

**Research Project:**

**TEACHERS' AND TRAINERS' TRAINING IN VOCATIONAL  
EDUCATION AND TRAINING**



*European Training Foundation*

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TEACHERS' AND TRAINERS' TRAINING IN VOCATIONAL EDUCATION AND TRAINING

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## FOREWORD BY THE EUROPEAN TRAINING FOUNDATION

Croatia is facing the challenge of adopting its education system to the changed economic and social requirements. International empirical evidence shows that the economy is highly competitive in particular in those countries where substantial resources are invested in the development of human resources. The education system can meet its challenge of developing the highly skilled workforce of today and tomorrow only if it is closely linked with the labour market and if it provides opportunities for learning throughout lifetime. Increasing the country's competitiveness and the employability of individuals are also the motives behind placing vocational education and training in the centre of European policy and programmes.

The Country Strategy Paper which was drawn up jointly by the European Commission and the Government of Croatia in 2001 states, amongst others, that "the risk of unemployment is closely linked to a lack of education and training, as well as to the restructuring of the economy". One of the elements of the European Community strategy to respond to these problems and to develop social cohesion in Croatia is vocational education and training: "A review of the vocational education and training system, and upgrading of the skills of the labour force, should therefore be part of a response strategy. The objective will be to assist in developing a skilled and flexible workforce in Croatia."

As a European Union agency, the European Training Foundation has been given the specific mandate to support vocational education and training reforms in non-EU Member States.

The present publication is the outcome of a wider initiative funded by the European Training Foundation and managed by the Croatian National Observatory. Work was undertaken by three groups of Croatian experts, focusing on issues of (1) decentralisation/financing, (2) the training of teachers and trainers in vocational education and training and (3) reforms of the vocational education and training curriculum within a lifelong learning context.

Apart from this initiative, the European Training Foundation has carried out, throughout the years 2000 and 2001, its own assessment of the VET system in Croatia. Findings and recommendations related to teachers and trainers in VET are presented below.

### 1. Description

In the Croatian education system there are, with a few exceptions, no shortages of teaching staff. However, due to the poor esteem of vocational education it has been difficult, over many years, to recruit teachers and trainers into the vocational education system which has resulted in a rather negative selection. As a consequence, there is a particularly big **deficit of qualified staff** specifically in vocational disciplines.

The recruitment of teachers and quality assurance is the responsibility of the Ministry of Education and Sports. Average salaries are equivalent to \$500 per month, yet as the cost of living in Croatia is quite high, this amount does not have a high purchasing capacity. As a consequence, the **social status** of teachers is not very high.

The **pre-service training** of teachers is the responsibility of the Ministry of Science and Technology and higher education institutions. Secondary school teachers are usually university graduates and have not received any special training for the teaching profession, they can only acquire basic skills through the system of additional training which is delivered by training colleges or pedagogical faculties. The Ministry of Science and Technology makes decisions about enrolment quota and conditions for particular teaching professions. Yet their dialogue with the main employer, the Ministry of Education and Sports, which also has a

responsibility to set training standards, seems very limited and, as a consequence, the needs of the labour market are not fully taken into account.

Undergraduate training of teachers through teacher training colleges has recently been downgraded in status and is no longer seen as higher education, which again does not contribute to a high prestige of the teaching profession.

There are three different types of teacher in vocational schools and the differences are significant. The teachers of general gymnasium subjects are educated in universities and highly specialised (as a rule, four years of studies). They usually teach only one subject. As a rule, they have, parallel to their subject, read pedagogy at the university. The vocational subject theory teachers comprise a middle group: they have a technical education, e.g. as an engineer, and have, as a rule, in the first year after their recruitment at a school, taken additional in-service training courses in pedagogy at the university. A large group of instructors/supervisors in school workshops or companies have no pedagogical qualifications at all. However, training for practice trainers within the dual training system, especially in connection with the newly introduced curricula, is provided by the Chamber of Crafts to the extent possible.

**In-service training of teachers** is compulsory by law for all members of educational staff and is provided either at the educational institution level or at the Ministry of Education and Sports level. In the latter case this is one of the responsibilities of the Ministry's Institute for Educational Development and is usually delivered through short and one-off professional meetings. Attempts of NGOs and donor agencies, such as UNICEF, Open Society Institute, Goethe Institute, British Council and others to provide a more consistent and prolonged in-service training programme for particular categories of teachers are seen as individual training efforts and their results are not recognised through formal qualification. Yet, some specialists, such as school managers, only rely on such opportunities for training – they do not receive any specialised training anywhere else.

**Promotion** of teachers and educational staff policy has recently been revised and is now regulated by a special legislative act, which sets appraisal criteria taking into account good results of working with students, extracurricular work and professional training. Yet financial incentives for promotion are very small or non-existent. There are only two levels of promotion, and assessment criteria are defined quite vaguely. These criteria do not require any formal qualifications or specialised training, whereas promoted teachers are expected to play new roles in the community, such as mentorship, professional training and pedagogical monitoring.

## 2. Critical policy issues

The system will not be able to renew itself without recruiting young, motivated and qualified people. The availability of a critical mass of highly qualified teachers will be a decisive factor to the success of a nation-wide curriculum innovation process. **Qualifications** of both teachers and practical training instructors in schools, school workshops and companies (with the exception of the majority of trainers in the dual system) represent an important barrier to the development of the Croatian vocational education and training system. University courses for future teachers focus on books rather than being more closely linked to the world of work. Interdisciplinary competencies, including ICT skills, entrepreneurship skills, foreign language skills, work and life orientation skills, aspects of environmental protection, etc. are not integral parts of teacher training curricula. Teachers are not exposed to in-company practices and hence lack the necessary understanding of work processes and new technologies in a quickly changing environment.

In the absence of both clear indications from the labour market about the skills required and the necessary work-related competencies of teachers, there is a risk of increasing ‘academisation’ of vocational education which is happening especially through general subject and vocational theory teachers.

The absence of proper training of teachers in teaching skills becomes even more dramatic in the absence of a structured in-service training system. At the moment there is no opportunity for a future or practising teacher to learn new methods of teaching or experience interactive learning. The absence of such experience is not recognised as a threat in the policy documents of the Ministry of Education and Sports. There is currently no attempt made to compensate for the deficiencies of pre-service training or to significantly improve it.

The **low social prestige** of the teacher training profession which is manifested in a continuous decline in salaries is enhanced by the low status of their training. Teacher training colleges are very poorly equipped – sometimes poorer than secondary schools. Their libraries are outdated and under-resourced. Some did not even have systemic catalogues, let alone computer databases. Teacher education is seen as a vocational qualification rather than a higher education specialisation, as a consequence the amount of those willing to go into the teaching profession is declining and Croatia may soon face a problem of quickly ageing teaching staff.

There are no clearly defined career paths for teachers and the **promotion system** is not linked to any particular training or qualification system facilitating this promotion. As promotion means extra responsibilities, it must also imply financial incentives. In the absence of those, teachers will stop seeking promotion and upgrading of their skills.

### **3. Barriers to reform**

Teachers are by and large not very familiar with the current reform policy of the Ministry and for this reason not fully on board. They are often critical of existing practice, but seldom see themselves as those who can change it. With the uncertainty evident especially in vocational education, there is a tendency among teaching staff towards low motivation for change. While teachers’ role in the reform of education should become more explicit, there are no facilities in place that will help train these people at the moment.

The **pre-service training system** will need significant reform: technologically and methodologically up-to-date teaching skills are not available to all future teachers as part of their curricula, nor through well managed and thoroughly monitored school practice. The importance of the teaching profession must not be underestimated through a lack of proper training status.

