municipality, county and State, according to the following shares:

- a) municipality (city) share 32%,
- b) county share 8%
- c) equalisation subsidy item share for decentralised functions 21%
- d) State share 29.20%.

According to an individual Act, cities, counties and the City of Zagreb are entitled to an additional income tax share as follows:

Basic education	2.9%
Secondary education	2.0%
Social welfare	
• Social welfare centres	0.4%
• Pensioners' homes	1.6%
Health care	
• Investment maintenance of county-owned institutions	2.5%
• Health care of non-insured persons	0.3%
• Health care of agricultural household members over 65	0.1%

An amount of 20% of income tax goes to the municipalities and cities, 10% to the counties, and 70% to the State. Real estate sales tax is distributed between municipalities, cities and the State only. The municipality's share in the real estate sales tax is 60%, while 40% goes to the State.

Equalization subsidies for secondary education financing

The main source of financing decentralization functions for the secondary education public needs, as well as of VET, for 32 cities and 20 counties are funds from the allocated income tax share (2%). If a local and regional self-government unit can not entirely meet the obligatory prescribed minimal standard of public needs in secondary education, equalization subsidy funds for decentralized functions are available within the transitional period. Subsidy funds or the so-called equalization fund (which are actually the State budget funds) may be requested by local and regional self-government units for equalization up to the prescribed minimal standard.

Funds from the equalisation subsidy item for decentralised functions of local and regional self-government units are distributed for the coverage of public expenditures in the field of basic and secondary education, social welfare and health coverage transferred to local and regional self-government units. The Croatian Government, that is, the Ministry of Finance in cooperation with the Ministry of Education and Sport, defines the method of calculation of

the equalization subsidies for the individual decentralized functions of local and regional self-government units for the following budget period³.

In the case of 2003, it was specified that equalisation aid users (local and regional self-government units) would plan decentralisation function expenditures for the year 2003 in their respective budgets. Revenue for decentralised functions is planned according to the estimation of revenue to be realized on the basis of the additional income tax share. The difference in income up to the amount defined by public needs in secondary education was planned from the equalisation assistance funds for decentralised functions from the 2003 State Budget, from the Account No. 3631 – *Current Assistance Within the General State*.

Equalisation assistance funds are allocated under conditions which depend on expenditure types. Expenditures are differentiated as follows: operating expenses, long-term property procurement costs, and additional investment into non-financial property. Equalisation assistance for operating expenses were allocated in advance for the month of January 2003, and also in advance for the other months, based, however, on a monthly statement of accounts for the previous month reconciled with the advance for the current month. Equalisation assistance for long-term property procurement costs and additional investment in non-financial property is executed on the basis of provided documentation by the counties, cities, and the City of Zagreb confirming procedure carried out according to the Law, on the basis of provided certified invoices for procured commodities and/or certified (interim or final) status reports on completed works, that are due or will fall due in the month for which an application for funds allocation is being submitted to the Ministry of Education and Sport, until the 10th of the month for the current month. After checking this documentation, the Ministry of Education and Sport submits integrated applications on the level of a particular county or city is submitted to the Ministry of Finance by the 15th of the month for the current month. Equalisation assistance funds are allocated by the Ministry of Finance between the 20th and 30th of the month for the current month. Counties, cities and the City of Zagreb are obliged to report quarterly to the competent Ministry on the funds spent by final users (institutions), in total, by institutions and the type of expense.

³Regarding the budget period, the following budget year is most often in question. In case of a temporary budget being approved, the budget period can be even shorter. Then it is usually a quarter. This was the case for the first 2004 quarter, because a temporary budget was approved before the parliamentary elections in November 2003.

Data related to revenue from additional income tax share and the needs for equalisation subsidies are incomplete and are of indicative significance only. Data from January to September 2002 are shown in the following table:

Table 3: realisation of revenue from additional income tax share and the needs for equalisation subsidies in the secondary education system, January – September 2002 (in millions of Kunas)

County	Obligation	Revenue from additional income tax share	Balance to be remitted from the State Budget	Share if the State Budget support in total obligation (in %)
Zagrebačka County	7,7	7,1	0,6	7,8
Krapinsko-zagorska County	8,5	2,3	6,2	72,9
Sisačko-moslavačka County	10,5	2,5	8,0	76,2
Karlovačka County	7,8	2,4	5,4	69,2
Varaždinska County	9,6	3,5	6,1	63,5
Koprivničko-križevačka County	6,0	2,0	4,0	66,7
Bjelovarsko-bilogorska County	8,2	1,7	6,5	79,3
Primorsko-goranska County	17,6	9,3	8,3	47,2
Ličko-senjska County	3,6	0,7	2,9	80,6
Virovitičko-podravaska County	4,5	1,0	3,5	77,8
Požeško-slavonska County	4,7	0,9	3,8	80,9
Brodsko-posavska County	9,2	1,8	7,4	80,4
Zadarska County	9,7	2,6	7,1	73,2
Osječko-baranjska County	18,0	4,5	13,5	75,0
Šibensko-kninska County	5,4	1,4	4,0	74,1
Vukovarsko-srijemska County	9,4	1,3	8,1	86,2
Splitsko-dalmatinska County	26,3	9,0	17,3	65,8
Istarska County	12,5	6,6	5,9	47,2
Dubrovačko-neretvanska County	8,0	1,8	6,2	77,6
Međimurska County	5,3	1,6	3,7	69,8
City of Zagreb	44,3	40,2	4,1	9,3
TOTAL	237,0	104,4	132,6	55,9

Source: Adjusted according Lukeš-Petrović (2002)

Total data show that the equalisation subsidy share in the total obligations for secondary education was 55.9%, but this piece of data conceals the pronounced differences in the fiscal capacity of individual counties. However, the Zagreb County and the City of Zagreb positions should be singled out, since they financed 93.2, and 90.7% respectively of their own obligations for secondary education. Only the Istarska and Primorsko-goranska Counties (with 47.2 % each) have a lower than half share of equalisation subsidies in total obligations. All the other counties explicitly lag well behind (with subsidy shares of 63.5% and more), that is to say that the meeting of their obligations depends primarily on the central State Budget. The Vukovarsko-srijemska County had the most difficulty and managed to cover only 13.8% of its own obligations for secondary education revenues from its additional income tax share.

