

**INITIAL VOCATIONAL EDUCATION AND
TRAINING IN THE REPUBLIC OF CROATIA -
ASSESSMENT AND OPTIONS FOR
DEVELOPMENT**

**REPORT BY THE INTERNATIONAL PEER
REVIEW TEAM**

MARCH 2003

A policy is a hypothesis, which has to be tested against reality and corrected in the light of experience.

Karl Popper, The Open Society and its Enemies

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FOREWORD

In 2002 the European Training Foundation launched a new Peer Review Programme in south-east European countries that are preparing or already running European Union funded CARDS¹ projects in the field of VET. The programme is a follow-up to the thematic reviews of education policy carried out by the OECD throughout the years 2000 and 2001 and is funded from the European Training Foundation's own budget. In 2002 peer reviews were carried out in Albania, Croatia, Serbia and Montenegro, and the Kosovo², while peer reviews in other countries will follow in 2003 and thereafter.

The focus of this peer review programme is to evaluate recent progress in VET policy development and to propose activities that could be undertaken to help bring the reform process forward. The Foundation's peer reviews aim at both policy advice and capacity building in the region. They are organised in such a way that they would:

- contribute to an exchange of policy experience and enhance learning processes among national stakeholders;
- contribute to develop policy analysis capacities in the countries of the region;
- promote, in an effective way, regional co-operation between actors involved in similar activities;
- contribute to the CARDS programming and implementation cycle.

The present (and possible future) peer review cycles of the European Training Foundation contain five phases:

- a specific review topic is agreed with the country in question;

- national background material is prepared by both the host country and the country manager of the European Training Foundation, which includes the drafting of a briefing paper;
- a peer review team is set up and pays a visit to the country;
- a public review report is formulated and circulated.

In addition, the European Training Foundation organises specific staff development activities as a follow-up to the national reviews, as well as regional dissemination events to share experience between experts from different south-east European countries and learn from each other.

Where relevant, the peer reviews of the European Training Foundation put a clear focus on assessing where the country stands in terms of meeting its requirements from the Stabilisation and Association Agreement and preparing for accession to the European Union. Experts from European Union member states are included in the review teams to compare countries against EU good practice in terms of *outcomes (what has to be done)*; and experts from candidate countries are included to share their experience in terms of suitable *reform processes (how should it be done)*.

The aim of the final reports is to give policy advice and to identify short and mid-term actions rather than providing a complete, academic analysis of the VET system and grand reform proposals. The reports contain substantiated and operational conclusions and recommendations which should allow policy-makers in the country in question to design follow-up activities.

¹ CARDS is the European Union's assistance programme to south-east European countries.

² Under international administration in line with UNSCR 1244 of 10 June 1999

The Foundation does not see the peer reviews as a one-off event but rather as a permanent cycle during which the Foundation would provide inputs into the VET reform processes in the given countries. It is, hence, planned to arrange for subsequent review missions with external peers after periods of two to three years.

All peer review documents - *Executive Summary, Briefing Note and Peer Review report* – will be made available through the European Training Foundation’s website.

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INTRODUCTION

Our intention was, first, to develop a clear understanding of the state of play of VET in Croatia and the strategic visions for its development. During our desk research, we have in particular reviewed the documents, as listed in Annex 2.

Second, during our visit we tried to identify first effects of initiated reform efforts in (vocational) education (and training) and how they are perceived especially by those who are mostly affected by the reform, namely teachers, school headmasters and local authorities.

Decentralisation has been identified as an overarching theme affecting important areas for VET reform, including governance, financing, curriculum and assessment, the position and training of teachers and school headmasters, as well as the management and implementation of the reform. That is why we have devoted a particular chapter to this topic (Chapter 1). Chapter 2 elaborates on issues pertinent to curriculum reform and Chapter 3 on the training of teachers, trainers (instructors) and school headmasters. Each chapter suggests priority steps in the further reform of VET, including an adequate strategy to both kick-start the process and make reforms effective and sustainable. Chapter 4 presents our key recommendations.

The OECD report

The OECD report on the thematic review of education policy in Croatia served as a reference for our evaluation.

Specific recommendations on VET included:

- The creation of effective and competent partnerships at all levels will be particularly important to help VET reform. Structured labour market information will contribute to assessing the effectiveness of the current system,

and help vocational education planners to respond.

- Modern production concepts and types of work organisation require broadly skilled and highly competent people who are able to take initiative, act in a self-guided way and continuously upgrade their knowledge and skills. The modern approach to VET implies a broad and comprehensive occupational preparation, where – besides technical and technological skills – emphasis is put on the development of key social and methodological competences.
- Three perspectives may guide the overhaul of the national system of vocational qualifications, curricula, assessment and certification in Croatia, which include lifelong learning, integration of work and learning, and entrepreneurship.
- Curriculum reform needs a number of adequately resourced central support institutions in Croatia. These include structures for organising social dialogue, analysing skill requirements of the labour market, reviewing and registering qualification standards, approving curricula, setting and administering examinations, and providing various kinds of training.
- With a view to both capitalising on existing experience and increasing ownership, teachers need to be systematically involved in the design of reforms and related action plans. Large-scale awareness-raising and guided learning processes (mentoring) of local actors will be needed to develop sustainable national solutions and implement them effectively.

These recommendations followed from an examination of the VET system and to set them – and this report – in context, it may be useful to summarise, without detailed analysis, what seem to be the main challenges of the VET system. It should be emphasised that VET in many other

countries share the same problems. In Croatia

- VET has a poor image with parents, pupils and generally, being seen as a second best to secondary education;
- It has not kept pace with changes in the economy, and training provision tends to be in outdated skills;
- Partly as a result, equipment and training methods are well below modern standards;
- It has poor contacts with industry and commerce, and with local stakeholders;
- There is a lack of effective teacher training, both for new entrants and for teachers in service;
- In the new skill areas teachers' salaries are not competitive with industry, and teacher shortages further reduce the ability of the system to train effectively;
- There is no well-developed national strategy to tackle these problems.

1 DECENTRALISATION: FINANCE AND GOVERNANCE

1.1 Financing

1.1.1 The present situation

According to the 1992 Law on Local Government and Self-Government, local government is expected to provide education services for the local population. 1993 saw the passing of a law on self-government, which defined the responsibilities of local self-government but did not, in essence, allow for much local independence in decision-making. This has gradually been relaxed through various by-laws since then.

The Government programme 2000-2004 envisages the strengthening of local self-government, while the new Constitution from the year 2000 has the aim of decentralising government functions. In the educational system, it is envisaged that there is a gradual decentralisation process that will be accompanied by an increase in financial capacity. The 2001 Law on Secondary School Education envisages financial decentralisation, as well as the strengthening of school boards as a mechanism of local governance.

The 1993 Law on the financing of local government states that the main sources of financing are own resources, common taxes and donations. In 2001 local budgets' share of total GDP was only between 4 and 6%, or 13-18% of the central budget, respectively. One fifth of the local budgets are allocated to capital investment, while the rest is used for current expenditure. Most of the taxes are shared between the central and local authorities. Only a small number are entirely local in kind. The most important sources of funds are income and corporate taxes (more than 80%). It can be said that local government has limited financial capacity, and there is therefore a

considerable level of financial dependency on the central government.

Until 2000, schools' financial resources came entirely from the Ministry of Education and Sports, and schools had no financial autonomy. In 2001 about 20% of the school budget was decentralised to local authorities. The Ministry of Education and Sports remains responsible for teachers' salaries and major capital expenditure, local government (counties) for overheads, such as utilities, transport, and materials and equipment in vocational schools.

The issue of a decentralised financing and management of education institutions varies across the country. Primary schools are run by the towns and municipalities, or the counties in case of smaller rural areas, or by the state through special compensations if referring to mountainous areas, islands or areas of special state concern (e.g. ex war-affected areas). Secondary schools fall under the responsibility of the counties under the same structure irrespective of the type of the programmes being offered or the curricula developed.

The central government determines the minimal financial standards for attainment of the minimum pedagogical standards in secondary schools. Rates for transfers to schools are then largely determined on the basis of the number of students enrolled and estimates, by local governments, of running costs, using figures from the previous year (historical budget). Where local government have inadequate resources to meet required pedagogical standards, for example because of the effects of the war on the economic base, an Equalisation Fund provides extra resources from the centre. In 2001, of the 20% of the school budget that has been decentralised, about one-fifth was provided by the counties and the remainder made available centrally. Schools are encouraged to seek additional resources from the local community and are now free to retain the full amounts they can raise locally.

Sources of financing for vocational and technical schools are more diverse than in other secondary schools and consist of:

- central government and counties/municipalities
- earnings from adult education programmes
- rental
- own activities, such as school workshops
- publishing
- donations.