The absence of a consistent **in-service training system** may also significantly hinder development. Further education is currently no continuum in a teacher’s professional development. Any change towards a more accountable system with clear cut quality assurance mechanisms will require new skills for education managers and staff. These cannot be achieved by occasional meetings and individual training schemes.

The **quality of university staff** training is another significant block to the reform: unless college professors themselves possess both up-to-date work process-related competencies and know-how, as well as interactive teaching skills and practice, these new teaching methodologies, the training of future teachers in vocational education and training will not be successful.

**Financial and non-financial incentives** to stimulate professional development of teaching staff are currently largely absent. There is a need for transparent and flexible schemes of teacher appraisal which are matched by an appropriate salary scale and qualification grades.

#### 4. Recommendations

1. As Croatian society is moving towards a more accountable and effective system of education, it is beginning to need a cohort of **agents of change**, which are both familiar with current trends of education reform world-wide and skilled in implementing the necessary changes. Structural reforms, such as extended secondary education or the modernisation of vocational education, will require significant investments into teachers. With a view to both capitalising on existing experience and increasing **ownership of reforms**, it is recommended that teachers and their representatives 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 necessary to develop sustainable national solutions and increase the effectiveness of their implementation.
2. The **management** of the teacher training system should be consistent and market-oriented. If a merge of the Ministry of Education and Sports with the Ministry of Science and Technology is not feasible at this point, there may at least be a co-ordination unit which will reconcile the interests of the two sub-systems as regards enrolment, standards and quality of the education and training of (both students and) would-be teachers, status of graduation diplomas and the challenges of the changing society.
3. Development theories have it that friction in education reform programmes occurs if teacher training is not provided in a structured, systematic way. One of the first preoccupations of a vocational education and training reform programme may, hence, be an overhaul of the **pre-service teachers' and trainers' training** system with a view to creating a holistic vocational pedagogy system at university level. The training of teachers and trainers for vocational education includes training on work process knowledge and up-to-date technical/technological skills, practical techniques of curriculum development in response to labour market change, state-of-the-art presentation skills, techniques of supporting the learner, the design and use of new learning aids and equipment, as well as coaching/mentoring during daily teaching practice. It would be important if all future teachers and trainers, regardless of which educational institution they graduate from, benefit from this kind of training. Moreover, there should be adequate facilities for school practice: enough time, well trained mentors, adequate guidance.
4. A consistent **in-service teacher training system** in vocational education and training is best set up as a result of thorough needs analyses and will require extra funding. It is recommended that the funding goes primarily to educational institutions that will then send their staff for training and that, instead of one single provider, there may be a choice of providers available. Targets for training and objectives for key cohorts of trainees are defined in a dialogue between the policy-making state organisations, relevant NGOs and the broader professional community. Providers can then compete to develop courses relevant to the goals and objectives set. Team training in such areas as strategic planning, quality control and school-based management becomes essential. There will also be a need in qualifications in testing and assessment, continuous professional development, as well as school and community relations. In order to cope with these jobs, the in-service training system should develop new courses and competence-based programmes.

5. Training **school managers** is exceedingly important for the success of the reform. The scope of competencies they require is changing dramatically as the system decentralises. School managers and their advisors need technical training in financial planning and management, democratic leadership, concepts to promote pedagogical innovation and monitor quality at school, regional networking, as well as project design, selection, contracting, monitoring and evaluation. In order to achieve site-based changes, school managers should be trained together with their teams. School-based project implementation should be seen as an integral part and an ultimate success indicator of the training scheme. If a relevant in-service training becomes available, merit-based selection of new school managers should also become possible.
6. A differentiated scale of salaries with clearly defined grades should be introduced to provide incentives and accountability into the system. **Appraisal** criteria are recommended and should be defined in cooperation with both teachers and their employers and should be performance based and easy to interpret. The qualifications required to move up the scale should become available through the new in-service training system which will then become competence, rather than knowledge-based.
7. In a country like Croatia, which has only recently experienced civil war and is facing a problem of refugees and inter-ethnic tensions not only school psychologists, but also school teachers require **special social skills**, such as conflict resolution, multicultural education, rehabilitation of children who have experienced violence, etc. These might be integrated both into pre-service and in-service training schemes.

Evelyn Viertel

## SUMMARY

### 1. Introduction

The Republic of Croatia is going through a process of complete transition. Its educational system should be rendered capable of continuous harmonization in balancing between the present and future needs of citizens, families, social community and labour market, on one side, and in keeping and attaining characteristics of educated and trained persons who will accept and successfully solve new, contemporary challenges of modern life, on the other.

Schools, as main carriers of educational process, are faced with an obligation of quick and effective transformation, from school that teaches, to centres of learning. Also, teachers, as immediate bearers of school and teaching procedures' transformation are faced with an obligation of their own transformation into teachers-promoters, that is, into teachers who facilitate learning to pupils, create learning situations, include pupils in decision-making, creatively search for and offer pupils situations in function of developing their creativity, develop a relation of mutual respect and trust, stimulate pupil's progress and, at the same time, develop their own creativity and inventiveness.

The teacher's retraining depends considerably on his/her basic (pre-service) professional and pedagogic-methodical level of training, that is on obtaining of vocational and pedagogic competency (first licence), and of the quality of vocational training during the process of introduction into work under supervision. Taking the state-exam, that is obtaining of second licence, depends on the quality of continuous training and upgrading (in-service), and on the work-motivation as well as continuing learning.

Insights that we have indicate the need to theoretically organize a new approach to the production of a programme for basic and continuous vocational and pedagogic-methodical training and upgrading of teachers. The existing solutions are not compliant to the modern concept of lifelong learning, and as such make obtaining of necessary teaching competences or developing of a professional career impossible.

#### 1.1. Issues in VET Teacher's Training

Basic (pre-service) training of vocational subject teachers, their training and upgrading in the course of work (in-service), presents a complex problem. Its complexity is a result of:

- incongruity of educational system with the lifelong learning concept
- sharing competences between the Ministry of Education and Sports, Ministry of Science and Technology and the Ministry for Crafts, Small and Medium-sized Enterprises. The Ministry of Science and Technology is in charge of the pre-service training of vocational teachers, the Ministry of Education and Sports is in charge of their in-service education and the Ministry for Crafts, Small and Medium-sized Enterprises is charged with the training of master craftsmen who perform a part of practice teaching
- impossibility of post-graduate specializing and scientific education of VET teachers
- non-existence of specialised institutions for VET teacher's training, either pre- or in-service, for which reason institutions for general education of teachers were involved in the process of achieving a part of a pre-service training curriculum (pedagogic-psychological and didactic-methodical education) without the necessary teaching staff and teaching equipment for the vocational subject methodology
- incomplete system of training and upgrading during service
- defective realization of trainee service
- deficit of knowledge and skills of VET teachers as a consequence of transition to the market economy, and of faster technology development

- a limited number of VET teachers, involved in available programmes of vocational and methodical education and upgrading
- inadequate administrative and pedagogic competences of the school manager.

## 1.2. Research Goals

This project is aiming at constructing a modern education system for vocational and pedagogic-methodical teacher's training, before (pre-service) and after they make the state-exam (in-service), for teaching in all types of secondary VET schools, based on the lifelong learning principles.