On the basis of this information, it can be concluded that the **decentralization of the secondary education system needs certain elaboration, primarily through reduction of the system's inefficiency, as well as distribution adjustment of authorizations and expenses in order to ensure less dependence on subsidies from the central State Budget.**

Additional Secondary Education Financing Sources

Secondary schools may collect some additional funds, such as from providing adult learning services, renting of premises, donations and the like. One should also mention the VET schools that earn additional funds through their own activities. In the case of some of the VET schools (for craftsmen occupations), these funds can be significant although these schools usually also have high expenses related to curricular program implementation.

Total Funds and Individual Secondary Education Expenditure Items

A tabular presentation of the total secondary education budget in the 1999-2003 period is given in this paragraph, so that the growth flow can be followed, that is, the decline in total funds and the structure thereof. On the basis of data available, we have shown separately the year 2002, in order to be able to indicate the structure of total funds, which are distributed between the State Budget and the local and regional self-government unit budgets.

Table 4: Total investment in secondary education – by application

	1999	2000	2001	2002	2003
Salaries and remunerations	1.219.551	1.359.485	1.386.043	1.395.085	1.547.085
Running costs	123.312	110.498	192.825	222.522	249.235
Accommodation and food in pupils' hostels	29.614	40.806	30.655	37.230	37.530
Pupils' transport from areas of particular State concern	-	-	-	-	24.999
Capital investments	55.867	48.885	146.552	216.938	227.270
Special programs	6.394	6.536	8.006	8.368	12.661
Total	1.434.738	1.566.210	1.764.081	1.880.096	2.098.780

Source: Ministry of Education and Sport

Table 5: Individual expenditure items shares in the total secondary education financial resources 1999-2003

	1999	2000	2001	2002	2003
Salaries and remunerations	85,00	86,80	78,57	74,20	73,71
Running costs	8,59	7,06	10,93	11,84	11,88
Accommodation and food in pupils' hostels	2,06	2,61	1,74	1,98	1,79
Pupils' transport from areas of particular State concern	-	-	-	-	1,19
Capital investments	3,89	3,12	8,31	11,54	10,83
Special programs	0,45	0,42	0,45	0,45	0,60
Total	100,00	100,00	100,00	100,00	100,00

Source: Ministry of Education and Sport

The Table 5 shows the falling trend of the share of expenditure on employees' salaries and remunerations in the total financial resources. Although the share of expenditure on employees' salaries and remunerations in the total expenditures for secondary education has been reduced in the observed period, funds used for salaries and remunerations increased in absolute terms. In 1999 an amount of Kunas 1.2 billion was spent on salaries and remunerations, and Kunas 1.5 billion in 2003, which is a growth of almost 27 percent. An average net salary in secondary education was Kunas 3,708.77 in 1999, and Kunas 4,705.60 in 2003. The increase is a result of an average salary increase in Croatia, the increased number of employees due to opening of the new schools, separation of schools and

extending of programs, reduction of teaching personnel obligations, and increased collective agreement rights (holiday bonuses, increased bases for payment of severance pay, jubilee-awards, aid, increased fare remuneration rights). However, three quarters of all investment in secondary education goes on financing of salaries and remunerations. **The most important conclusion which could be drawn from data presented in Table 5 is that the structure of secondary school expenditures is unfavourable (with an app 75 percent expenditure share for staff), while the trend is positive with a reduced share for employees' salaries and remunerations in the total expenditures, and a substantial increase of expenditure for capital investments from 3.89 percent in 1999 to 11.54 percent in 2002.**

Neglecting of capital investments was due to low allocations to education, which also had an effect on the condition of premises, equipment and other long-term property. The rate of fixed assets depreciation was 35.4 % in 2001. This is in a great extent due to the fact that depreciation funds have not been ensured since 1995 (cf. Vrgoč, Šokić and Vuković, 2002). The capital investment structure in the given period can be seen is the following table:

Table 6: Capital investments in 1999-2003

	1999	2000	2001	2002	2003
Capital Investment (construction) SB ⁴	38.779.426	30.661.103	105.126.278	131.604.682	110.352.117
Capital Investments (construction) - decentralization	-	-	-	18.258.865	41.622.068
Investment maintenance -SB	8.655.766	12.396.417	9.942.392	-	-
Investment maintenance and equipping - decentralization	-	-	7.781.030	40.330.908	32.116.909
Equipping SB	5.609.000	4.190.231	1.582.849	-	-
Computerization SB	588.148	163.173	15.500.000	22.424.277	9.779.634
Required reading SB	2.235.342	1.209.454	3.778.094	2.319.273	5.400.000
Didactical equipment SB	-	265.111	2.841.905	2.000.000	28.000.000
Total	55.867.682	48.885.489	146.552.548	216.938.005	227.270.728

Source: Ministry of Education and Sport

⁴ SB: State Budget

Taking into consideration salaries and remuneration, material expenses, special programs, investment maintenance and capital investment, total funds have been increased since 2000, and, thus, also the average outlay per pupil (see Table 7).

Table 7: Average outlay per pupil

Year	Total Funds	Average outlay per year per pupil in Kunas	Average outlay 1999=100
1999	1.434.738.000	7.244	100,00
2000	1.566.210.000	7.907	109,58
2001	1.764.081.000	9.128	126,49
2002	1.880.096.000	9.722	134,73
2003	2.098.780.000	10.824	149,00

Source: Ministry of Education and Sport

An amount of app Kunas 1.5 billion (app 82% of total financial resources) was allocated from the State Budget for financing of secondary education public needs, while slightly over Kunas 300 billion (app 18% of total financial resources) was paid from local budgets for secondary education, that is for items which are within the scope of their obligations according to the Secondary Education Act.