The practical part for the training of crafts occupations in the dual system is funded by the crafts businesses who take on apprentices. The system is supervised by the Chamber of Crafts and concerns about 5-6% of the given age cohort.

1.1.2 The team's findings and conclusion

The review team considered financial issues in VET at several levels.

The public expenditure on education in Croatia is widely accepted as being inadequate. Currently, educational expenditure from public sources as a percentage of the Gross Domestic Product (GDP) is slightly over 3% (3.4% in 1999). This compares with the OECD average of 5-6% of GDP (5.4% in 1999). Other central European countries also have higher expenditure: between 4% of GDP in Romania and 7% in Estonia. The low expenditure in Croatia is not explained by its demographic or age structure vis-à-vis other OECD countries. It could be regarded as a matter of political choice.

The composition of expenditure is also significant for VET. Relative to the OECD average, expenditure on tertiary education is roughly similar, that on pre-school education much higher, and on secondary education about 75%. In addition, Croatia devotes a greater share in its secondary schools to current expenditure and less to

capital expenditure on such items as books, equipment and maintenance. The combination of relatively lower expenditure on secondary education and lower spending on capital, etc. is a major problem for vocational schools. Vocational schools have high expenditure on materials and equipment, and the general view expressed by those the team saw was that equipment was outdated and needed to be replaced, and that maintenance of buildings was inadequate.

Many of those the team interviewed suggested that the VET sector needed more money, if modernisation and educational reform were to be effective. This is fully justified. The team was told that the education budget would be progressively increased, but a more urgent issue is to rebalance the budget in favour of VET, recognising its higher costs, its need to modernise and its very substantial proportion of school age and adult students.

In its meetings the team found in one group of interviewed, general support for the existing stage of decentralisation. For them, it has meant more effective decision-making and created better liaison between local government and schools. Another group claimed that the Government decision to decentralise social services through the law enacted on 1 July 2001 has not yet given satisfactory results. The implementation of the process, they said, was not well prepared. Very many questions regarding the real obligations of counties/ towns/ municipalities are still unclear, although the local community seems inclined to behave as a "good master". As a consequence, the high expectations on the part of local communities raised by the basic strategic document have not been realised. The strategy should have defined an adequate approach, a clear division of responsibilities and devolution of powers. As it stands, the process represents a simple deconcentration of financing to lower administrative and governance levels.

The territorial and administrative division of the country is unfavourable with a large number of small, sparsely populated legal entities. There are too many small administrative units (municipalities) which creates excessive administrative running

costs. This is not efficient, especially with a view to the (still) relatively centralised decision-making process, and makes administrative reform an issue to be tackled in the short term. This remains an obstacle to reach a proper and fair financing formula, based on the real fiscal capacity of local administrative units. The Equalisation Fund, created to surpass the transition period, acts as an additional centralised mechanism which can in the long run produce greater inequality rather than being a balancing financial resource.

The current stage of decentralisation cannot be regarded as the last step. Thus, it is widely expected that the process would be continued, while it is recognised that, in a new decentralised setting, shifts in attitudes are required at all levels and by all partners. Some interviewed suggested that handing over the whole school budget to localities or even to schools might be the ultimate goal. This would be unlikely in political terms, and the school level is not optimal in that schools are too small as a funding unit. It would, in theory, be more practicable to give counties total responsibility for school budgets, including those areas currently funded by the Ministry of Education and Sports.

The team, however, found a number of practical difficulties in this. One possible reason for this level of decentralisation would be to allow localities to change the pay of teachers, to attract more people into difficult-to-fill jobs. This might seem desirable, but it would be strongly resisted by teachers' trade unions, and to lose the goodwill of teachers could endanger the reform process.

Another problem of county level decentralisation is the widely different tax bases of prosperous and lagging areas of the country. It will be difficult for relatively depressed areas to fund increasing educational expenditure after the initial decentralisation settlement, and some kind of continuing settlement fund would be necessary to maintain consistent national educational standards throughout Croatia.

At the moment counties can use local taxes to increase educational budgets, and some

do, e.g. Varaždin which the team visited, where the county intends to upgrade computer equipment in vocational schools. But in others, such as Pakrac which was badly affected by the war, there is no realistic prospect of the county, with a greatly reduced tax base and a major job of reconstruction, being able to provide much if any help. This suggests, as also a World Bank study³ concludes, that the great bulk of finance for education should be raised centrally through general taxation.

Similar contrasts apply in the ability of vocational schools to raise money from local industry. The Government's White Paper on Education (hereinafter called the "White Paper") and the Ministry's of Education "Concept for Changes in the Education System in Croatia" (hereinafter called the Concept document) suggest that schools will be encouraged to do this, but where the industrial base has been radically changed by the move towards a market economy, or undermined by the war, industry may have few resources to help fund schools.

As a major increase in government expenditure on education, while desirable and necessary, may be difficult to obtain in the near future, a new emphasis is required on enhancing education funding through a greater efficiency in the education system.

To illustrate this: the team found that in Varaždin four schools are situated next to each other on the same 'campus'. They share dormitories and some teachers (also for vocational subjects). But each school has its own administration. In the same county, we found the (in terms of practical work facilities) very well-equipped agricultural school "Opeka" which could, with just a few more classrooms and a regular bus service, take on some 100 students more. Just 50 km away, but within a different county, there is another, less well-equipped agricultural school in Cakovec. The two schools are competing for students rather than the two counties being encouraged to look for economies of scale. Also in Varaždin (as we heard also from other counties), more

³ World Bank (2002): Regaining Fiscal Sustainability and Enhancing Effectiveness in Croatia.

apprenticeship places in the dual system are offered by crafts businesses than are filled, with schools and local chambers again competing for students. In Pakrac, a new school was just opened which seems to be bigger than needed. Building plans had been designed before the war, and the Ministry of Reconstruction covered construction costs. The school with a similar profile in the neighbouring county is already not able to attract enough students to fill all places. Hence, there is a need for a VET strategy from the Ministry of Education and Sports to avoid the problems of competing vocational schools in adjacent counties and overlapping courses, which represents a waste of resources.

Funding is a powerful tool in the hands of the Government to steer the development of the VET system, including the programmes offered. However, the team has not found any evidence of this tool being used to achieve desired objectives. On the contrary, schools, local governments and the Ministry seem to be most concerned with using existing resources. One of the school directors, asked if the scope of programmes offered by his school was adequate to the needs, replied, "Yes, because we use our teachers and classrooms". There are too many VET programme graduates whose skills are not asked for by the labour market any longer. The problem of young people who cannot find a job is then shifted on to the Croatian Employment Service. An overall analysis of how efficiently Government funds for education and training or related subsidies are used is not made. The Ministry of Education and Sports needs to react more vigorously to these changes in the labour market.

1.1.3 Recommendations

It must be emphasised that the aim of greater financial decentralisation is not to reduce resources going to education, but to improve the use of existing resources and to achieve the ultimate objective of improving the quality of learning. If counties and schools were given greater financial autonomy they would have to report on how

they have actually used the resources allocated to them. In a climate of increasing transparency for what is "produced" in the education system, funding and good results (i.e. access to higher-level education or the labour market success of VET school graduates) form the two sides of the same coin. However, before counties and schools can be made accountable, they must have the resources required for a good quality provision of education and training.

The team would like to make the following recommendations:

Recommendation 1 - Make better use of available resources

- Pay closer attention to the relationship between the provision of educational services and the number of pupils on the one hand and national/local labour market needs on the other. This implies that difficult measures and decisions will have to be taken, such as analysing carefully the existing VET school network and eventually closing down high-cost schools or merging schools in rural areas.
- There should be an increased emphasis on reducing rates of education failure (measured by repeating classes and school dropouts). We will come back to this issue in our chapter on curriculum.

Recommendation 2 – Change the criteria for funding in VET

The current method for funding VET schools is to take student numbers as the sole criterion, following a universal funding formula for all (general, technical and vocational) secondary school students. Changes could be envisaged in the following directions:

- providing block grants to counties or municipalities so as to give them greater autonomy in the management of funds in line with their objectives;
- equivalent funding for public and private schools or training providers (in the latter category, those meeting conditions laid

down by the government or the Chambers in case of employers), which may include, for the VET sector, the co-funding by the state of apprenticeship schemes in companies;

- using funds in a structured way as a steering mechanism for encouraging training in areas especially demanded by the labour market and for discontinuing programmes where there is clear surplus labour;
- filling all the apprenticeship places offered by businesses;
- encouraging counties or schools to use (a certain proportion of) teachers' pay for outstanding performance, innovative projects, etc.

Recommendation 3 – Establish a fair and genuinely redistributive Equalisation Fund

One of the main objectives linked to funding is the reduction of inequalities through particular attention to those counties or regions and those groups of the population who are most in need. Less developed regions need additional funding over and above the funds provided following the current “same for all” principle applied through the existing Equalisation Fund, if prevailing development gaps are not meant to grow deeper or, essentially, a two-class education system is generated which has already taken shape in Croatia. New allocation measures should be developed.