## 1.3. Activities

- Make an overview of situation in VET Teacher's Training
- Make guidelines for advancing the education and training system, and postgraduate specialist and scientific education of present and future teachers
- Establish a dialogue between competent ministries
- Educate educators at universities and schools
- Organize vocational study trips to countries with developed teacher's training systems

## 2. CURRENT SITUATION

### 2.1. Basic Teacher Training

In the current subsystem of secondary vocational education in the Republic of Croatia, conditions of basic education that teachers are obliged to fulfil to obtain the right of teaching, or working at school according to the type of subject, are regulated by law:

1. Teacher of general education subjects; university degree that includes pedagogic, psychological, didactic, methodical education,
2. Teacher of vocational-theoretic subjects; university degree of adequate orientation, along with the obligation of subsequent taking exams (additional education) in pedagogy, psychology, didactics and methodology programmes before entering service or during the first year of service.
3. VET teacher of practical training and exercises; same as under 2, or a college degree of vocational studies (not university) of adequate orientation with additional pedagogic-psychological and didactic-methodical education of the same level as under 2.
4. Associate in practical training (assistant to VET teacher); secondary vocational school of adequate orientation and successfully taken additional exam at university in pedagogic-psychological and didactic-methodical sphere, under the special programme for lower levels than those of the programme under 2.

### 2.2. Supplementary Education of VET Teachers

Since there is no educational study for vocational theory teachers, nor for teachers of practical training in the Republic of Croatia, they come to schools after obtaining a university degree or vocational study degree in their basic vocation and are obliged to take additional exams at universities and academies of pedagogy, that educate teachers of general education subjects, during their first year in service.

The minimal curriculum for teachers of vocational theory subjects and for teachers of practical training, who have a university or a vocational study degree, encompasses:

- |  |            |
|--|------------|
| 1. Pedagogy.....                               | 30 lessons |
| 2. Psychology of education.....                | 35 lessons |
| 3. Didactics.....                              | 25 lessons |
| 4. Methodology of vocational subjects with the |            |

methodical practice (work at school: supervised).... 35 + 20 lessons

The curriculum for associates in practical training (assistant to vocational teacher) encompasses:

1. Working pedagogy..... 40 lessons
2. Methodology of practical training..... 35 lessons (including the work in school under supervision)

In the Republic of Croatia, this form of additional education can be obtained at 9 different universities and academies for the education of teachers of general education subjects.

Even these minimum plans are not accomplished on all institutions, which particularly refers to methodology of vocational subjects. The reason for that is non-existence of a common standard, autonomy of university institutions, lack of adequate vocational staff for methodology of vocational subjects and underdeveloped network of secondary vocational laboratory schools, as well as the lack of educated mentors.

### **2.3. Education of master craftsmen – vocational teachers in crafts shops**

In the education for occupations in crafts trade under the dual system, practical training is executed in licensed crafts shops, obliged to have one employee with a master craftsman degree, a part of which is acquiring of knowledge and skills for teaching apprentices (Exam in Work Pedagogy taken before the Croatian Chamber of Crafts)

### **2.4. VET teachers – instructors in other companies**

The obligation of obtaining pedagogic competences for company personnel that take students from the school system for a part of practical training (a part of which is being performed in school workshops) had not yet been regulated by law.

### **2.5. Trainee’s years of service and state exams**

All teachers are obtaining their working experience under supervision during the first year of service. The programme for the trainee’s year of service is set by the school's teaching staff council where the trainee is working. The trainee’s work is monitored by a committee consisting of the trainee's mentor-co-expert, pedagogue or psychologist, school secretary-jurist and school manager. The trainee has the teaching norm reduced for 2 teaching classes per week, and is obliged to attend his mentor’s classes for at least 30 hours as well as to execute at least 10 teaching classes before the three-member committee (mentor, pedagogue and headmaster).

After successfully executed years of trainee’s service, the trainee obtains the right to take the state exam under the programme regulated by the Ministry of Education and Sports. The exam takes place before a committee of 5 members nominated by the Ministry of Education and Sports.

Having passed the state exam, teachers obtain a second licence, that is the right for independent direct work with students, the execution of form-master’s duties, advancing in teaching professions and positions, but with an obligation of continuous vocational and pedagogic upgrading.

### **2.6. Financing**

Basic teacher education is free – it is financed from the government budget. Supplementary pedagogic-psychological and didactic-methodical education is financed either

by the teacher himself, or by the school that employs him. The expenses for the state exam are financed from the government budget, except for the travel and accommodation expenses of the candidate-examinee.

### **2.7. Continuous teachers' training**

According to the Secondary School Law, vocational and pedagogic upgrading is the right and duty of every teacher. The programme and organization of upgrading is prescribed by the Minister.

The carrier of upgrading is the Institute for Educational Development or vocational associations to which the Institute transferred its authorities.

Every year, Institute for Educational Development publishes a Catalogue of vocational gatherings for continuous teachers' training. Topics in these vocational gatherings result from deliberations of the education councillors in the Institute for Educational Development who are most often not competent for VET teaching, and not from investigating the needs of VET teachers resulting from scientific-technical and technological development, from the demands arising from teaching subjects and from pupils participating in teaching. There is no complete model of continuous VET teachers' training. There is no organized systematic education and training of multipliers for taking over the jobs of organizers and executors of VET teachers' training.

The system of mentors' education of students - future teachers, is insufficiently elaborated, and so is the system of education of trainees' mentors during the trainee years of service and the preparations for the state exam.

### **2.8. Monitoring and evaluation of teacher's work**

In the Croatian education system, there is no deliberation or legal regulation of systematic monitoring and evaluation of the teacher's work. The external monitoring and evaluation of their work is deliberated and regulated to an even lesser degree.

### **2.9. Teacher's promotion**

Pursuant to the Law, the teacher's work is evaluated. On the grounds of evaluation of the efficiency of their work, teachers can be promoted to the profession of teacher-mentor and teacher-councillor.

However, for the time being there have been no clear criteria established for selecting a teacher in teaching professions. Moreover, the preparatory education has not been deliberated either for performing teaching professions, or for their upgrading to those professions.

### **2.10. Specialized and scientific development of teachers**

Due to unattained changes in the third (undergraduate) and fourth (postgraduate) phases of education, as well as due to differences of opinion in the university community regarding the possibility of postgraduate education of teachers, they have no possibility of additional training at the level of specialized and scientific education in the sphere of pedagogy, planning and programming of education, teaching methodology, and so on.

### **2.11. School managers of secondary vocational schools**

Management of a secondary school can be conducted through administrative and vocational-pedagogic function. Administrative-managing bodies are functioning on one side, and vocational-pedagogic on the other. They are connected through the school manager. A

secondary school is managed by a school board, and the school manager is executive and pedagogic manager.

The Law on Secondary Schooling regulates conditions a teacher has to meet in order to qualify for the position of school manager, as well as the election procedure, procedure of nomination and acquittal, mandate and programme orientation.

Education structure of vocational schools' managers is as follows: 46% vocational subject teachers. The remaining 54% covers for the biggest part the natural sciences and mathematics area, and then arts and humanities as well as language areas. The average working experience is 23 years.

During the school manager's election, the emphasis is not on actual competences, but on formal competences and subjective evaluation.

Vocational upgrading of school managers is not organised, there is no deliberated system for their training.

There is no systematic monitoring and evaluation of school manager's work, no external evaluation of the results of the school's educational work. Having in mind all said and considering that a partial decentralization in the management and financing of schools has been introduced, it is logical to change the role and responsibilities of the school manager, and therefore the care of his professional work and development should greatly change as well.

### **3. Expected outputs**

To secure the high quality of vocational education, the priority should be given to the education of qualified and competent teachers, VET teachers and management, providing adequate upgrading, equipment and other opportunities for effective performance of their work.