Table 8 shows local and regional self-government expenditure items in 2002. As in the total financial resources structure, there is an evident disproportion between allocations for current expenditures and capital expenditures. An amount of slightly over 80% goes for financing current expenditures from total financial resources planned.

Table 8: Review of decentralized function obligations for secondary education to be financed from the counties' budgets and from the 2002 equalization subsidy position

Counties	General expenses	Other expenses	Accommodation and meals in pupils' hostels subsidy	Total current expenses 2002 (2+3+4)	Capital projects	Investment maintenance, equipping, didactical equipment and current maintenance	Total capital investments (6+7)	Total (5+8)
1	2	3	4	5	6	7	8	9
Zagrebačka	2.227.500	4.733.482	1.482.000	8.442.982	812.445	988.696	1.801.141	10.244.123
Krapinsko-zagorska	1.875.960	4.290.722	3.672.000	9.838.682	694.724	841.987	1.536.711	11.375.393
Sisačko-moslavačka	2.438.640	5.942.098	3.648.000	12.028.738	897.996	1.116.701	2.014.697	14.043.435
Karlovačka	2.160.480	4.822.103	1.650.000	8.632.583	782.381	985.409	1.767.790	10.400.373
Varaždinska	2.843.700	6.661.513	1.026.000	10.531.213	1.067.324	1.213.713	2.281.037	12.812.250
Koprivničko-križevačka	1.710.060	3.133.653	1.776.000	6.619.713	630.450	757.192	1.387.642	8.007.355
Bjelovarsko-bilogorska	2.199.000	4.831.267	2.088.000	9.118.267	796.002	1.017.623	1.813.625	10.931.892
Primorsko-goranska	5.226.060	9.855.125	4.194.000	19.275.185	1.859.570	2.373.834	4.233.404	23.508.589
Ličko-senjska	661.020	1.917.750	1.608.000	4.186.770	234.708	327.028	561.736	4.748.506
Virovitičko-podravska	1.353.720	2.610.738	972.000	4.936.458	2.155.136	600.088	2.755.224	7.691.682
Požeško-slavonska	1.357.980	2.663.365	1.194.000	5.215.345	493.826	588.423	1.082.249	6.297.594
Brodsko-posavska	2.555.940	5.550.713	2.112.000	10.218.653	944.687	1.116.558	2.061.245	12.279.898
Zadarska	2.889.900	6.436.701	1.230.000	10.556.601	1.051.171	1.367.386	2.418.557	12.975.158
Osječko-baranjska	5.687.580	11.730.295	1.914.000	19.331.875	1.812.998	2.566.079	4.379.077	23.710.952
Šibensko-kninska	1.775.400	3.679.071	306.000	5.760.471	656.217	825.980	1.482.197	7.242.668
Vukovarsko-srijemska	3.059.580	5.845.993	1.056.000	9.961.573	1.154.227	1.386.864	2.541.091	12.502.664
Splitsko-dalmatinska	8.157.720	17.765.297	2.520.000	28.443.017	0	6.662.987	6.662.987	35.106.004
Istarska	3.541.080	8.078.048	2.082.000	13.701.128	1.294.646	1.662.204	2.956.850	16.657.978
Dubrovačko-neretvanska	2.273.880	4.622.498	1.950.000	8.846.378	300.000	1.516.886	1.816.886	10.663.264
Međimurska	1.683.780	3.406.370	660.000	5.750.150	620.357	711.236	1.331.593	7.081.743
City of Zagreb	14.732.280	32.488.709	90.000	47.310.989	0	11.704.029	11.704.029	59.015.018
TOTAL	70.411.260	151.065.511	37.230.000	258.706.771	18.258.865	40.330.903	58.589.768	317.296.539

Source: Official Gazette 155/02

3.2 Dual System Financing

The dual system is organizationally complex and its implementation includes various actors – from the ministries and the Croatian Chamber of Crafts to VET schools, authorised craftsmen and apprentices, that is pupils themselves. But, when financing is in question, the system is not at all developed. In other words the Ministry of Education and Sport equally financed classes – regardless of whether pupils attended dual or classical model schools. That means that salaries and regular material costs were subsidised (cf. Rebić-Jovičić, 2003). The smaller scope of teaching activities in schools, as well as the transfer of responsibility and costs of practical teaching implementation to craftsmen, the dual system training for crafts is, in principle, relatively less expensive than the classical system.

The fact that there is no financial or logistics follow-up of the practical education part of the dual system is reflected both in reduced craftsmen interest in participation, and also in the quality and standardization of the education that an apprentice receives. It should be noted that because of the pronounced decentralization of the dual system, it is particularly sensitive to the non-existence of the national pedagogical standard.

However, a basic shortcoming of the dual system is that it is not sufficiently stimulating for craftsmen. Craftsmen-mentors could find interest for participation in the dual system in the low cost of apprentices' work and in the education of potential workers. The potential respect and contacts in craftsmen circles could stimulate craftsmen to participate in the dual system. However, craftsmen do not receive any direct encouragement by the state for carrying out the mentor's role. There is usually no logistics support which could have a maximum effect on both the pupil's apprenticeship and the craftsman's business. In other words, a craftsman is expected to bear the costs of the practical part of the apprenticeship himself, while the only possible financial compensation for him might be the relatively low cost of the apprentice's work in more advanced grades, when the apprentice has mastered the majority of skills needed in a particular craft. On the other hand, there are cases that not all the apprentice vacancies in a craftsman workshop are filled due to insufficient interest on the part of pupils/apprentices. This lack of coordination between supply and demand may happen due to insufficient adaptability of the school the market needs, an inadequate level of information for the pupils, parents and teachers, but also due to relatively broader responsibilities taken by the pupil in the dual system.