1.2 Governance

1.2.1 The present situation

There has been a great deal of work, within the Government, the Ministry of Education and Sports and the various educational institutes, on setting out the policy background to educational reform. This culminated in the White Paper and the Concept document. Much less attention has been given to the issue of governance, the process by which the policy objectives are

translated into action, and the roles and responsibilities of the various parties.

Croatia has started a process of state reform that has included a redefinition of the roles of the central and local levels of government. This involves profound changes in the way education services are delivered. A second stage of decentralisation needs to build on the experience – positive and negative – and be based on an in-depth analysis of the first stage of decentralisation. Roles at national, intermediate and school levels need to be clearly defined, and the resources, authority and accountability appropriate to meet devolved responsibilities. Further elaboration is needed on what is meant by school autonomy, as well as of the financial responsibilities and structures: who collects and who distributes finance and by what criteria? In this context, there needs to be a clearer rationale for revenue sources (state/ locality/ earned income by schools/ donations), for expenditure by headings (salaries/ materials/ transport/ special needs) and who retains earned income. With a view to improve the quality of VET, “inspection” or evaluation procedures previously set in hand by the government need to be reviewed to establish criteria for a more appropriate assessment of school performance and revitalise the system.

Clearly, there are pre-conditions to this shift: decentralisation and diversification should not lead to a further segregation of the system or a lack of equality, quality and transparency. Therefore, a new legal framework, monitoring structures and mechanisms, as well as new information tools will have to be put in place.

The OECD report of 2001 made a number of comments on the position on governance and management. It emphasised the need for bipartisan⁴ political support of the reform process; it saw an inadequate delineation of roles and responsibilities between the levels of government, horizontally between ministries and vertically between central and local government; there was a lack of evaluations and, hence, insufficient feedback from the system to the policy-makers;

⁴ In this context, “bipartisan” comprises the ruling coalition and the opposition parties

municipalities were not connected to the needs of schools; and there were barriers to effective decentralisation.

While some recent developments have helped improve the situation - the first stage of financial decentralisation seem to have cemented links between counties and schools - most of these comments remain valid.

1.2.2 The team's findings and conclusion

Parliamentary discussion of the reform documents will have secure the necessary political consensus, which is essential if the long-term reform of the system is to proceed. That debate could help settle unresolved issues at the national level: it may contribute to building better relationships between ministries, which are now insufficiently close. Several interviewees cited the lack of contact between the Ministry of Education and Sports and the Ministry of Science and Technology. While it appears that joint working is beginning, the team had the impression that this does not yet extend to a common understanding of the reform of the overall education system. Concepts are rather developed (sub-)sector by (sub-)sector. Other ministries, such as the Ministry of Economy, seem to be distant from the whole process.

There is a widespread view that the size of the staff of the Ministry of Education and Sports is too small in relation to the enormous task ahead. We think that the reform process would benefit from a merge of the two Ministries – Education & Sports and Science & Technology - and the gradual increase of staff resources, which is however difficult in the current phase of restricted civil service recruitment.

No doubt partly because of the lack of staff, there appears to be no central focus for managing the reform process. Who is ultimately responsible for the key decisions on reform and for pushing the action through? The Concept document lists several institutions and bodies (namely: the

Centre/department for vocational education, the Centre/department for state exam, the Institute for adult education, the National council for lifelong learning, the Board for general education, the Board for vocational education, the Board for adult education, the Board for the support to gifted students, as well as Councils and commissions for curriculum, law and pedagogical standards design) which will all have a role in working out the detail of reform in particular sectors of the system. However, the remits of some of these institutions and bodies seem to be overlapping; lifelong learning requires a coherent, cross-sectoral approach, and it is not clear how their work will be co-ordinated and brought together.

Another serious barrier to professional planning is the lack of proper information and planning tools in Croatian education. Education/VET system macro-planners require a certain type of labour market information (macroeconomic and regional surveys), while skill needs analyses have to inform the development of VET standards and curricula. Indications for a future VET school and programme infrastructure may be drawn from the labour market surveys, as planned to be carried out in 4 Croatian macro-regions (north, east, south, west) under the EC CARDS 2001 Labour Market Restructuring project. Labour market surveys should provide both quantitative and qualitative data; there are examples for suitable survey methodologies from other countries. Indications may also be drawn from a series of regional analyses and workshops where education and economic actors from neighbouring counties come together and discuss the possible future structure of VET in their region, being forward-looking and avoiding overlap. The Ministry of Education and Sports would have to play a mediating role here, weighing interests by individual counties against national and regional human resource development needs, as emerge from national and regional economic development plans. Hence, the involvement of economic Ministries. The future structure should take particular account of newly emerging skill needs.

A draft law on the Institute for Educational Development (*Zavod za Unapređivanje*

Školstva) was published during the team's visit⁵. This suggests an institution independent from the Ministry of Education and Sports, very substantially expanded, with a regional network and a governing body of stakeholders. The full implications and practicality of this are not yet clear. But if the body was given an implementation role, this could provide a focus that is currently lacking. Changing one organisation is a very important step. However, it would also leave many of the issues outlined above unresolved: at the same time fundamental strategic, resourcing and governance problems need to be solved.

Several people interviewed called for an action plan, and this is clearly essential. It is, however, important that such a plan is not simply a list of random pieces of work: it must be a strategy for implementation, reflecting the objectives to be achieved, the priorities of work to be done, the order of activities or events, realistic timescales, the person or institutions in charge and the funds allocated for specific assignments. Such an action plan would be one of the most important outcomes of the EC CARDS 2001 VET project to which the present paper is hoped to make a useful contribution.

The problem of reform is perhaps even greater for VET, whose curriculum should reflect the needs of the economy and the labour market. This should involve economic ministries and the social partners in coming together to take a view for planning purposes of the near-term future of the VET system. With the exception of the Chamber of Crafts and Trades who participated in policy debates, this does not happen. But this Chamber does not have the capacity to develop forecasts and analyse skill needs much beyond their remit covering only the crafts sector.

In this area, like many others, there is a huge problem of capacity building, of ensuring that those charged with the responsibility of implementing parts of the

reform process have the resources and the ability to play their parts fully. This applies at both national and local levels. We found general openness for changes and the inclination, by local actors, to accept a bottom-up approach, but this alone will not suffice. If decentralisation is to be made effective, respective mechanisms and tools will have to be made available, and an extensive training programme will have to be started.

1.2.3 Recommendations

Recommendation 4 – The government is to retain a central role and functions in a decentralised system of VET governance

With regard to (initial) VET, we recommend that the central level (the government and its institutions and partners) retain the following main functions:

- overall policy and strategy development, action planning, decision-making and co-ordination concerning system-wide reforms;
- preparation of a legal framework for VET;
- determination of the overall budget and funding formulae;
- design of national (= "output") standards and core (or: framework) curricula – in the case of VET, responsibility for designing standards of competence will be shared with the social partners;
- the registering and certification of qualifications; and the building up of structures and mechanisms for the transparency and recognition of qualifications in line with European Union requirements;
- the co-ordination of in-service training of local government staff, school headmasters and teachers, in particular in connection with the already initiated and envisaged reforms;
- the determination, jointly with economic, social and education actors at the level of macro-regions and based on a sound labour market analysis, efficiency, demographic and other criteria, of a suitable network of vocational schools;

⁵ The Law on the Institute for Educational Development was adopted by the Parliament in December 2002.

- promotion of research in the field of VET and the labour market, which may include some Innovation Fund; as well as
- system monitoring and evaluation.

All other functions could be devolved to the local level, including adjustments of salaries for teachers and other school staff above a certain nationally fixed minimum and amendments to the core curriculum to suit local needs.

Recommendation 5 – Set priorities in VET policy and strategy to manage change

The management of change requires careful prioritising and timing and will have to be based on a simultaneous top-down and bottom-up approach - involving ministries and central institutions or bodies on the one hand, as well as local authorities, schools and other partners on the other. Due to the scarcity of resources and the difficulty of changing attitudes, major reform goals can realistically be achieved only in the longer term rather than in a period of three or four years.

- A coherent concept paper ('VET development' or 'Green' paper) would have to be designed to provide a framework for future VET legislation and regulations. This concept paper should not simply be an assembly of particular, isolated short-term measures. The Government must consider carefully what kind of VET system it wishes to see in Croatia in the long term, say ten years. In the view of the team, this ought to be a system based on competences, with training to standards, with more flexible VET structures, which will be able to adapt to the changing needs of the market economy, with better qualified teachers, well equipped workshops, etc. Without such a view of the desirable future, reform measures taken in the short term could hinder progress towards a truly modern system.