#### **A. Teachers' Training – obtaining the first licence**

Whereas teachers of vocational-theoretical subjects, and of practical training have obtained vocational qualifications at colleges and universities, and since they have to take supplementary pedagogic-psychological and didactic-methodical education, which was already defined as insufficient and inadequate, changes should be introduced. Therefore the Ministry of Education and Sports, together with the Ministry of Science and Technology, should innovate plans and programmes for additional pedagogic-psychological and didactic-methodical education of future teachers of vocational subjects, with particular emphasis on specialized methodology.

1. Additional education of teachers for the work in vocational education and obtaining of the first licence should include the following elements:
  - a) general education theory, as well as the one related to vocational education
  - b) educational psychology and sociology, that are particularly related to a group or groups the teacher will deliver lectures to
  - c) methodology of teaching, particular pedagogic methods compliant to subject/sphere for which a teacher-to-be is preparing himself/herself, including the methods of testing the student's knowledge and work
  - d) upgrading through methods of selection and use of contemporary teaching techniques and aids, including the information/communication technology
  - e) upgrading of creative possibilities and creating of adequate teaching material, including teaching material based on module and computer technology if there is a shortage of the material necessary for vocational education

- f) particular care should be taken of the period of obtaining the first practical teaching experiences in laboratory schools under guidance and supervision of a mentor, as well as in selecting mentors and their competences
2. Personnel in charge of additional education of future teachers for vocational education must have adequate competences. Methodology lecturers must themselves be experienced lecturers in the sphere of vocational education, for which they are preparing future teachers.  
Since the number of methodology teachers of vocational subjects/spheres is not sufficient, it is necessary to urgently begin with their training
3. Selection of laboratory schools, where future teachers of vocational subjects acquire first practical experiences under supervision, should be approached with particular care
4. It is necessary to train teachers for work in laboratory schools for admitting and guiding future teachers in the process of attaining the first practical teaching experience

All of the above listed should be provided so that a future teacher could obtain the first licence.

## **B. State exam and obtaining of the second licence**

### **1. *Trainee's years of service***

To better complete years of service, it is necessary to innovate the work programme, monitoring and evaluation of teacher-trainee, define roles of the personnel in charge of working with the trainee (school manager, secretary, pedagogue, mentor-co-expert of the trainee) and train them for this job.

### **2. *State exam (obtaining of the second licence)***

Programmes for taking state exams should be innovated and classified as follows:

- programme for university degree qualification, that is for teachers of vocational subjects
- programme for two-year post-secondary school qualification for teachers of practical teaching
- programme for secondary school qualification for associates in teaching classes (assistants to teachers of practical teaching)
- programme for teachers of students with special needs
- programme for teachers who work with adults.

## **C. Continuous teachers' and school managers' training**

1. *Upgrading of teachers, pedagogical-methodical and vocational (programmes, forms and conditions)*
2. *System of professional promotion*
3. *School for school managers*

## **D. Evaluation of work, success and quality**

For a successful implementation of this work it is necessary to determine the criteria and train the personnel for evaluation of work and success of: students, teachers and form-masters; vocational associates, that is, vocational school services; school managers; schools.

## **E. Institutions**

Establish institutions for the implementation and equip them with competent VET staff.

## **F. Deadlines**

Set short-, medium- and long-term tasks and deadlines (2002 – 2006).

## **G. Funding**

Funds for implementation should be procured from:

- domestic sources (state budget)
- donation sources from European funds
- find new sources – local authorities, economy, foundations etc.

## FOREWORD BY THE AUTHORS

### Definition of the term “teacher”

The term “*teacher*” refers to all the persons in schools (state-owned, religious or private) who are responsible for the education of pupils until the end of secondary education, regardless of whether it concerns pre-school, primary or secondary education, including technical, vocational and artistic education. Teacher is an employee working in the public service, which requires knowledge and specialized skills, acquired through demanding studies lasting several years.

The same term includes persons who have been recognized by the society and the educational authorities as being capable of accomplishing the goals and tasks set by the curriculum of the subject s/he is teaching to the pupils.

(UNESCO, Recommendation on the Status of Teachers, Geneva, 1966)

### Changes in the Environment

Expert studies indicate a particular direction of development: structural changes in economy and society bring about great changes in the concept of knowledge, in the philosophy and conception of education, in the education system, in the notion of qualification.

According to the European Commission’s predictions of 1994, today’s technologies would very soon become obsolete (by year 2000) and would be replaced by new ones. The total number of employees in the new technologies will comprise about 80% of those who had started by working in the old technologies. *This fact actually indicates the main obligations of the education system: firstly, it must assist the employees who have been surprised by the shift from the old to new technologies in their faster and easier adaptation to the challenges of the new technologies; secondly, it must prepare the new generations to work and live in ever faster changing conditions.* Moreover, this fact indicates the need for establishing a new lifelong learning system, which would comprehend (as part of its network) companies and other representatives of the labour market.

In the conditions of modern technologies, a person is faced with two basic educational requirements:

- personal skills
- social skills.

Personal skills include:

- ***capability to cope with permanent changes.***

This is a capability to adapt one’s personal behaviour to the surrounding changes, without neglecting one’s final aim.

- ***readiness and capability for self-study.***

This is a capability to understand the need for independent information gathering, to retain and understand the information, to analyse and effectively use it in one’s own environment and area of work. It includes structured learning processes in the sense of “lifelong learning”.

- ***capability to independently define the actions ensuing from goals and predetermined tasks.***

This is a capability to “detect work” without waiting for a specific order, to early spot problem areas, to analyse these areas and react to them, to make prompt decisions, even with incomplete criteria, to estimate possible risks and accept the responsibility for it, to recognize when one crosses the limits of his/her responsibility and to coordinate with colleagues and superiors. Furthermore, this capability includes characteristics such as “self-discipline” and the traditional work qualities (punctuality, tidiness, preciseness etc.), which do not grow out of

use, but remain very important for many reasons. In this regard, “personal environmental behaviour” has an important role and represents, within professional activities, a permanent need for establishing ecologically acceptable working processes. It must be noted that professional qualifications in ecology are in great demand in many work areas, in particular for management and educational staff in all areas and on all levels, since these qualities are best conveyed through examples and images.

Social skills include:

- ***ability to work in a team, i.e. together with a group which is pursuing an aim, by introducing personal ideas, knowledge and skills in the common work and adapting them to the work of others, ability to derive personal success from the group’s results.***

Closely related to the mentioned skills are the

- ***communication skills***, which are extremely important also outside the working group (with clients, partners).

Great importance of personal skills must not bring us to the wrong conclusion that the professional qualifications have lost their importance. On the contrary. Education qualifications are today focused on:

- ***coping with permanent changes***
- ***capability of self-regulating learning processes***
- ***independent definition of working activities from the set goals or tasks***
- ***traditional work qualities***
- ***disciplined behaviour in the working environment***
- ***capability for team work***
- ***communication skills***
- ***basic culture techniques*** (mother tongue literacy, elementary mathematics knowledge etc. Mother tongue is more than a basic culture “technique”. It is a means for identifying objects, new concepts and differences, a basis for one’s thinking. It is a basis for communication and for any common family, work or social life.)
- ***professional, vocational qualification***
- ***interest for one’s professional activity (vocation, profession)***
- ***use of computers in basic applications and knowledge of foreign languages (at least one, English in particular).***

Nevertheless, ***a precondition for today’s education qualifications*** is a preliminary basic vocational education in a specific area of work, at a specific educational level and a profession. Each person should contribute with certain basic knowledge and skills in order to add to the value, which is not limited within narrow areas of work and profession, but open to other areas of work and other professions.