The key recommendation for the future VET system development in the field of crafts concerns the objectivity of criteria, in other words, the establishment of pedagogical standards (also including their financial component and the definition of appropriate source of financing) which would make possible a better and more efficient organization of the system. This could include the design of a uniform education for crafts model, as suggested by Rebić-Jovičić (2003), but also preservation of the present system's elements in addition to necessary improvements. For instance, the dual system can be particularly useful in cases when school workshops are not adequately equipped while the teachers are well trained to pass their skills to their pupils, which is often the case (cf. Vrgoč, 2001). In the meantime, it would be possible to undertake measures which would financially stimulate craftsmen for mentoring and add to the quality of its execution (e. g. by subsidizing loans for equipment purchase). This would need to be coupled with adequate monitoring of how the funds are spent, mentoring quality and fulfilment of obligations as stated by the apprenticeship contract. The Croatian Chamber of Crafts could play an important role in this procedure, with the financial support of the competent ministry.

3.3 Criteria and Scales for Financing Current and Capital Costs

The highest item in running costs is other costs, which include heating, lighting and utilities, teaching material for VET schools, pedagogical documentation, pupils' health insurance and medical check-ups of the school employees, rent of teaching premises and equipment, employees' transport to and from work. The criterion and scales for financing these costs is an outlay per pupil, which varies from county to county. Thus, the highest average outlay per pupil per year, in 2002, in the category of other costs was that in the Ličko-senjska County (Kunas 1,333), and lowest in the Koprivničko-križevačka County (Kunas 637).

General costs of a school include office material, teaching material and pedagogical documentation, utilities and related costs, telephone, telefax and postage costs) pedagogical and other periodicals, magazines procured according to the Ministry of Education and Sport's recommendation, procurement of minor inventory and safety at work equipment, cleaning materials, rubbish disposal, water consumption, material for current maintenance of premises, working material and equipment, seminars, professional literature, per diems and

travel expenses for business trips, professional training etc., according to the Ministry's program.

Criteria and scales for financing general school costs are the following: number of pupils, number of classes, number of schools, number of island schools, and the number of computers, while scales include prices per month and year defined according to the following elements as follows:

- from Kunas 15.00 per pupil per month,
- from Kunas 250.00 per class per month,
- from Kunas 2,500.00 per secondary school per month
- from Kunas 1,500.00 per island school per month
- for computer use and maintenance from Kunas 50.00 per computer per month.

General and other costs make up the category of material and financial expenditures of local budgets. These expenditures were planned in the amount of Kunas 221,476.771 in 2002, while they were somewhat higher in the year Kunas 2003, 247,479.028.

The planned price for co-financing of pupils' accommodation and food was Kunas 20.00 per pupil per day in 2002, that is Kunas 600.00 per month per hostel for 30 days. According to the Decision on Criteria and Scales for Identifying Balance Sheet Rights for Financing the Minimum Financial Standard of Secondary School and Pupil Hostel Public Needs in 2003 (Official Gazette 155/02), remunerations to citizens and households on the basis of insurance and other remunerations (transport of pupils in areas of special state concern) should be included in local budget expenditures for the year 2003. Total funds planned for this item for the year 2003 amounted to Kunas 25 million.

Current maintenance refers to roof repairs which can not be planned, working equipment maintenance ensuring regular school operation activities, and interior wall painting. The order of priority for investment maintenance, equipment and teaching material purchase was set for the year 2002:

- boiler and central heating maintenance aimed to the functioning of the system;
- sanitary and water piping installation maintenance aimed at health/hygiene conditions improvement;
- procurement of new equipment, replacement of outdated equipment and procurement of lacking items and auxiliaries;

- roof maintenance to prevent damages;
- electric installation maintenance to meet technical and statutory standards;
- outer window and door maintenance;
- other maintenance activities.

The scope of each individual schools and counties activities sets the scale for defining costs and investment maintenance of school premises, equipment, teaching material and accessories, as well as current maintenance. The scope of activities is defined according to the following basic criteria:

- total number of pupils in the school and county;
- total number of classes in the school and county;
- number of school buildings in the county (only secondary schools in function);
- condition of existing school buildings and equipment;
- existing quality and level of teaching equipment and accessories;
- previous years investments.

The following amounts were allocated for the purpose of investment building maintenance, equipment, teaching means and accessories and also current building maintenance throughout Croatia in 2002.

- an average of Kunas 47.30 per pupil per year,
- an average of Kunas 1,831.58 per pupil per year,
- an average of Kunas 26,881.29 per pupil per year.

The following amounts were allocated for the purpose of capital project construction, adaptation and reconstruction throughout Croatia in 2002:

- an average of Kunas 60.08 per pupil per year,
- an average of Kunas 1,625.02 per pupil per year,
- an average of Kunas 7,549.63 per pupil per year.

Expenditures for material, spare parts and services in current and investment maintenance and expenditures for procurement of long-term property and additional investment into non-financial property, that is capital costs, stood at Kunas 58,589,768 in 2002, while the amount of Kunas 73,738,977 in 2003 was somewhat higher than for the previous year.

Average total planned material and financial expenditures per pupil per year in 2002 were Kunas 1,234,009 (Kunas 1,276.04 in 2003), according to criteria defined by Law and Regulations. They were obtained by dividing total material and financial expenditures by the number of pupils. An average cost per pupil per year for capital expenditures (capital projects, investment maintenance, equipping, didactics and current maintenance) in secondary schools was Kunas 296.08 in 2002 (Kunas 380.30 in 2003). Total planned expenditures for decentralized functions in secondary education were Kunas 317,296,539 in 2002, and Kunas 383,747,960 in 2003.

Deleted:

3.4 Roles of the Minister of Education and Sport, School Principals and Teachers in the System

Minister of Education and Sport, the head of the ministry in charge of functioning of the education system, has extensive authority, but also responsibilities.

Among other, the Minister of Education and Sport sets and approves the following:

- the common and optional part of the curriculum and program;
- text-books;
- the way of organizing classes in crafts schools and the practical part of teaching in VET schools;
- beginning and ending of classes and duration of recess period for every school year;
- conditions for and methods in talented pupils education;
- special institutions, programs, conditions, methods and procedures for pupils with special educational needs;
- conditions and methods of secondary education for adults.