- The likely framework for legislation based on the concept paper would have to:

- redefine the mission of VET;
- define, for VET in a decentralised context, who decides what and in which context (ministries, localities, school);
- establish the responsibilities for the collection and expenditure of finance at each level;
- set the broad outlines of the curriculum;
- set out the framework for qualifications and certification;
- establish a framework for accountability and evaluation;
- enable the establishment of new institutions or the adaptation of existing ones.

- The concept paper ought to also set out clearly the plan of action on which the reform process will proceed. This means priorities, timescales, the sequencing of events, responsibilities for action and the resources allocated for each measure. All of this may require a specific legislative act for VET: *The VET Reform Act*, as well as a *central body in charge of reform co-ordination*.

- 'Institutional homes' need to evolve from the policy, structural and curricular processes being undertaken as mechanisms for continuity and sustainability, taking reform ideas forward in a routine way. Legal instruments will have to be created for the operation of specific organisations. Examples would be the membership, terms of reference and financial powers of the board of management and directors of institutions, councils, boards or committees, and substantially autonomous schools; the specific responsibilities for VET of the local authorities; of those who identify new courses, who are in charge of the construction and maintenance of buildings, etc.

- For the labour market, there is a likely need for the creation of (i) a national tripartite labour market and VET council to

house a national analysis unit and a medium-term forecast model; possibly also (ii) (decentralised) regional tripartite labour market councils with parallel regional analysis units; and (iii) informal local school-employer networks to structure links between the skill demand and supply side. As in most central and East European countries, the social partners in Croatia lack the capacity to take on the roles, which they should perform in this area. There will be a need for them to develop analytical skills and systems, which will inform them and the VET authorities of what the labour market might need in terms of trained personnel.

- For curriculum development and certification, there is a likely need for a national centre for curriculum development and assessment, which would both co-ordinate the definition, jointly with the social partners, national qualification standards and relate this to VET programmes and thus ensure consistency and transparency across the VET system. The procedure should be flexible enough to allow the addition of new qualifications for emerging occupations. In the production of these occupational standards and their translation into the curricula, there would again be a need for close links between the labour market and educational institutions.
- In line with the new Law on the Institute for Educational Development and to prepare for its many new assignments, also as a reform co-ordination body, we recommend to draw up a study on the strategic mandate of the Institute, implications for resource requirements, staff training needs, etc.

Recommendation 6 – Establish a modern Management Information System

To allow for a better policy analysis and design, we recommend the installation of a new education management information system. Such a system would embrace information needs at central, county/local and school levels. Data to be collected

would include (i) basic data; (ii) ‘state of the art’ data (e.g. schools using new curricula; teachers trained; programmes/ training to international standards; donor projects, etc.) and (iii) quality data (performance indicators).

A proper management information tools can help education/ VET planners better steer the system and free up resources for reform, for instance, by optimising the VET school and programme structure. That is why we feel it important to include the establishment of new labour market and education management information systems in the list of first reform priorities.

Recommendation 7 – Launch a wide-scale training programme for education managers

The shift from central control to facilitation and monitoring by the Ministry and its bodies requires new skills and a new attitude towards other actors in the education system. Adequate strategic steering on the basis of sound management information, incentives rather than orders, and a monitoring and inspection system set up with a view to help actors improve will be the primary tools needed under this new arrangement.

All those who are to assume new responsibilities need to be adequately trained. To ignore this precondition may weaken the effects of decentralisation or damage public support for reforms altogether. Hence, both communication and a proper lead time for training to ensure that central, local and school managers acquire the requisite skills and attitudes for their new responsibilities are important components to the ‘marketing’ and successful implementation of changes in the management and financing of the system.

2 CURRICULUM

2.1 The present situation

The school system is highly centralised: the Ministry of Education and Sport takes full control and responsibility over checking and approval of the detailed syllabi and teaching plans of elementary and secondary school programmes, as well as textbooks recommended for use. However, schools are allowed to adapt the teaching plans (implementation of syllabi) to local conditions. The teaching plan determines the main aims of each programme, the number of compulsory subjects and the lessons/hours per week, materials used for teaching, teaching methods and the examinations.

The structure of the school curriculum follows the logic of separate subjects. Syllabi in VET are composed of the core general subjects (which are largely the same as in the gymnasium programmes), as well as general vocational subjects and elective practical subjects which are linked to the technical or vocational specialisation chosen. Curriculum elements most criticised in different documents and reports⁶ include:

- too many compulsory subjects and weekly lessons (between 30 and 33 hours), leaving hardly any space for elective subjects or subject-matter;
- an overlap between content of different subjects;
- an over-emphasis on factual knowledge;
- traditional methods of teaching, with lectures by teachers pre-dominating over an active or practical involvement of pupils.

The national classification of occupations lists well over 400 specialisations, for most of which education and training

programmes exist. One should bear in mind that this classification was prepared for different purposes - mostly for statistical ones. Most of these occupations are too narrow, the training for them is too specialised, and they hardly reflect the skill needs of employers and the requirements of a modern VET in a lifelong learning perspective. Neither is the linking of qualifications to a certain amount of time spent on training practical in view of the challenge to recognise also skills of adult people who may acquire skills through shorter non-full time courses or on the job.

Gymnasium programmes are completed by matura exams, while the four-year technical education programmes and three-year VET programmes end with final exams. In all cases the preparation and assessment of matura and final exams is left to each individual school. The fact that schools determine the output standards of knowledge and skills themselves (although based on, and in line with, the syllabi and teaching plans) leads to great variations in the knowledge and skills of pupils across the country. This causes problems both for employers who do not know what they can expect from young school graduates or what is behind certain certificates, and for higher education institutions that may have a very uneven level of knowledge to build on. The only way around this dilemma is the setting up of transparent national qualification structures based on national (output) standards and the testing of pupils' performance through independent examination bodies. As mentioned before, to establish transparent qualification structures will also be necessary in connection with Croatia's preparation for accession to the European Union, which implies the putting in place of prerequisites for an EU-wide mobility of students and labour.

Currently, there is no institution or department within a central institution that deals with labour market analyses and forecast studies that could inform the macro-planning in VET. However, there are a couple

⁶ cf., for instance, Lui, Olga et al (2002): Curriculum reform in the context of lifelong learning, National Observatory Croatia, Zagreb.

of initiatives in Croatia that will certainly add most helpfully to the stock of knowledge about the training and qualification needs which needs to be built up. The Chamber of Crafts has got a good overview over dual system occupations, i.e. crafts trades, but has little information about the general labour market picture. The employment service (*Hrvatski zavod za zapošljavanje - HZZ*) has done, a few years ago, a study tracing the labour market success of school graduates by type of occupation/ programme. The analysis shows which occupations were most in demand in which county and for which there was an oversupply. Results were not brought to the attention of and have, hence, not led to respective action by the Ministry of Education and Sports. The employment service also proposes to undertake, for its own purposes, a survey of employers to ascertain their future employment intentions. Studies exist in economic ministries or offices about the future development directions of the Croatian economy, including its small business sector, as well as some regional or county-based development strategies – most of them outlining related human resource development needs. The Zagreb-based Economics Institute (*Ekonomski Institut Zagreb - EIZ*) is an important source in this context. In addition, in the framework of an upcoming CARDS programme, the Central Bureau of Statistics will start collecting regional development indicators for the northern, eastern, western and southern parts of Croatia plus the capital.

Decisions about the enrolment of pupils in secondary school programmes are based on the success (marks) of pupils achieved in primary school. Secondary schools themselves are in charge of the selection procedures. They can set additional selection criteria, but are unable to base the choice of programmes on an analysis of labour market needs. Horizontal mobility between the VET stream and the general (gymnasium) stream is in principle possible, but only during the first year of the programme and it again depends on the school success (marks) of the pupil. Transfers the other way round (from general to VET) are also possible, but even less likely. Vertical mobility at secondary

level is also limited: 4-year technical schools open up pathways to higher education and, within the dual system, there is the possibility to acquire the status of a “master“ craftsman. Altogether, the system provides for an early streaming into either the general or the VET stream, with limited transfer possibilities later on, which deprives a major share of young people of better education and career prospects. More ‘lateral bridges’ and ‘vertical ladders’ need to be built into the system to allow for career change or progression and avoid dead-end streets. Due to the restricted financial means of parents from poorer regions, which do not allow their children to commute to distant places and pay for their accommodation, choices are even more limited in small cities or rural areas outside the big urban centres.

So far the Ministry of Education and Sports via its Institute for Educational Development has co-ordinated and supervised the development of school curricula. The Ministry centrally approves educational programmes, although their production and implementation had been decentralised for a longer period of time. It is not very clear on which basis teachers (or other experts) are invited to participate in the design of curricula. Neither is it clear which other criteria, apart from those of formal compliance, have been used to assess and approve newly developed or revised curricula, as no standards of knowledge and skills (or competencies) exist. Possibilities for disseminating newly endorsed curricula to other schools, for instance, through the Education Institute’s training seminars, are also limited.