***Every individual cannot be equally good in all areas of work, thus it is necessary to develop each individual’s capabilities to the maximum so that s/he could respond to the conditions of professional work and life today and tomorrow.***

## **Consequences**

The abovementioned changes in the environment clearly show the need for change in the *education role* of the family, the educational institutions (preschool, primary and secondary schools and higher education), the education system and all professions. Nevertheless, the greatest changes refer to the education system and teachers/instructors. *The reason for this is their direct duty and responsibility for the development of personal, social and professional capabilities of persons (children, youth and adults).* Therefore, it is necessary to guarantee:

- that the curricula for basic and continuous education and training of vocational teachers includes everything (contents and methods) that is important for the economy
- that vocational teachers, in their direct work with pupils and their parents, set clear and acceptable goals for both parties
- that the results of vocational teachers' work in class are evaluated, but not only through pupils' notes, but through their real knowledge, which will be directly applied in practice. This refers to pupils' success and satisfaction with their knowledge in practice
- that the teaching processes recognize the individual progress of talented pupils and pupils with special needs, as well as of adult students.

Vocational teachers cannot realize such great expectations without adequate support of school management and infrastructure (manager and experts). Consequently, the management and infrastructure of secondary vocational schools must be trained for modern school management and organization of vocational education processes.

It is clear that the tasks facing vocational teachers, managers and support staff in secondary vocational schools mean that more attention must be given to the selection of future vocational teachers, managers and support staff of secondary vocational schools and to their basic and continuous education and training.

### **Future of teaching professions**

In this more and more uncertain future, knowledge will become the key to the survival of individuals and society. Because of this very role of knowledge, every individual should be encouraged to keep learning during his/her whole life.

In these conditions the future of teaching professions is very certain. These professions will become of key importance in developing a positive attitude of children and young people towards lifelong learning, in inciting their curiosity, developing their independence and preparing them for the uncertainties of the future. By preparing the children and youth for the future, the teachers become creators and constructors of the future; they become active participants in future changes. Their responsibility is therefore very large.

In order to allow the teachers to take over such important and responsible tasks and to ensure that the expected results are reflected in the society, more attention must be given to the following:

- a) motivating the best students and experts to enter teaching professions
- b) selecting candidates with relevant personal, social, professional and pedagogical qualities for the teaching professions
- c) their initial and continuous education and training
- d) improving their working conditions
- e) increasing their qualifications (vocational, specialised and scientific)
- f) professional and hierarchical promotion throughout their career
- g) increasing their social status.

Measures for increasing the quality of teachers must be given special attention.

According to J. Delors, these measures include:

1. Establishing relevant co-operation between teachers' colleges and other higher education institutions.
2. Need for raising the level of initial training for all future teachers, in particular the secondary school teachers, to the level of higher education.
3. Programmes for continuous vocational and pedagogical education and training, with special focus on the acquisition of vocational skills outside the school system (in companies with modern technologies), acquisition of knowledge and skills for

independent access and use of communication technologies and knowledge and skills of teaching methods for simplest possible transfer of knowledge and skills to the students.

4. Selection and training of college professors for education and training of teachers.
5. Teachers' advisors – experts in vocational fields, teaching methods and sources of information - who will:
  - a) contribute to the improvement of teaching through a dialogue with teachers,
  - b) monitor, evaluate, propose promotions and rewards for successful teachers.
6. Introducing services which will assist the teachers in their work, such as: initial “snapshotting” of students' personal profiles, monitoring of students' development, resolving students' psychological and social problems, co-operation with parents, implementation curricula in schools, co-operation with the school's environment etc.
7. Ensuring that teachers' salaries are comparable to those of employees with equal qualifications and that teachers in remote places and difficult working conditions receive additional stimulation.
8. Providing modern teaching equipment and aids.
9. Motivating the teachers to establish co-operation with the local environment, in particular concerning creative participation in the school's development (curricula, teaching methods, course organisation, students' progress evaluation etc.) and changes in the education system.
10. School management should be entrusted to experts (teachers) who have the necessary personal, social and professional qualities and who are specially trained for school management tasks.

## 1. COMPARATIVE ANALYSIS

### 1.1. Issues in training of VET teachers in the Republic of Croatia

The EU CARDS 2001 project titled **Training of VET teachers and trainers** was a basis for surveys of VET teachers' training in the Republic of Croatia. The survey comprised several crucial indicators. Results of the survey are presented below, following the indicators.

#### 1.1.1. Legislation concerning VET teachers

For a number of years, all issues concerning VET teachers in Croatia have been regulated in the same "package" as those of all other secondary school teachers. This approach disregards the particularities of VET teachers and often gives results which have negative impact on the quality, position and motivation of VET teachers.

Particular difficulties related to the initial pedagogical training of VET teachers stem from the division of responsibilities between the Ministry of Education and Sports and the Ministry of Science and Technology. The Ministry of Education and Sports is responsible for the labour market of pre-school, primary school and secondary school teachers, whilst the responsibility for the education of all teachers with higher (college and university) education lies with the Ministry of Science and Technology. According to this division, the Ministry of Science and Technology should also be in charge of the initial pedagogical training of VET teachers who are selected among the experts who finished non-teaching studies and hold a higher education diploma, whilst the Ministry of Education and Sports should take care of initial pedagogical training of experts with secondary vocational education who work in secondary vocational schools as assistants in practical teaching.

However, this division of responsibilities has in fact left the VET teachers *in an interspace*, with many unresolved issues, such as: the standardisation of teaching curricula for the first teaching licence, the selection criteria for higher education institutions who should carry out the initial pedagogical training, possibilities for continuous (specialised and scientific) training and many other. A possibility of acquiring a craftsman qualification through the dual system has been introduced in the secondary vocational education system, with the Law on Crafts defining the condition for the craftsmen who want to accept students for apprenticeship: passing the craftsman examination which includes the capability for training apprentices.

#### 1.1.2. Characteristics of existing VET teachers

The provisions of the existing Secondary Education Act define *three groups* (types) of *teachers* in secondary vocational schools: teachers of general knowledge subjects, teachers of vocational theory subjects and experts (pedagogue, psychologist, special education worker, librarian).

The subject of this document is the perspective for training of vocational teachers, therefore we shall focus only on them in the following analysis. According to the provisions of the Secondary Education Act, the group of VET teachers consists of *the teachers of vocational theory subjects (with or without laboratory practice) and the trainers in practical teaching*.

There are vocational teachers with different characteristics in the existing secondary vocational education system of the Republic of Croatia, for example, those who:

a) teach vocational subjects in secondary vocational schools:

- for **technical education** (education for all jobs and professions which have technology as a basis). This group comprises teachers of architecture and urbanism, shipbuilding, electronics, geodesy, construction, graphics, chemical engineering, metallurgy, computer technology, mining, oil and geological engineering, machinery, traffic and transport technology, textile technology, aircraft, rocket and space technology and others,