According to the Secondary Education Act, a secondary school is managed by the School Board, while the school principal is the business manager and pedagogical leader of the secondary school. Persons with degree-level education, who meets requirements for being a teacher and have at least 5 years of working experience as educators may be nominated as school principals. The principal is selected on the basis of a public positions vacant

announcement. The School Board⁵ nominates and dismisses the school principal, as a new managing entity of the school with the capacity of independent decision-making for the period of four years. The same person can be nominated repeatedly. In addition to activities stated by the Act on Institutions, the school principal:

- proposes an annual plan and work program;
- executes School Board, Teachers' Council and other bodies decisions;
- decides on starting and terminating employees' work contracts;
- carries out School Board decisions on starting and terminating employees' work contracts and on employees' petitions, requests and appeals;
- carries out Teachers' Council decisions on pedagogical measures, pupils and their parents requests and appeals;
- carries out other tasks as stipulated by the Establishment Act, Statute and Law.

The school principal submits a report on education activities and school business operations to the Ministry at least once a year. **However, there is no stipulation on evaluation of the school principal's work, nor of the person or body that would monitor the quality of his/her work.**

Secondary-school teachers are graduate teachers, research associates, trainers, educators and teaching associates. The Minister stipulates what is considered to be the required education and required pedagogical/psychological education of teachers. Unlike the school principal function, teachers' work is evaluated. Evaluation is carried out on the basis of the elements defined by the Bylaw on Teachers' and Trainers' Promotion to Mentors and Counsellors. The process of evaluation is carried out by the school principal and the Education Institute Counsellor. The procedure, method and conditions of evaluation are stipulated by the Minister.

School principal and teaching personnel salaries are calculated on the basis of salary categories and current coefficients, defined by the Decree on Working Post Titles and Job Complexity Coefficient in Public Services (Official Gazette, 38/01 and 112/01). An employee's salary is made up of the basic salary and bonuses. The basic salary is made up of an employee's working post complexity coefficient and the base for salary calculation, increased

⁵ A School Board has 9 members. Four of them are teachers elected among the employees by secret voting, two members are elected by parents from the parents' council, while three members are elected by the representative body of the regional self-government or the City of Zagreb, based on the proposal of the management body of the local self-government unit where the school is located.

by 0.5% for each year of working experience. Bonuses on the basic salary are as follows: work success bonus (a relatively low stimulating salary portion), special working conditions bonus, position bonus and salary increases. Teaching personnel salaries defined in such a way are allocated to schools directly from the State Treasury.

This way of defining teachers' salaries is totally ineffective. The-equal-salary-for-all criterion for different work should be abolished as soon as possible. Various bonuses should be introduced to encourage teachers and show them their efforts will be adequately remunerated. If the only criterion of salary growth is the duration of working age in education, teachers become indifferent to the teaching curriculum, are tempted to do their work in a routine manner, not achieve the best possible effect with pupils. It has been mentioned several times that the salary and fringe benefit expenditures for employees is the most extensive item in the secondary school budget. Therefore, it is extremely important **to create, maintain and improve a transparent system for evaluation of teachers' work.**

4 Adult Learning System and Its Financing

Regardless of profession or educational qualifications, completed education does not always provide sufficient opportunities for taking part in work life. Training for a particular work is not final and sufficient because of the constant changes and the need to gain new knowledge and skills over and over again. Additional learning and training is needed - formal, non-formal or informal - in order to adapt to future working post changes.

The Council of Europe sponsored projects in life-long learning prospective throughout Europe and declared 1996 the year European Year of Life-Long Learning.

When the role of education is in question, two concepts are most frequently mentioned: *functional illiteracy* and *minimum competence threshold*. The consequence of functional illiteracy is structural unemployment. This phenomenon frequently arises in the developed world, through the need for adequate education of persons who gained their qualifications long ago, which are no longer appropriate in new conditions. The minimum competence threshold includes availing of a certain extent of knowledge without which it is not possible to survive on the labour market. This usually implies minimum computer literacy and minimum foreign language knowledge.

According to the current regulations, adult learning forms in Croatia cover the following

- a) basic education,
- b) training,
- c) retraining

Secondary education expenditures for adults are borne by students themselves or by the institutions which send them to be educated or retrained, by the Croatian Employment Bureau or other interested legal or physical persons (Rule Book on Adult Education, Official Gazette 112/2000). At present, the only adult education project, at a total cost of Kunas 6.5 million, which is financed by the Ministry of Education and Sport, at the moment is the adult literacy project and the vocational training for first occupation project.

Every person of 15 and over may be educated and trained within the adult education system. The basic principle is that every citizen must have an opportunity to complete basic education and attain a first occupation.

The interest in adult learning in terms of basic education is not particularly high because its duration is no shorter than it is in the regime of regular education. There are more individuals who are interested in additional training, particularly those who have completed three-year vocational programs, because having completed the fourth year they get the opportunity to continue education at polytechnics and universities.

Children who want to continue their education after three-year vocational schools are faced with the problem of losing their pupil status and thus all the accompanying rights (social and health insurance, child's allowance, parents' pensions and the like).

Retraining is one of the most popular adult education forms. There are several ways of understanding the notion of retraining in practice. It is not rare that retraining is seen as training of the unemployed to make them more employable. From the prospective of formal education, retraining is education according to particular programs compiled on the basis of vocational differences with the purpose of attaining a new occupation in programs of equal duration. Vocational differences are defined, for each of the candidates, between the programs a candidate has already completed and the new occupation.

There are 372 companies which deal with adult education. They are as follows:

- secondary schools 202
- people's open universities 19
- others 152.

Only 207 schools out of the total number of 372 were providing approved adult education programmes in 2000/2001. Public schools lost interest for this type of education, because according to the Ministry of Education and Sport decision, and now also Counties' Parliaments (as a result of the transfer of authorities), public schools are obliged to set aside 20% of income. As a consequence, the number of students was reduced by app 30%. However, the number of private schools which have found their interest in this field was increased. In any case, this measure is unpopular and incorrect, because every price increase is borne by the student, who has already given his last penny for education.