Despite the agreement that curriculum reform is urgent, relevant background documents and standards and procedures have not been defined, yet, to begin with this process. Hence, also in this field, the EC CARDS 2001 VET project is expected to make an important contribution by defining the basic structures and methodologies for both standards and (framework) curricula and by training a core group of actors. By doing so, the CARDS project would provide a very important impetus for the more far-reaching curriculum reforms which are needed and which will require a long time and a lot of resources.

2.2 The team's findings and conclusion

2.2.1 General curriculum principles

Secondary VET has to provide for a broad foundation training that is related to the chosen occupation or rather the group of related occupations. Hence, there is a need to revise and re-cluster occupations and substantially broaden VET programmes in line with the complex, interdisciplinary and constantly changing nature of skill requirements today. The latter developments have also led the international research community to identify a number of key competencies, which need to be developed with young people and adults alike. They include:

- sound numeracy and literacy skills; knowledge of one or two foreign languages;
- diagnostic-analytical and technical (media) skills increasingly essential to finding, selecting and using knowledge;
- the motivation and skills for a self-reliant, independent acquisition of new content and methods ("learning to learn" skills);
- social and inter-personal skills involved in communication, decision-making, teamwork and adaptability, positive attitudes and behaviour, and the ability to assume and discharge responsibilities;
- business and entrepreneurial skills, including the development of an entrepreneurial attitude at work, creativity and innovation, the ability to identify and create opportunities, calculated risk-taking and an understanding of basic business concepts, such as productivity and cost, and skills for self-employment;
- multiple technical skills in generic areas central to a number of different occupations (or specialisations), which will facilitate occupational mobility.

Thus, education needs to combine various technical/technological skills with methodological and behavioural skills. Furthermore, communities and businesses cannot work properly unless people work well together. They must be tolerant, have intercultural skills and be able to manage conflicts. People must also take responsibility for sustainable development, which can be achieved only by combining economic, ecological and social responsibility.

These key competencies cannot be developed solely through separate subjects, but rather through new, cross-disciplinary methods of learning, such as project work in teams, etc. stressing the active involvement of students. However, we are aware that there is inevitably some tension between developing these broader competencies and giving people job-specific skills which they can immediately use in the labour market. However, they may be out of such jobs after a while again.

Hence, there has been an international debate at which point vocational specialisation should start. The dual system in the crafts sector in Germany, which has inspired the training for crafts trades in Croatia, for instance, has been criticised for providing too narrow a range of skills at an early phase of a young person's education, with education progression remaining limited to taking masters' courses and the paths to higher education being blocked. Some countries suggest that specialisation be postponed to as late a stage of secondary education as possible or even to the post-secondary level (e.g. Sweden, Poland, Hungary, World Bank model). The study by Olga Lui et al⁷ supports the idea of a broader (occupation-related) foundation training, but it depends also how relevant this "broader education and training" is to increase a person's employability and not just the level of general, theoretical knowledge.

Arguments against the postponement of vocational specialisation to the post-secondary level include the relative late point at which young people would acquire

⁷ Lui, Olga et al (2002): Curriculum reform in the context of lifelong learning, National Observatory Croatia, Zagreb.

specialist qualifications, which would make the system more costly, and the current lack of a well-developed system of labour market training courses at post-secondary level in Croatia. Additional costs for post-secondary courses might possibly have to be shared by individuals and employers.

However, individual short specialist courses at post-secondary level do exist in Croatia, and the system is expected to expand anyway in connection with the retraining or skills upgrading of employed people, redundant workers or unemployed adults. So, the breadth and depth of initial VET, the relation between general and vocational education contents and the point at which students would specialise will have to be reconsidered against this background.

2.2.2 Links between VET and the labour market

Two issues are important as regards the responsiveness of VET to the labour market:

a) *How the needs of the economy are reflected through the types and contents of VET programmes offered (or the skills to be acquired by learners).*

From the team's local visits it appeared that appropriate information about the demand for training and skills is lacking, so that vocational schools tend to train mainly according to their own availability of teachers, courses and facilities, and partly according to students' choices. VET is currently not seen to contribute to human resource development goals established through (regional) economic development strategies.

Pursuing the goal of making VET relevant to labour market needs and thus increasing the employability of young people, economic actors also have to get a greater share in shaping the range of occupations covered by a given sector and determining skill needs. The latter would be reflected in standards of competence which are to be defined for each occupation or specialisation.

However, given the difficulties employers, especially small firms are facing in determining future skill requirements, the initiatives outlined in section 2.1. alone are unlikely to be detailed enough to provide a precise guide for planning the VET school and programme infrastructure in Croatia, but stock could be taken of them; they could be analysed and used. In the current situation, clearer ideas may be obtained by bringing economic, social and education actors from neighbouring counties (perhaps macro-regions) together and letting them develop a vision on the future VET school and programme infrastructure.

2) *How schools liaise with enterprises and how the latter are involved in the delivery of practical training.*

The VET system is education-driven and school-based. Even if practical training is done in companies, it often means performing standardised tasks on outdated machines and not being supervised or tutored well.

Links to local enterprises and organisations are weak (except in dual programmes) and are not an integral part of the curriculum. Such links depend on the economic situation of the given region, the economic prospects of local big companies or small entrepreneurs, local initiatives, as well as personal networks and initiatives by school headmasters, teachers or company staff in charge. In a situation of economic difficulties, where there is high unemployment and little emphasis by companies on training, traditional links with schools have deteriorated or even ceased to exist. Even in Varaždin, a relatively prosperous county, the team observed that contacts with firms, including those from the new private sector, were not good.

We are aware of the fact that, in view of the current economic situation, there are limits to extending the dual system much beyond the crafts sector and the few big industrial companies that continued to provide practical placements. On the other hand, since most teachers do not at all have the necessary practical skills required for a modern VET provision, the involvement of staff from the business world (be they pedagogically

qualified or not) in practical training either at school workshop or company learning sites appears to be the only short-term solution. Instructors from the business world could also contribute to enhancing skill development of existing teaching staff at schools.

It is extremely important that real-life and work situations be brought into the curriculum, through project work, solving of problems arising from non-standardised situations, business simulations, etc. Only this way the necessary competencies to act in certain work situations can develop. This implies a substantial change in teaching approaches and methodology and, consequently, in the role and qualifications of teachers, discussed later. A structured co-operation of schools with enterprises, employment services and other organisations at a local or regional level will be a sine qua non for a modern VET provision in Croatia.

2.2.3 Assessment

An output or qualification-based approach may, if pursued, imply fundamental change in the VET system. It could in time radically alter the structure of VET. The curriculum would be designed to achieve qualifications (= recognised skills) rather than to fill the time specified for training. People, especially adults, could eventually qualify in whatever time it took to achieve the necessary standard and be certified for their skills. Many OECD countries are already following this path. At the same time, it must be acknowledged that such a change will not be easy nor achieved rapidly.

There is no systematic assessment of schools, the learning process and individual teachers. The problem of the quality of learning processes in schools is hardly ever stated in documents especially from the point of view of output criteria, i.e. the actually achieved level of knowledge and skills of graduates, how well they perform on the labour market or in continuing education. Such issues are rarely raised, partly because they are difficult problems to

solve, but also perhaps because systematic assessment might be used as the basis for a differentiation of teachers in terms of payment, to which teachers would be strongly opposed.

Linked to this problem is the incidence of school failure and the dropping out from school, to which currently too little attention is paid. There is no systematic monitoring of the number of young people concerned (which is especially high from VET programmes); nor is there an in-depth analysis of the reasons behind school failure and early school departure. To our knowledge, no research has been undertaken to date into what could be done to prevent such a high dropout rate. Adequate measures would include to give early school-leavers a second or extended chances for completing some programme, to assess the skills they have acquired, even if these are more skills rather than knowledge-related and even if these would be only partial qualifications. But at least they would have some recognised skills to build on. International studies have shown that the recognition of partial qualifications and appropriate measures to reduce the failure rate considerably improve job prospects and reduce social problems, such as criminality and drug abuse.

2.2.4 Curriculum development and reform

Everyone agrees that curriculum reforms is needed, and it is recommended that they be radical in nature, changing not only some of their contents, but the very structure of the curricula and approaches. Extending basic compulsory education from 8 to 9 years and the envisaged overhaul of all curricula for primary and lower secondary education will have major implications also for the structure and contents of secondary school curricula. As curriculum reforms in the fields of basic and secondary education in Croatia are expected to run in parallel, they will need to be well co-ordinated. They must proceed from the development of new standards, then existing curricula should be evaluated against these standards and revised accordingly, as well as new standards and curricula be

designed for new occupations or specialisations.