- for **professional education** (education for all other, non-technical jobs and professions). This group includes teachers of biomedicine and health (nursing, dentistry, veterinary medicine...), biotechnology (agronomy, forestry...) and social sciences (economy, law...);
- b) are classified on the basis of their vocational education level in three groups:
- **with university vocational education diploma (VSS),**
  - **with college vocational education diploma (VŠS),**
  - **with secondary vocational education diploma (SSS);**
- c) on the basis of the Law on Secondary Education, can:
- teach **vocational theory subjects** (those with relevant university vocational education diploma (VSS), or those with relevant college (VŠS) and/or secondary vocational education diploma (SSS) if there are no experts with university degree);
  - teach **practical courses and exercises** (those with relevant university and/or college vocational education diploma, or those with relevant secondary vocational education diploma if there are no experts with university or college degree);
  - assist in the **preparation and training of practical courses and exercises** (those with relevant secondary vocational education diploma);
- d) on the basis of the Secondary Education Act, teach:
- **regular students in secondary vocational schools** (four- and three-year schools),
  - **gifted students,**
  - **students in secondary vocational schools with special needs,**
  - **adult learners** who follow secondary vocational education classes,
  - **in homes for secondary school students,**
  - **prisoners;**
- e) acquired their pedagogical qualifications as VET teachers:
- **by completing regular or work-and-study programme at the former Industrial-Pedagogical College, i.e. Teachers' College in Rijeka (until 1978).** These programmes were gradual and provided candidates with relevant secondary vocational education and professional working experience with vocational and pedagogical training on the level of college (teacher of practical courses) or university degree (teacher of vocational theory subjects). Moreover, these study programmes offered vocational theory subject teachers and engineers with a university degree a two-year post-graduate work-and-study programme leading to a Master's Degree, followed by a PhD programme in Pedagogical Studies,
  - **through additional training in pedagogy, psychology, didactics and teaching methods after completing the relevant university or college education or secondary vocational education;**
  - **by completing their internship in vocational schools and passing an exam in front of the School Examination Commission;**
- f) before being employed in secondary vocational schools, either had some short or long working experience in their basic profession, or had none;
- g) attended vocational college studies (technical colleges) after completing gymnasium and did not have any practical courses or exercises during this two-year study, which in fact means that they lack vocational training for teaching practical courses;
- h) completed university vocational studies, which, however, lacked subjects related to modern scientific and technological development; this makes them incapable of transferring such subjects to students who are being trained for contemporary occupations;
- i) are employed in legal persons, such as chambers, company expert services etc.

### 1.1.3. Number of VET teachers

Report of the Ministry of Education and Sports - Institute for Education Development (June 2000) states that there are cca. **6200 VET teachers** in Croatian secondary vocational schools (4000 vocational theory subject teachers, **370 of which do not have the required**

**professional qualifications**, about 1800 vocational trainers and about 400 assistants in practical teaching).

According to the data of the Croatian Chamber of Crafts, there are about a thousand craftsmen working in licensed craft and other workshops in the Republic of Croatia who are involved in the dual system for vocational training of apprentices.

Due to lack of legal regulations, the number of instructors who conduct practical training in companies for students of secondary vocational schools and/or accept secondary vocational school students for summer practical training.

#### 1.1.4. **Conditions for employment of VET teachers**

According to article 78 of the Law on Secondary Education (Official Gazette 19/92) and article 57 of the Regulations on Professional Qualifications and Pedagogical-Psychological Training of Secondary Education Teachers (Official Gazette 1/96), the candidates for VET teachers should fulfil the following conditions:

- a) adequate professional qualification level in the relevant scientific field (for university and non-university degrees) or in the working field (for secondary school level),
- b) qualification in pedagogy, psychology, didactics and teaching methods (if the candidates do not fulfil this criteria, they are obliged to complete this training within one year from the date of employment),
- c) successfully completed their 2-year internship (from the date of employment) if the candidates do not have any previous experience in vocational teaching,
- d) passing the professional exam (State Exam) during their internship or, at the earliest, after completing their 1-year internship,
- e) social acceptability (no criminal record).

Thus the existing legislation does not regulate:

- a) the obligation to examine personal capabilities of VET teachers
- b) minimum working experience in the teacher's basic profession
- c) age limit for future VET teachers.

#### 1.1.5. **Basic professions of VET teachers**

According to article 78 of the Secondary Education Act and the Regulations on the Professional Examination of Teachers and Experts in Primary and Secondary Education (Official Gazette 89/95), after passing the professional exam, VET teachers are attributed the following basic teaching professions:

- a) **teacher for the group of theory subjects** which belong to his/her basic profession (i.e. teacher for the group of mechanics theory subjects),
- b) **trainer for the practical teaching and exercises** in his/her basic profession (i.e. trainer for practical teaching and exercises in mechanics - machine treatment),
- c) **assistant in practical teaching and exercises** (assistant to the practice trainer) in his/her basic profession (i.e. assistant in the practical teaching and exercises in mechanics - machine treatment).

#### 1.1.6. **Qualifications in pedagogy, psychology, didactics and teaching methods**

##### **VET teachers**

According to Article 57 of the Regulations on Professional Qualifications and Pedagogical-Psychological Training of Secondary Education Teachers (Official Gazette 1/96), the pedagogical-psychological training is comprised of:

- general pedagogy,
- didactics,
- teaching methods,

- education psychology,

and is determined by the Ministry of Education and Sports (MoES).

*The Secondary Education Act and the Regulations on Professional Qualifications and Pedagogical-Psychological Training of Secondary Education Teachers do not offer any difference in content or other distinction between the training in pedagogy, psychology, didactics and teaching methods of: (i) vocational theory subject teachers, (ii) vocational trainers for practical classes and (iii) assistants in practical teaching.*

The adoption of the Decision on Curriculum and Organisation of Primary and Secondary Teachers' Training in Pedagogy, Psychology, Didactics and Teaching Methods (Ministry of Education and Sports Newsletter, 2/97) introduced a distinction between the training curriculum for pedagogy, psychology, didactics and teaching methods for vocational theory subject teachers and trainers for practical courses and such a curriculum for assistants in practical teaching. This Decision defines the curriculum for VET teachers with university and college education qualifications as follows:

- |   |                |
|---|----------------|
| 1. Pedagogy   | 30 hours,      |
| 2. Education psychology   | 35 hours,      |
| 3. Didactics  | 25 hours,      |
| 4. Teaching methods for relevant vocational fields with practical exercises | 35 + 20 hours. |

Curriculum for assistants in practical teaching and exercises consists of:

- |                                   |           |
|-----------------------------------|-----------|
| 1. Work pedagogy                  | 40 hours, |
| 2. Methods for practical teaching | 35 hours. |

Unfortunately, these curricula are not being implemented, particularly not the one for assistants in practical teaching.

The obligatory contents of the VET teachers' professional exam put pressure on the teachers' colleges to run courses in initial VET teachers' training in pedagogy, psychology, didactics and teaching methods following a curriculum which includes:

- general pedagogy,
- education psychology,
- didactics,
- teaching methods in VET.

Contents and staffing conditions for implementation of these courses have not been standardised, which makes the situation in VET teachers' initial training in pedagogy, psychology, didactics and teaching methods unsatisfactory. According to the data available at the MoES - Institute for Education Development, VET teachers' initial training in pedagogy, psychology, didactics and teaching methods is available at the Teachers' Colleges in Āakovec, Osijek, Pula, Rijeka, Split, Zadar and Zagreb. These activities will start soon also at the Teachers' College in Petrinja.

After passing their exams in the mentioned courses, the VET teachers are granted their **first teaching licence**.

### **System of initial pedagogical training of VET teachers**

Initial pedagogical training of VET teachers in Croatia generally takes place in form of a **work-and-study scheme**?. This scheme refers to pedagogical training of persons who have university, college or secondary school non-teaching qualifications and who have been employed in vocational secondary schools, according to the Secondary School Act, for a limited period of time (two-year internship starting with their appointment date).

Training in pedagogy, psychology, didactics and teaching methods for craftsmen in licensed crafts workshops

The Law on Crafts (Official Gazette, 77/93), which was adopted in Croatia in 1993, offered the possibility to introduce the dual system in vocational education and training for craftsmanship. This dual system is incorporated in the secondary vocational education system. Practical teaching (practical apprenticeship) takes place in licensed crafts and other

workshops and the workshop cannot be granted a license if it does not employ a craftsman who has passed the craftsman examination. The Articles 50 and 51 of the Law on Crafts thus stipulate that the craftsman exam may be taken by a person who has passed the apprentice examination and has a minimum of three-years working experience in the relevant craft and basic skills required for apprentice training.