Research at the Institute of Economics in Zagreb (Marušić, 1999) shows that the human resource function⁷ in Croatian companies is generally unsatisfactory. Comparison with EU countries shows that the situation is particularly unfavourable in the field of *motivation, permanent education and management development*. The survey sample of 200 human resource department heads and managers demonstrated that the situation is barely satisfactory in these three aspects in only 15%, 38% and 22% of companies and institutions. The above mentioned research also gives a certain insight into *co-financing* of certain education and training programs in Croatian companies. It seems that Croatian companies rather modestly take part in training of their employees' financing, which could be an additional explanation for the chart data. Subsequent interviews showed that human resource department heads in Croatia depicted situations as being better than they really are. It was shown that formal management education (seminars, undergraduate or postgraduate studies) *was not carried out in 22% of the companies, but in only 15%* (mainly in the large ones, in institutions and medium sized enterprises, and even less in schools).

One can conclude that there is no consistently defined life-long learning development and development motivation framework, and thus no consistently defined financial framework for it. Life-long learning financing attitude is only partial and is carried out by an Active Labour Market Policy system, and recently, by financial support to employers who finance their employees' education. According to present regulations, physical persons can not use their education investment as a tax deduction, which is a regular practice in most of the EU countries.

⁷ The human resource function covers planning, human resource selection, development, education, promotion, motivation ect

5 Education and Retraining Programs for Redundant Workers and the Unemployed

The Labour Act (Official Gazette 38/95, June 1995) stipulated the Care for Redundant Workers Program. According to Article 119 of the Labour Act, an employer is obliged to compile such a program if he employs more than 20 employees, but intends to terminate more than 10%, and not less than 5%, of labour contracts, due to economic, technical or organizational reasons, within the period of 6 subsequent months.

Privatization, company restructuring, production program transformation, introduction of new technologies, labour market adjustment inability are the most frequent reasons of redundant workers creation. It should be accentuated that a considerable number of workers registered as unemployed at the CES come from bankrupted and liquidated companies.

The CES is faced with a number of objective problems in the course of the above mentioned measure implementations, such as: shortage of new jobs with the same or new employer, psycho-physical condition of persons covered by the programs and the like. The Redundant Workers Care Program is a special measure which is aimed to reduce or lessen harmful effects of labour contract termination. This measure is applied in case of higher number of labour contracts being terminated.

Table 9: Data on programs for technological redundant workers care

Year	1998	1999	2000
Number of programs	366	242	6
Number of persons covered	12.326	7.146	314

Source: CES

When an employer defines a list of redundant workers, the Croatian Employment Service provides various opportunities to the persons who might become redundant in future. This implies mediation for another job during the notice period to reduce the number of recorded

unemployed persons by CES and various forms of retraining with the purpose of applying for another job in the same company, but also for jobs outside of the company in question. The Croatian Employment Service also provides self-employment training programs with the purpose unemployed persons starting their own business, financially supported by the CES.

The Centre for Business Changes Support is also active within the CES and is financially supported by international institutions. The Centre for Business Changes Support participated in care for redundant workers in larger public companies during the restructuring process. The Centre for Business Changes Support enters the company with their mobility teams working on employment of expected redundant workers before they are dismissed, and their redundancy payments are made. They also try to find workers for the same employers according to their stated needs for workers caused by the change of working and business processes.

The conclusion may be drawn that the Croatian Employment Service activities aimed to help redundant workers are mainly planned and funded from resources for implementation of Active Labour Market Policy including **education, training for new jobs, retraining and self-employment.**

Active Labour Market Policy have been carried out in Croatia since 1993. However, program implementation has been frequently interrupted, both because of the misunderstanding of the role of active labour market policy measures, and by a lack of political will. None of the interruptions resulted from an evaluation study which would have shown the previous ALMP had been ineffective, but were exclusively the result of political decisions on discontinuation of Active Labour Market Policy. Such decisions were usually explained by insufficient State Budget funds for their financing. The level of active labour market measure allocations in the amount of 0.27% of GDP in 2000 put Croatia in the average category among transitional countries. An average of 1% of GDP is allocated in the OECD countries (cf. Dar and Tzanatos, 1999). However, while *education activities and on-the-job-training* have the highest funding priority in OECD countries and developed transitional countries, they are at the bottom of the priority list in 2000 Croatian active policy measures. The 2002 active employment policy measures showed an improved allocation structure in favour of education activities (cf. Table 10). Croatia has almost reached the OECD average with the above mentioned 2002 set of measures. Approximately 50% of the total allocations related to

various forms of education activities in OECD countries, while in Croatia app 45 % AEPM in the new 2002 and 2003 cycle was allocated to education activities.

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Active Labour Market Policy which started to be applied in March 2002 was made up of six programs. The B program "From Classroom to Workshop" and C program "Through Education for to Jobs for All" referred to education activities and on-the-job-training of the unemployed registered at the Employment Service.

The B measure was directed to employment of skilled and highly skilled workers without working experience, who had been registered as unemployed for at least 6 months, or who would complete their education in the current year. This measure financially supported introduction of one of the unemployed target groups into the world of labour so it is justifiable to consider it as an education activity. The employer is obliged to keep the person working until the end of the financially subsidized period, and keep the same number of the permanently employed 18 months from the day of submission of the application. The subsidy is allocated in the amount of 100% of gross salary for the period of 6 months, based on a Kunas 1,500 net salary, and subsequently at the level of contributions on and from the gross salary for 18 months after this period.

The C measure "By Education to Jobs for All" had two modalities, C1 and C2. The first one encourages employment of persons under 30, with 6 months of working experience in the occupation or 12 months outside of the occupation. Persons who could be users of the A and B measure are excluded from the target group. The measure refers primarily to craft programs probation period (with the exception of trade and catering activities). The employer is obliged to keep the person working until the end of the financially subsidized period, and keep the same number of the permanently employed 18 months from the day of submission of the application. The subsidy is set in the amount of contributions on and from the gross salary for the duration of the probation period.