As emphasised also in both the White Paper and the Ministry's Concept document, modern learning theory calls for a shift from teaching to learning and from a teacher to a learner-centred focus. In other words, education and training should be geared towards the development of competence of the individual. This in turn implies, amongst others, that curricula will take the form of frameworks rather than detailed regulations so as to give a high degree of freedom of action to the institutions providing the education and training services. A decentralised curriculum development and delivery system also implies that new roles and responsibilities are ascribed to all involved: at the central level, both clear objectives in terms of learning achievements (competencies) and frameworks for content will be formulated rather than detailed syllabi and teaching plans, while schools will have to determine both the more specific content elements and learning methods by which learning objectives are to be achieved. There needs to be room for the learning progress of each individual.

We understand that, already in the current system, there is some potential for adjusting curriculum implementation and the teaching processes according to the needs, but it appears that only few schools make use of this opportunity. Managers and teachers from the private secondary economic school named after "Katarina Zrinski" in Zagreb, which we visited, demonstrated to us in an impressive way how programmes were amended by structuring formerly separate subjects into subject clusters, stressing inter-linkages between the various disciplines and following common overarching learning goals for the student, by adding other relevant subject-matter, by establishing links with real-life cases and by introducing practical placements as an inherent part of the curriculum, etc. The school uses (part-time) teachers from the business world, and a lawyer for legal subjects, respectively. Their ideas to improving secondary school curricula are more far-reaching than can be realised at the moment, but they may

inspire wider curriculum reforms in Croatia. Thus, their competent staff may be involved both in relevant national reform commissions and, in a more structured, remunerated way, in the training of other teachers and trainers.

We emphasise the approach of this school, as the general picture in Croatia is rather different. Education in Croatia follows the old pedagogical paradigms that the necessary body of knowledge *can* be pre-selected and pre-defined and that the acquisition of knowledge can best take place in schools – i.e. an environment which is removed from utilitarian considerations. This perception creates particular problems for VET. In the context of today's quickly changing job requirements, the need for flexibility and adaptability, for people to be creative, to work in teams and be motivated and able to learn continuously, practical training and skill development (rather than knowledge formation) needs to form an inherent part of the curriculum and teaching – or rather: learning - approaches need to actively involve all learners. Teachers and school headmasters do neither sufficiently master these new curricular approaches nor have enough freedom and incentives to try and test them.

2.3 Recommendations

Recommendation 8 – Establish a national curriculum framework for VET

- The new VET curriculum reform process in Croatia should reflect a clear move towards making VET more responsive to the needs of the labour market. That is why representatives from social partner and economic branch organisations are important partners in all phases of the process.
- The design of new or the revision of existing curricula which do not follow a system of common levels and criteria may lead to largely differing, non-comparable qualifications. Shaping a modern VET system in Croatia would have to start with a complete overhaul of the system of occupations/ qualifications. This would

imply that, in a first phase of VET reform, new structures, methodologies, procedures, criteria, etc. for both standards and (framework) curricula need to be developed, pilot-tested and shared by all key actors who are or will be involved in curriculum reform.

- Major work will be required to determine levels of attainment (perhaps in line with the EU 5-level-system), outline the structures of a new national system of qualification standards applicable for both young people and adults and redefine the scope of (broader) occupations (and possible specialisations building on them). The latter could be the responsibility of national sector committees, of which there may be 10-20 in line with existing major primary, secondary and tertiary business sectors. Skill needs analyses shall be undertaken and standards elaborated on a pilot basis, using new methodologies and describing the competencies a learner would need to be able to demonstrate in order to qualify as the holder of a certain qualification or job title. Furthermore, core curriculum contents, as well as examination arrangements will have to be agreed. The central curriculum authority will require clear criteria for assessing the quality of the contents of the newly developed curricula.

Recommendation 9 – Firmly embed VET curriculum reforms within school development projects that include joint teachers’ and headmasters’ training schemes

Curriculum-led VET reforms have considerable implications for the teachers and managers at local level, which can be summarised as follows:

- Design and development of new curricula: Within given objectives and frameworks defined at national level, teachers will be actively involved in curriculum development: they will have to translate overall learning goals into specific subject-matter, determine the

actual teaching plans and the methods of teaching/learning.

- New equipment: New curricula imply the use of new or updated learning equipment. The modernisation of school workshops calls for teachers and instructors to master the new machines themselves and to be able to make good pedagogical use of it, i.e. to create meaningful learning opportunities for students. An intensive training in vocational didactics is necessary. The programme to train trainers from dual crafts trade programmes, which was implemented by the Chamber of Crafts and Trades in collaboration with Western partners and took partly place within companies, may serve as a good example in this respect. Learning on the spot from the best vocational schools or companies will be an essential condition to learn about the new, often tacit knowledge and skills required.
- Curriculum delivery: New student-activating methods must be introduced, such as the solving of problems organised as group work, project work, etc. The focus is on training teachers for developing the capacity to organise new learning processes, to stimulate the learning motivation of students and to establish more optimal learning environments. This would have to go hand in hand with the development of new teaching material.
- Teams of teachers: The work of teachers and instructors will follow new principles of organisation. The need for developing key occupational competences on the basis of a much better integration of both general subjects and subjects of vocational theory and practice requires a much closer co-operation between all teachers and trainers in a vocational school. The new approach, as witnessed in the “Katarina Zrinski” economics school, presents a radical challenge vis-à-vis current school practices: the teacher becomes part of a collective planning body composed of several teacher colleagues who altogether feel responsible for the holistic (more broadly occupation-oriented rather than narrowly subject-oriented) competence development of an individual student. To

achieve this goal, school-based teachers' and trainers' training and development must be increased in the coming years, as an inherent feature of true VET curriculum reform. Training needs to include school headmasters, as they have to understand these processes themselves to be able to provide direction and leadership, orchestrating the efforts of the teacher teams.

- Curriculum assessment and revision: In a decentralised VET system leaving substantial leeway to the schools, mechanisms will have to be introduced to nevertheless assure both a high quality in line with agreed national standards and a purposeful and an efficient use of public funds. As a result of pressures from the financing authorities, but also from a number of civil and economic actors to which the school becomes increasingly accountable (students, parents, employers, etc.), vocational schools will have to reflect on the range of their programmes and the quality of their services. The best schools in Europe have developed a genuine evaluation

culture as a shared preoccupation by all school staff. These schools use the feedback from their "external clients" to continuously improve learning processes and outcomes. Such an evaluation culture can only be established on the basis of mutual trust and must reflect the values of the school, which can vary considerably from school to school. Once more, school headmasters would have to play a pivotal role in establishing such a culture.

New curriculum principles will involve all teachers and trainers at a vocational school. At the same time, school headmasters will have to play a key role in promoting new pedagogical approaches in their schools. Thus, both teachers and school headmasters have to be equipped with the necessary skills to master these new assignments. As collective learning processes are required, it is recommended that joint school development projects are organised around the (design and) introduction of new VET curricula rather than sending teachers and school headmasters on one-off, individual courses outside the school.

3 TEACHERS' AND TRAINERS' TRAINING

3.1 The present situation

Three ministries – the Ministry of Science and Technology for the technical subject-related and general pedagogical pre-service training of teachers, the Ministry of Education and Sports/Institute for Educational Development for the in-service training of teachers, and the Ministry of Crafts & Small Enterprises/Chamber of Crafts & Trades for the training of trainers in the dual VET system – are responsible for different parts of teacher training provision with hitherto no co-ordination. Four different teacher categories exist, three of which (the vocational subject teachers) are prepared for the job as a teacher in a consecutive (*Pädagogikum*) model, i.e. they read their technical subject(s) and then - simultaneously or successively - pedagogy. Nine universities/academies in Croatia provide pedagogical training which is usually very short. All of them are specialised in general pedagogy.

There is no specialised VET teacher training institution in Croatia, and the autonomy of universities appears to make an innovation of pre-service teacher training extremely difficult. According to a study by Vladimir Luburic et al (2002)⁸, the implementation of the teacher trainee year in schools is also unsatisfactory due to the lack of qualified support and supervision. No post-graduate or scientific education exists for teachers. The in-service upgrading and professional development system for teachers is incomplete and not based on empirical training needs assessments. Overall, the authors of the study conclude that the knowledge and skills of teachers related to the market economy and technological development, as well as modern types of teaching/learning are very weak.

⁸ Luburic, Vladimir et al (2002): Teachers' and trainers' training in vocational education and training, National Observatory publication, Zagreb.

The study⁹ itself presents a number of suggested substantial changes to existing provision, which cover the following areas: pre-service VET teacher training at university; the inception year of would-be teachers at school; the state exam; in-service teacher and school headmaster training; the evaluation of performance; the location of the activities, the timescale of change, and the resources required.