Craftsman Examination Curriculum (Official Gazette, 102/95) defines the training knowledge and skills which the craftsman must possess (see point V. of the Craftsman Examination Curriculum for a Photographer).

*The mentioned legislation does not oblige craftsmen with additional professional and pedagogical training or give them any possibilities for further promotion in their craft.*

### **Training of company instructors in pedagogy, psychology, didactics and teaching methods**

Currently there is no regulation obliging the persons who conduct practice courses or summer practice in companies and other legal persons to have pedagogical qualifications.

#### **1.1.7. VET teachers' internships**

According to Art. 80 of the Secondary Education Act, VET teachers without the first teaching license is obliged to acquire teaching working experience through an internship which lasts two years from the date of appointment.

The internship curriculum is established by the School Teachers' Council at a proposal of the Internship Commission. The work activities of the school's Internship Commission are defined by the Regulations on the Work of Internship Commissions and Professional Examination Commissions (Ministry of Education and Sports Newsletter, 5/96).

*Internship of VET teachers is very specific due to their three concurrent obligations: obligation of direct work with students (teaching of students), obligation of following the internship curriculum and obligation of training in pedagogy, psychology, didactics and teaching methods, as well as a frequent impossibility of secondary vocational schools to provide interns with professionally and methodically qualified mentors.*

#### **1.1.8. Professional examinations**

Conditions and methods for organising the professional examinations have been defined in Art. 80 of the Secondary Education Act and the Regulations on the Professional Examination of Teachers and Experts in Primary and Secondary Education (Official Gazette 89/95).

The professional examination structure is equal for all VET teachers regardless of their education qualifications. However, content structure and requirement level is conditioned by the education qualifications of the candidates and activities they are qualified to perform in vocational education and training. For instance, assistants in practical teaching and exercises are not required to prove their capabilities to independently conduct practical courses and exercises, but have to show their capabilities for advisory/assistant tasks and activities.

VET teachers' professional exams are organised by the MoES and secondary vocational schools in which the exams take place, and are conducted by five-member examination commissions appointed by the Minister of Education and Sports.

*Professional exam curricula for vocational theory subject teachers, for trainers for practical courses and for assistants in practical teaching have not yet been standardised.*

After passing their professional exam, VET teachers are granted their **second license**, i.e. the right of independent direct work with students, homeroom teacher status (except assistants in practical teaching and exercises) and promotion to teaching jobs and positions, together with an obligation of permanent professional and pedagogical training.

#### **1.1.9. Financing**

### **Financing of the initial training in pedagogy, psychology, didactics and teaching methods**

The results of a survey (conducted at the beginning of 1996) of VET teachers who have completed additional training in pedagogy, psychology, didactics and teaching methods in Osijek, Pula, Rijeka, Split, Zadar and Zagreb, the costs of their training, i.e. the tuition and exam costs have been borne by:

- secondary vocational school employing the VET teacher 57,6%
- VET teacher him/herself 42,4%

Taking into consideration that the VET teachers generally purchase the necessary books themselves and cover travel expenses to/from the place of additional training in pedagogy, psychology, didactics and teaching methods, their participation in the total costs is much higher than 42,4%.

After the adoption of the Decision on Curriculum and Organisation of Primary and Secondary Teachers' Training in Pedagogy, Psychology, Didactics and Teaching Methods, the regional offices of the Croatian Employment Bureau are appearing as co-financiers in some places. However, so far there has not been any estimation as to the relative value of the Employment Bureau's participation in the total annual costs of this training.

### **Financing of the professional examination**

According to the Regulations on the Professional Examination of Teachers and Experts in Primary and Secondary Education, the total cost of the professional examination is covered by the Ministry of Education and Sports. VET teachers participate in the exam costs only in case they have to repeat the entire exam or a part of it.

#### **1.1.10. Situation after the professional exam**

Professional and pedagogical training of VET teachers

Article 84 of the Secondary Education Act defines:

- a) the teachers' right and duty to professional and pedagogical training
- b) curricula and organisation of training programmes are regulated by the Minister of Education.

During the last few years, the key organiser of the professional and pedagogical training was the Ministry of Education and Sports - Institute for Education Development.

An analysis of the professional training catalogues for 2000 and 2001, which include plans for VET teachers' professional training, serves as a basis for the following conclusions:

1. the topics of the planned professional training sessions for VET teachers are a result of personal viewpoints of the current (often vocationally unqualified) advisors at the MoES - Institute for Education Development, and not a result of a VET teachers' training needs analysis linked to the scientific and technological progress, requirements of the teaching subjects and characteristics of the students who are taught these subjects. This problem is clear from the fact that in the same year and for the same group of VET teachers there have been completely different and uncoordinated topics offered by different regional offices of the MoES - Institute for Education Development,
2. the topics do not offer simultaneous training in professional fields and teaching methods,
3. most of the topics are designed for vocational theory subject teachers, only a few for trainers of practical courses and exercises and none for the assistants in practical teaching and exercises,
4. during the last three to five years, non-governmental organisations and non-educational institutions (companies etc.) are trying to participate more actively in the processes of VET teachers' professional and pedagogical training.

### **Monitoring and evaluation of VET teachers' results**

According to the information available at the MoES - Institute for Education Development, in the Croatian education system there is neither a concept nor a legal basis for a systematic internal monitoring and evaluation of the VET teachers' results. There is even less concept or regulation about an external monitoring and evaluation of the results of their work.

*In these conditions, the evaluation of the VET teachers' results and proposals for their promotion to other teaching jobs and positions are a result of subjective self-evaluation of teachers and/or subjective evaluation of school experts and managers. In the last year there have been attempts to replace this practice with a more systematic monitoring and evaluation of VET teachers' results by vocational school's experts and managers, as well as by advisors at the MoES - Institute for Education Development.*

### **Promotion of VET teachers**

According to Art. 83 of the Secondary Education Act, VET teachers' work is evaluated. VET teachers may be promoted to other teaching jobs and positions on the basis of evaluation of their success in work.

#### *Promotion to other teaching jobs*

According to Regulations on the Promotion of Primary and Secondary School Teachers (MoES Newsletter, 14/95), VET teachers may be promoted to other teaching jobs:

- vocational theory subject teachers into occupations “teacher-mentor” and “teacher-advisor”,
- vocational trainers into occupations “trainer-mentor” and “trainer-advisor”.

Assistants in practical teaching and exercises have no possibility of promotion!?

*However, there are currently no established clear criteria for the selection of VET teachers into other teaching jobs. Moreover, the initial training for their new teaching duties and further continuous training has not been defined.*

#### *Promotion to teaching positions*

It can be clearly stated that, according to Art. 47 of the Secondary Education Act, VET teachers with university education fulfilling the conditions for a VET teacher may be promoted to the position of a school manager.

*Nevertheless, the selection criteria for secondary vocational school managers have not been defined and there is no relevant training of VET teachers for the position of school manager or professional training at the position of school manager.*

*Particularly vague is the process of selection and training of VET teachers for the advisors' positions at the Ministry of Education and Sports and the Institute for Education Development.*

### **Specialisation and scientific development of VET teachers**

Due to the lack of reform in the Croatian higher education, as well as disagreements among the academics concerning the possibilities of specialisation and scientific training of teachers in general, including VET teachers, vocational trainers and assistants in practical teaching and exercises have no possibility of additional training at the higher education level. On the other hand, teachers of vocational theory subjects have no possibility of additional training at the level of specialisation and scientific training in the area of pedagogy, vocational education and training curricula-building, teaching methods in VET etc.