The C2 measure covers subsidizing of education activities: introduction into work, training, additional training, training for a new occupation, and advanced training for a known and unknown employer. Users can be all persons registered 30 and more than 30 days as unemployed with the CES, regardless of age, education level and previous working experience. In addition, users can be employed persons whom employers would like to keep. The employer is obliged to keep the person for a period twice as long as the subsidy period, and also to keep an equal number of permanently employed persons. Subsidies are paid out in the amount of contributions on a gross salary for the duration of activities, but not longer than 12 months.

Table 10: The number of persons covered and funds spent on B and C measures in 2002 and 2003

	B Program		C Program		All programs	
	Employed persons	Paid out funds	Employed persons	Paid out funds	Employed persons	Paid out funds
2002	490	3.118.656	11.649	22.058.124	16.998	61.768.524
2003	542	8.886.576	17.837	144.011.271	25.031	337.381.801
Total	1.032	12.002.232	29.486	166.069.395	42.029	399.150.326

Source: Croatian Employment Bureau

From data shown in Table 2 it can be concluded that in relation to previous years, the 2002 Active Labour Market Policy considerably changed the structure in favour of education activities and on-the-job-training. Approximately 45% of the 2002 and 2003 ALMP subsidies were related to B and C measures which finance education activities of and on-the-job training. These programs definitely are the most significant source for financing education and training of the unemployed.

6 Sources of Irrationalities in VET Financing

One of the most significant irrationalities is the continued financing of obsolete programs that do not provide necessary knowledge and skills for the modern labour market, offering narrow specialisations for occupations that are in abundant supply anyway with a great number of young people ending up in the CES registry of unemployed. The problem is even worse having in mind that there is no vertical mobility after three-year vocational education. When pupils complete it, they are not able to continue with higher education unless they finish the fourth grade. However, this is both time and money causing a significant drop-out from the further education process, and long-term uncompetitiveness on the labour market.

The tables attached provide a good insight into the situation and dynamics. Table 11 data show that the highest number of unemployed young persons is low-skilled workers. Jobs in most abundant supply remained mainly the same in the period covered, which tells us there is a constant structural disproportion between the job supply and demand.

In spite of the surplus of certain occupations on the labour market for several years now, they are enrolled in by the highest number of pupils (Table 12). A considerable number of pupils enrol *gymnasium* programs, which is a serious problem for a young person who does not manage to be accepted at the university. *Gymnasium* programs provide a wide scope of theoretical knowledge and prepare young people rather for tertiary education than for the labour market. Some vocational programs (commercialist, salesperson, hairdresser, car mechanic, nurse, cook, waiter/ress) constantly attract the greatest number of pupils in spite of the fact that they produce the highest rate of unemployment.

Table 11: Unemployed persons in Croatia up to age 30 – 10 occupations with highest surplus of trained candidates (on 31st December in the respective year)

Occupation	2000	Occupation	2002
Non-skilled workers	24.439	Non-skilled workers	20.081
Salesperson	10.538	Salesperson	9.118
Business technician	8.763	Business technician	7.295
Gymnasium graduate	5.665	Gymnasium graduate	6.311
Cook	4.883	Cook	3.989
Waiter/ress	4.741	Car mechanic	3.600
Car mechanic	4.435	Hairdresser for men and women	3.501
Hairdresser for men and women	3.095	Waiter/ress	3.193
Mechanical technician	2.504	Nurse	2.336
Truck-driver	2.268	Female suit tailor	1.800

Source: CES – Central Office, Unemployed persons by vocation and education up to age 30, on December 31st 2000 and 2002, Zagreb, 2003

Table 12: Education program with highest number of pupils enrolled in the 2002/2003 school year

Education program	Number of pupils enrolled
Gymnasium programs	12.999
Commercialist	4.178
Salesperson	2.882
Hairdresser	1.668
Car mechanic	1.591
Hotel/tourist technician	1.583
Nurse	1.537
Cook	1.535
Electrotechnician	1.530
Waiter/ress	1.284

Source: Ministry of Education and Sport, Zagreb, 2003 (taken from (Un)Employment of Young Persons, Vehovec, 2003)

The secondary school network is not coordinated, while the geographical placement of vocational schools is not rational, a problem waiting to be solved in a longer run. On the other hand, there is a considerable degree of ineffectiveness within the schools themselves. In 1999/2000, a large number of schools were providing many vocational programs (Table 13), which were often implemented in one or two classes only, thus making the whole process expensive. At the same time, the education process is of doubtful quality in schools inadequately equipped for particular education fields with only a small number of enrolled pupils.

Table 13: A review of schools according to the number of education fields offered in the 1999/2000 school year

Number of schools	Number of vocational fields
91	1
66	2
49	3
25	4
17	5
19	6 and more

Source: Ministry of Education and Sport

The system for evaluation of work and results is not motivating, but egalitarian. This relates to both school level and teacher level, largely due to the fact that there is no methodological system with clearly defined criteria for external evaluation. This makes the real quality of school and management (School Principal) activities impossible to assess, causing a partial loss of financial efficiency. Instead of financially stimulate quality, the system "scatters equally" a considerable part of funds, often financing non-rational programs, non-rational school work and non-rationally defined teaching content.

The most significant finance system expenditures are salary and remuneration costs in the secondary education system, and VET accordingly. The salary system and policy are not stimulating. It is based on fixed amounts, while the stimulating part for the additional effort is negligible. Such a system definitely causes reduced teaching personnel motivation, and, consequently a fall in work productivity and efficacy.

The inadequacy in the dual financing system for craftsman occupations results in inefficiencies and thus affects its quality. The expenditure structure in the dual system is not the same as in the classical one – because of the reduced teaching activities in the schools and transfer of practical teaching activity costs to craftsmen. This makes the dual system cheaper, in principle, than the classical, from the State Budget point of view. In spite of this, classes are financed uniformly, without regard to whether they are implementing teaching activities according to the dual or classical model. As a consequence, financial resources and/or organizational support to other dual system partners, such as craftsmen themselves or the Croatian Chamber of Crafts, are not provided.

There is no consistent adult education and learning financing model, what is also a major problem. According to the 2001 census, there were 685,000 persons over the age of 15 who had not finished basic education and 69,777 illiterate persons over the age of 10. There is no doubt that, with such an educational population structure, it is impossible to develop a knowledge-based economy. It is therefore necessary to establish a sustainable and consistent adult learning financing model based on social partner cooperation.