3.2 The team's findings and conclusion

The team considers that the suggested changes are all worthwhile, but cannot be fully implemented immediately. Hence, a careful choice has to be made of teacher training elements that are critical to reform.

As outlined before, VET teacher education cannot be seen in isolation, but should go hand in hand with simultaneous changes in other areas of system change, such as decentralisation and curriculum reform. Hence, we argue for an integrated approach, combining efforts to improve teachers' and trainers' skills with the modernisation of learning processes in schools. Furthermore, instead of a series of separate interventions in the fields of pre-service and in-service VET teacher training, we recommend to try out a coherent, systemic approach based on partnerships between schools, universities, the Institute for Educational Development and possible other teacher training institutions, as well as companies.

In VET teachers' and trainers' training, emphasis has to be given to a profound knowledge of work processes, on how jobs are constructed in companies, on job analysis, and on how learning takes place on the job. In this regard, there is an urgent need not only to upgrade the overall teacher training system, but also to provide intensive

⁹ Ibid.

further education for teachers already in service. Teachers should not only have academic qualifications and practical real-life work experience, they must be trained how to convert this experience into their teaching concepts. Teachers should understand the organisation of workshops, and be familiar with both the work environment in real companies and how it is likely to develop. Only this way, they are able to bring students' learning closer to the world of work. The basic (and also further) training of teachers should be geared towards a closer co-operation with companies in the region, and be based on an understanding of both the needs of modern work processes and the practice of student-activating learning processes.

Our approach would focus on the principles of 'learning on the job' or 'action learning', which is in line with modern competence theory. They imply that learning should be as closely related to the changing day-to-day work processes as possible. This way, theoretical knowledge would be combined with experience-based learning as part of the change process and becomes applied knowledge or "action competence" (*"Handlungskompetenz"*), i.e. a combination of *to know* and *to act*. Learning outcomes are optimised when teachers and school headmasters learn through first-hand experience being supervised by teacher-mentors (in a non-threatening way). Having gone through such a process themselves, teachers are more likely to practice the same new style of learning with their students in day-to-day teaching practice afterwards.

Involving teacher educators and mentors, teachers and teacher-trainees in a radical and accelerated collective learning process, we believe, will be highly stimulating for them. Resistance to change, which is natural, can be overcome when headmasters and teachers share the same vision, when they have well-conceived and commonly agreed action plans and see a role for themselves in a future reformed system.

Teacher trade unions need to come out of their somewhat defensive position. They ought to play a pro-active role and become

the 'spearheads' for the design and implementation of all the aforementioned plans and processes, as after all a modernisation of VET and the related improvement of working conditions is very much in the interest of their members.

3.3 Recommendations

We are aware that the needs for training in relation to the change processes are enormous. Without such training in combination with school development being initiated on a massive scale, VET curriculum change and modernisation will not be accomplished. As this is a continuous rather than a one-off process, resources will have to be secured in the budget for this task.

We have pointed out the importance of capacity building at each level of the system, but this is particularly important at the point of delivery: the school in the context of its local community and local market place.

Training is important in the following fields:

Recommendation 10 - Establish a new mentor¹⁰ training programme

Pre-service education of VET teachers in Croatia already combines theoretical pedagogical-psychological knowledge with one year of supervised teaching practice in schools. However, as mentioned earlier and as also stated by those in Croatian education themselves, the supervision or mentoring function at schools needs to be considerably improved, if the system is to work well in practice. At the same time, the interplay between universities and the schools needs to be reinforced.

The purpose of developing a mentor training programme is twofold: (a) to enhance the learning of young would-be teachers and (b) to simultaneously develop an increased awareness of vocational pedagogy in the

¹⁰ The term 'mentor', as used in this report, is not entirely identical with the same term used in the Croatian education system, denoting a certain step in the "career ladder" of a teacher.

given schools. It is necessary to create a learning environment for all teachers, which is conducive to a continuous development of innovative skills and expertise. Teachers require change-oriented competencies, which imply both a theoretical-analytical and a more experience-based, intuitive competence of the individual, depending on the given context. This can be accomplished only through the combined use of theoretical and practical learning environments. Therefore mentoring - both as a teacher specialisation applied in practice and as a research area in its own right – requires much more attention in Croatia in the coming years. A ‘critical mass’ of experienced vocational school teachers need to be trained to become ‘professional teaching practice supervisors’ in universities and teacher training institutions, and schools respectively.

- The upcoming CARDS projects in the field of VET will provide technical assistance both to develop, with Croatian actors, the necessary know-how to design teaching materials and to run a mentor training. In addition, support is essential with a view to build up the required institutional capacity within the universities or other teacher training institutions, the Institute for Educational Development and the vocational schools involved. This work should involve a participatory approach by both the universities and schools involved, whose failure to connect effectively has presented an important obstacle to orient programmes better towards learners’ needs. Shared ownership and good results with the mentor training programme could have a positive knock-on effect on all pre-service and in-service teacher training programmes.

Recommendation 11 – Carry out a training programme for school headmasters

Decentralisation will have major implications on how schools operate. Roles, responsibilities and performance requirements of school headmasters, especially in VET schools, will change from following

rules and regulations to acting with considerable freedom. The role of a school headmaster may in many ways resemble that of a private company manager; however, the predominant role of the school headmaster should remain as the one of the leader of a *pedagogical* institution. Teachers are professionals and their work needs to be stimulated and carefully supervised with a view to ensure constant improvement of school performance. This leadership role is highly challenging. It requires very experienced headmasters with multiple skills, including the ability to develop a school strategy and act as a role model, to make sure that school processes are developed, implemented and continuously improved, to form (new) teams inside the school and partnerships with strategic partners and representatives of society outside, and to motivate, support and recognise the performance of all school staff members. These abilities can be developed only gradually and over time.

- The first CARDS VET project, which has started in March 2003, has rightly chosen school headmaster training as one of its priorities. Pilot actions of this CARDS project will have to be substantiated and the number of skilled school headmasters increased during the second one. The “School for School Headmasters” should be established at a national level, as envisaged in both the White Paper and the Concept document, with a view to provide an institutional home for school headmasters’ and head teachers’ training in Croatia and for supervising, evaluating, publishing and disseminating the results of school development projects. The existing association of school headmasters, as well as the Institute for Educational Development with their experience in school headmaster training will play a pivotal role in this respect.

Recommendation 12 - Renew in-service teacher training

Continuing teacher training must be brought closer to the working environment of teachers and trainers. More emphasis needs to be put on demand-led training provision (close to or within the schools). Projects could be

supported where, on an experimental basis, selected teacher training providers start the training process by going to the vocational schools and define, together with teachers and headmasters, the actual training needs. Group training of school headmasters, teachers and trainers should be introduced with a view to enhancing the development of the whole school organisation rather than just the individual teacher. Throughout the process, action learning principles could be applied and on-the-job learning supported by external consultants. Feedback mechanisms should be established to channel pilot experience back into regular teacher training programmes.

Recommendation 13 - Develop a 'CAT' strategy as a tool in reform implementation and the professional development of teachers

The reform process can be strongly supported by the use of Change Agent Teams ("CATs") This is an efficient way to ensure an effective and continuous professional development of teachers. It serves as a strategic measure to prepare and train all teachers in a VET school for reform.

Sending selected teachers to courses out of school is obviously useful, but it can create encapsulated and subsequently often unused knowledge. Therefore, learning within and by the entire organisation and local competence development projects have become a new focus in continuing training - also in the in-service training of teachers. Each school is different and has an individual school culture. The best strategy to enhance the collective capacity of a school and to minimise barriers to change is often to train well qualified and respected teachers to undertake the training of their colleagues.

Major reforms always imply a wide range of training activities. With a VET reform in the pipeline, Croatia could prepare immediately for an effective dissemination of and training for reform by setting up teams of well-trained reform consultants (or CATs) already now. The trained CATs could be the liaison persons between the universities, the Institute for Educational Development, the counties and the schools. CAT members might be trained mentors, but also other categories of teachers, depending on the level of strategic thinking in individual schools. A respective programme would involve, among other things, training selected teachers from each vocational school (2-3) all over the country to become responsible for reform implementation and to carry out training and other competence development activities for colleagues in their own schools.

4 KEY RECOMMENDATIONS

All system elements described and analysed above - governance, finance, curriculum and teacher training reform - are closely interconnected, and the challenge for the Croatian Government (and its local and foreign advisers) is to design a reform process which builds upon these internal linkages and develops both new framework structures, 'tools' (methods) and the actors who ought to implement them at the same time. Hence, the reform approach ought to address the combined ambitions of designing new concepts, reform implementation *and* the professional development of key actors in VET.

1) Croatia intends to make a rigorous attempt towards orienting education towards the needs of the labour market and the society with a view to better preparing both young people and adults for the challenges of the future. This requires a strengthening of capacities of the local level within a **new governance framework**. In such a framework, the central authorities would be in charge of strategic planning, steering and monitoring and provide the (newly shaped) regional or county level with opportunities for capacity-building, as well as appropriate incentives, authority and resources for increasing the relevance and quality of VET provision. The various economic, social and education actors from the regions should have a say over the future shaping of the school network, VET profiles and programmes offered, as well as the intake of students. Finance is a strong tool in the hands of the Government to steer the development of the VET system towards achieving human resource development goals linked to national and regional economic development strategies. **Financing mechanisms** are recommended to be revised, amongst others, to envisage compensation for the special needs of areas whose development lags behind that of the urban centres, to increase flexibility by providing block grants to

counties or municipalities, to encourage a diversification of funding sources and encourage a certain degree of competition by ensuring equivalent funding for public schools and private training providers (incl. employers), as well as to reward quality and innovation.

- 2) A **national action plan for VET development** should proceed from a shared view within government and consulted with the social partners, of how the VET system as part of the education system and in a lifelong learning context is to look like in 10 years from now. The plan should set out a strategy for implementation in the short and mid term (3-5 years), outlining the priorities of work to be done, the order of events, realistic timescales, the protagonists of change and the resources allocated. A major emphasis of such a plan needs to be laid on the development of the necessary institutional capacities for managing the reform process, and sustaining and disseminating its results.
- 3) Curriculum reforms in VET require changes not only to the contents, but also to the very structure of the curricula and approaches. With a view to achieve a true shift in VET towards the new labour market and social requirements, work should commence at the central level to design a new national framework for occupations/ qualifications and to develop **competence (output)-based qualification standards**. This work must be based on better information on how the labour market and skill needs are changing, which will have to be drawn from a number of sources. Representatives from social partner and economic branch organisations will form important parties to the whole process of VET curriculum reform. Responsibilities for curriculum development will be shared: at the central level, both clear objectives in terms of learning achievements (competencies) and **frameworks for content** shall be formulated, while schools will have to determine both the

more specific content elements and learning methods by which learning objectives are to be achieved.

- 4) Teacher educators and mentors, teachers and teacher-trainees need to be involved in a radical and accelerated collective learning process. All teachers and trainers in VET have to develop an understanding of both the needs of modern work processes and the practice of modern learning methods. This is best done through **school-based 'action learning' processes organised around the development and implementation of the new VET curricula**. A national reform programme may, hence, include a number of school development projects, which combine efforts to improve the skills of relevant

actors with the modernisation of curricula and learning processes in schools. As regards the modernisation of both the pre-service and in-service teacher training systems, we recommend to try out a coherent approach based on partnerships between the schools, the universities, the Institute for Educational Development, other teacher training institutions and companies. Teacher trade unions ought to become active partners in all school development projects.

- 5) Systems of evaluation should be set up which will enable the Ministry to assess whether reforms of the education system are proceeding according to plan, how effectively reform is achieving its goals, and how efficiently resources are being used.

ANNEX 1

Peer review mission to Croatia, 7 – 13 September 2002

SCHEDULE

Saturday, 7 September 2002

Arrival of peer review team members

Saturday, 7 September 2002

05:30 pm Briefing meeting of peer review team members

Monday, 9 September 2002

10:00 am ■ **Hrvoje Vrgoc** – adviser to the Ministry of Education & Sports (MoES) and one of the authors of the Concept document

Issues of financing education:

■ **Petar Sokic**, Head of Department for Capital Investments and Financing at MoES

11:30 am Briefing meeting with **Ivan Vavra**, Deputy Minister of Education & Sports

02:00 pm Croatian Employment Service (*Hrvatski zavod za zaposljavanje - HZZ*): **Sanja Crnkovic-Pozaic**, Director

04:30 pm The World Bank, Croatia Country Office:

■ Indira Konjhodzic, Country manager

■ Ivan Drabek, Operations analyst

06:30 pm Higher education reform – Issue of possible introduction of professional colleges at non-tertiary level:

■ Darko Polsek, Scientific Associate, Faculty of Law, former Adviser to the Minister of Science & Technology

Tuesday, 10 September 2002

09:00 am – 05:00 pm

Round table with key education experts and authors of the White Paper on Education and the MoES' concept document:

Place: Chamber of Crafts and Trades (HOK)

- **Nikola Pastuovic**, University professor, Faculty of Philosophy, main author/editor of the White Paper
 - **Ivan Vavra**, Deputy Minister of Education & Sports
 - **Vesna Bilic**, Assistant to the Minister of Education & Sports, Head of Department for Schooling
 - **Milan Matijevic**, University professor, Teacher Training Academy, one of the main authors of the policy papers
 - **Olga Lui**, Head of Department for Training at the Chamber of Crafts and Trades (*Hrvatska Obrtnicka Komora* - HOK), main author of the VET chapters
 - **Vlado Luburic, Stanko Paunovic, Milvija Markovic, Maja Petkovic, Zeljko Jakopovic, Nenad Vakanjac** – all Institute for Educational Development (*Zavod za Unapređivanje Školstva*)
 - **Enrique Aguado-Asenjo**, Sector manager, Social sector, Delegation of the European Commission to the Republic of Croatia
 - **Zeljko Orsag**, Head of Management Training Programme, Croatian Employers' Association (*Hrvatska Udruga Poslodavaca* – HUP)
 - **Gabrijela Karaica**, Croatian Chamber of Commerce (*Hrvatska Gospodarska Komora* - HGK)
 - **Petricевич Dusan**, MoES
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Wednesday, 11 September 2002

Whole day	<p>Site visit to Varaždin</p> <p>Meeting with Zvonimir Sabati, County Governor</p> <p>Round table with:</p> <ul style="list-style-type: none">■ Stjepan Habunek, Deputy Prefect, Varaždin County■ Blazenka Divjak, Board Member Education and Culture, Varaždin County■ Miroslav Hudjek, Head of the Administrative Office for Education, Culture, Science and Sports, Varaždin County■ Jasenka Hutinski, Head of the Employment Service, Varaždin■ Arijana Solaja, Chamber of Crafts and Trades, Varaždin County■ Cedomil Cesarec, Croatian Chamber of Commerce - County Chamber Varaždin■ school directors <p>Visit to vocational school complex in Varaždin (school directors, pupils, teachers)</p> <p>Visit to vocational school complex in Varaždin (school directors, pupils, teachers)</p> <ul style="list-style-type: none">■ Ilka Grdjan, school director
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Thursday, 12 September 2002

Whole day	<p>Site visit to Pakrac</p> <p>Site visits and meetings with people, including:</p> <ul style="list-style-type: none">■ Marin Dragan, director medical school■ Mihaela Hajic, Entrepreneurship Centre, Pakrac region■ Zorica Barunica, Head of the Employment Service Pakrac■ Marter Drago, parents' representative■ Marijan Prohaska, Commercial Director of Lipik Glas (glass factory)■ Milka Nemet, representative of "Papuk" Pakrac (wood factory)■ teachers and pupils
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Friday, 13 September 2002

- 09:00 am Social partner representative:
- **Ana Milicevic Pezelj**, Education Coordinator – Development of trade union structures at the Association of Autonomous Trade Unions of Croatia (SSSH)
 - **Anita Car**, president, Teachers' Trade Union (Sindikata u obrazovanju)
- 11:00 am Private secondary economics school named after "Katarina Zrinski":
- **Vitomir Tafra**, school director
 - **Jadranka Tafra**, teacher
 - **Efka Heder**, geography teacher
- 01:00 pm **Milvija Markovic**, Institute for Educational Development, Head of Programme Implementation Unit of the (then upcoming) CARDS 2001 VET project
- 02:00 pm Debriefing meeting of peer review team members and departure

ANNEX 2

List of references

- Government of the Republic of Croatia (2001): White Paper on Education – as one of the sector strategies drafted within the context of the Government’s “Croatia in the 21st century” strategic initiative
- Luburic V. (2002): Teachers’ and trainers’ training in VET, National Observatory publication
- Lui O. et al (2002): Reform of curriculum in the context of lifelong learning, National Observatory publication
- Marković M. et al (2002): Decentralisation and financing of vocational education in the Republic of Croatia, National Observatory publication
- Ministry of Education and Sports of the Republic of Croatia (May 2002): *“Konceptcija promjena odgojno-obrazovnog sustava u Republici Hrvatskoj”* (Concept for changes in the education system in Croatia) in the context of the *Izvorište* (the Source) project
- Organisation for Economic Co-operation and Development (2001): Thematic review of education policy in Croatia, OECD publication
- World Bank (2002): Regaining Fiscal Sustainability and Enhancing Effectiveness in Croatia, World Bank publication