Financing of adult learning and retraining of unemployed redundant workers, which is mostly carried out through Active Labour Market Policy, has shown greater stability over recent years in terms of funds allocated from the State Budget and such practice should be continued. However, full efficiency of the ALMP is disrupted by the non-existence of continuous evaluation programs, which would show whether objectives have been attained, which programs might possibly be elaborated, and which create more costs in terms of “dead burden”⁸ and “substitution effect”⁹ than benefits in terms of increased employment prospects for unemployed person target groups.

Education and science are not priorities in state expenditures and financial plans. Allocations from GDP for these purposes are far smaller (app 4.5%) than in the EU countries (5.6 – 6%) (cf. Vrgoč, Šokić and Vuković, 2002). The allocation structure, though, is unfavourable. As a result, the education standard is low – working in several shifts, inadequately equipped

⁸ “Dead burden» appears when the program result is no different than it would be in a program-less situation, like subsidising employers to employ persons they would (maybe) employ even without a subsidy.

⁹ Substitution effect appears when an employer employs the worker who is entitled to the subsidized wage instead of the worker who is not entitled, but would otherwise be employed.

school premises, insufficiently equipped school workshops and *practicums*, lack of text-books and professional/theoretical books and journals, as well as of computers.

There are cases in which vocational content in vocational schools is taught by external, inadequately educated, associates. Investment in teacher training is not sufficient, which results in a low level of knowledge and skills being attained by pupils.

When secondary education financing and authority decentralization is in question, it should be taken into consideration that more complex procedures and an increased number of participants in decision-making results in additional costs. On the other hand, decentralized decision-making provides a more precise cost monitoring and a higher level of accountability of all participants in the process. Efficient decentralization can contribute to benefits and savings exceeding costs. But its precondition is a competent administration at all levels of government and self-government, and this is not a frequent practice in Croatia.

The need for elaboration of the secondary education system decentralization elaboration is also evident from the share of State Budget subsidies in decentralized function expenditures. The fact is that most of the counties (17 out of 20) do not manage to finance even half of their expenditures for the decentralized function out of additional revenues, which indicates differences in fiscal capacity, but also the inefficiency of the system in its present form.

7 Recommendations

- To establish standards for secondary vocational education inputs and outputs. In the short term, it is possible to work on the adjustment of the program to the labour market requirements. To reduce enrolment quotas in programs and occupations that produce high unemployment rates, and to introduce new programs required by the labour market.
- To ensure pupils have vertical and horizontal mobility. Labour market flexibility should also produce education process flexibility, because the changing knowledge and skills requirements on the labour market move parallelly with profound economy changes.
- While eliminating inefficiency, the dynamics components should be taken into account, that is, the need to develop secondary vocational education in accordance with the needs of society in general, and, particularly, of the labour account. This means that reducing of costs (in segments where this is possible) and elimination of inefficiencies caused by inadequate resources distribution, and the way of using thereof, should be accompanied by investments enabling modernisation of school capacities and equipment, and attainment of the national pedagogical standard by all the schools.
- The developmental priorities should be considered realistically. They should be fiscally sustainable with the school reorganised in the mid-term. Schools should be opened or closed/united according to needs, on the basis of the school network analysis, their inputs and outputs, trends on the labour market, as well as certain social factors. The regional structure, that is the decentralization of authority, should not be an obstacle to the rational managing of school resources.
- Secondary vocational education decentralization requires certain elaboration through the reduction of system inefficiency and authority and cost distribution adjustment in order that State Budget subsidies dependence being reduced.
- It is necessary to build up a methodologically consistent system for external school valorisation with clearly defined criteria, and to establish an organizational unit within the responsible ministry, which would work on school work valorisation.
- To build up a stimulating secondary vocational school financing model, which would stimulate quality work and discourage unsatisfactory quality.
- To build up a stimulating and motivating award and teacher-promotion system. The existing system is woefully inefficient and does not motivate. Equal salaries for diverse

work quality does not support the quality work of teaching personnel and the secondary education system itself.

- Stimulating legal measures should encourage vocational schools to acquire additional revenue at the market. This also applies to providing adult learning and similar services (such as school restaurants, book-shops, newspaper and journal selling). In the latter case, school premises could be rented to private entrepreneurs. When a school owns additional premises the renting thereof to the private sector may be an income source, regardless of education activities. Acquiring and distribution of income earned on the market should be transparent and in accordance with criteria defined in advance.
- Vocational schools should link up with business entities and their associations (Croatian Chamber of Crafts, Croatian Chamber of Commerce, Croatian Association of Employers). This particularly applies to entrepreneurs when activities related to their businesses are in question. This should not only enable an easier transition to the world of labour for the pupils, but also a stronger interest in partnership by means of joints projects.
- Private financing in certain education segments should also be encouraged if such a possibility exists. Modalities to be considered include sponsorships, donations and part parent co-financing.
- To include adult learning in the education policy and ensure participation of all the responsible state ministries and institutions into its planning.
- To identify education need priorities by a social dialogue between the partners and to agree upon principles for a life-long learning finance model structure.
- To build up a life-long learning model with measures encouraging an increase in the number of adults participating in various education programs such as:
 - tax relief measures for employers who finance education programs for their employees, or education costs (of specific programs) for physical persons which would be recognized as tax deduction;
 - direct subsidizing from the State Budget and local budgets for specific education programs;
 - active policy measures – financing of various education and training programs for the unemployed aimed at their employability, financing or co-financing (the other part borne by the employer) of redundant worker retraining programs or additional training or financing of education programs linked to job introduction or various forms of internship etc.
- Organize and finance a media campaign which would promote the importance of education and life-long learning.

Start implementation of continuous Active Employment Policy Measures and redundant worker retraining programs. It should be identified which programs have met their purpose (in terms of increased employment of unemployed persons), which need further elaboration, and which ones are inefficient and should be abandoned, while the funds reallocated to financing of efficient programs.

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