Vocational theory subject teachers currently have a possibility to specialise or attend scientific training only within their basic education field (within their professional background area).

### **Social status and motivation of VET teachers**

Remuneration of VET teachers in relation to salaries of employees with equal qualifications in the private sector is unsatisfactory. VET teachers' salaries are about 10% lower. VET teachers do not have any professional association. Only since a year ago, there have been some initiatives for establishing non-governmental and non-profit associations of VET teachers.

## 1.2. International organisations' recommendations

International organisations analyse VET teachers' training in the context of global changes, so we shall give an outline of their conclusions and recommendations.

1.2.1. CMOPE (World Conference of Associations of Teaching Professions) considers that *“Teachers of technical and vocational education must be ensured:*

- a) *education and training of high quality starting with the initial conditions for education, which should be precisely defined,*
- b) *in-service education and training, as well as a possibility for practical work in their working environment.”*

Furthermore, CMOPE states that *“Persons in companies who are in charge of organising practice for students must have a possibility to be trained in pedagogy for their work with students.”*

1.2.2. ILO (International Labour Organisation) states that *“persons conducting training programmes must have a comprehensive theoretical and practical knowledge, working experience, knowledge in pedagogy and psychology and skills for transfer of knowledge and working skills to the trainees and must be included in permanent professional and pedagogical training.”* Curriculum for initial training of future VET teachers in pedagogy and psychology should encompass knowledge in physiology, work psychology, work sociology and methods of teaching processes management.

1.2.3. UNESCO (United Nations Education, Science and Culture Organisation) in its Convention on Technical and Vocational Education states:

- “1. Contracting states agree that all the persons conducting teaching in the field of technical and vocational education, regardless of whether they work full- or part-time, should have adequate theoretical and practical knowledge in their professional field, as well as relevant teaching competencies which are adequate for the type and level of training;*
- 2. The persons who teach in technical and vocational fields must be given the possibility to improve their technical awareness, knowledge and skills through special training courses, periodical practical training in companies, or through any other type of activity which is linked to the working world. They should also be provided information and training on the innovations in the education process, which they could implement in their own profession, and allowed to participate in relevant research projects.”*

In the document *“Revised Recommendations on Technical and Vocational Education”* (2000), UNESCO recommends to the member states to **build systems of lifelong learning**, where technical and vocational education would constitute an integral part, allowing everybody (men and women, youth and adults, persons with average capabilities, talented persons, persons with difficulties, socially excluded persons) to acquire basic technical and vocational education (basic occupation) and adapt throughout their whole lives to the changes taking place in the professional world and which would work according to the curriculum rules in all its segments.

In order to ensure high quality of technical and vocational education in such a system:

1. **priority should be given to employment and preparation of and appropriate number of qualified and trained teachers, instructors, administrative staff and managers**, ensuring relevant training, equipment and other conditions for their efficient work;
2. **remuneration and working conditions offered to the teaching staff should be comparable or better than those of persons with equal qualifications and experience in other fields;**
3. **all teachers in the system of technical and vocational education, including instructors who conduct only the practical teaching, must be treated as an integral part of the teaching profession** and as such should be given an equal status as their colleagues in the general education system;
4. teachers working in the technical and vocational education system, **regardless of whether they work in regular or extra-curricular teaching and training programmes, must possess personal, ethical, professional and teaching qualities which are crucial for their work, and must complete a thorough initial training** which will enable them to function and adapt to the continuously changing scientific, technological and social environment;
5. teachers of technical and vocational education **for a specific field must be qualified for this educational field:**
  - a) if the occupations for which the students are being trained primarily require practical knowledge and skills, the teachers themselves must have sufficient working knowledge and skills in these occupations,
  - b) if the students are being trained for technical occupations or for middle management positions, the teachers must have relevant knowledge, if possible, acquired through practical experience which is necessary for the work on these positions,
  - c) if the students are being trained for an occupational area which requires scientific work and theoretical analyses, such as engineering, the teachers must have knowledge of research methods;
6. teachers of technical and vocational education in form of continuous (adult) education, **apart from being specially trained in adult education**, must be acquainted with the working environment of their students and able to organise distance learning and adapt it to the individual possibilities of the students;
7. qualified experts employed in relevant sectors outside the education system should also be invited to participate in the school teaching programmes in order to link the classroom teaching more efficiently to the working world;
8. **training for technical and vocational teaching must be organised at a university or college institution**, which presupposes that future teachers have gymnasium or other equivalent secondary school education. All the curricula for this type of training should be built taking the following objectives into consideration:
  - a) maintaining the standards of education and professional training according to the demands of the teaching profession and contributing to further raising of these standards,
  - b) future teachers should develop skills for teaching theoretical and practical aspects of the field they are being trained in, with a particular focus on the use of information and communication technology wherever possible,
  - c) future teachers should develop a need for permanent awareness about the current trends in their teaching field and the employment possibilities in this field,
  - d) future teachers should acquire skills for directing students with special needs,
  - e) through additional training, future teachers should be enabled to teach other students in similar programmes;
9. teachers' professional training for the work in technical and vocational education should include following elements, relevant for both **teachers' initial and continuous training curricula:**

- a) education theory in general and referring particularly to the technical and vocational education,
- b) education psychology and sociology with special reference to the group(s)
- c) teaching methods, special pedagogical methods, relevant for the subject/field for which the future teacher is being trained, including the methods of student evaluation,
- d) training in methods of selection and use of modern teaching techniques and aids, including the information/communication technology,
- e) training in the creation of adequate teaching materials, including teaching materials based on modular and computer technology in cases where there is a lack of material necessary for technical and professional training,
- f) period of practical supervised teaching experience before starting independent teaching,
- g) learning the methods of training and professional orientation and the administration methods in the education system,
- h) organising the environment for practical teaching in class and laboratories, as well as management of this infrastructure,
- i) training in safety issues, with particular focus on the teaching methods in safety at work and safe working practice;

10) responsible staff for the preparation of teachers for professional training must have a high level of education and qualifications in their field;

11) teaching staff should be encouraged to continue improving their qualifications in the relevant fields and appropriate financial means should be ensured. This continuous training, which should be organised through a wide range of education institutions, should include:

- a) continuous evaluations and upgrading of knowledge, skills and capabilities,
- b) continuous refreshing of professional knowledge and skills,
- c) periodical practical work in relevant working field,

12) when considering promotions, changes of positions etc., results in the teachers' continuous training should be taken into account, as well as their working experience;

13) managers of institutions for technical and vocational education should devote an important portion of their time to the educational and training aspects of their work. Institutions for technical and vocational education should dispose of a sufficient number of employees for the following tasks:

- a) counselling and professional orientation of their students,
- b) preparation, supervision and coordination of the entire practical and experimental work,
- c) maintenance of the instruments, equipment and aids in the classrooms and , laboratories.

The results of a comparative analysis conducted in the **EU Member States** by B. Marentić-Požarnik lead to the following conclusions:

1. in most of the countries pedagogical training of future teachers is organised in a successive model, i.e. after completing professional studies (acquiring a professional degree),
2. curricula for pedagogical training of future teachers are comprised of four subject fields:
  - a) PEDAGOGY, including:
    - teaching methods
    - education science, which includes education psychology (learning theory, habits, motivation, interests etc.) and education sociology (sociology theory, school as a social organisation, group dynamics etc.),
    - education theory, which includes education philosophy and history of education ideas,
  - b) INFORMATION TECHNOLOGY
  - c) FINANCIAL ISSUES IN EDUCATION

## d) CURRICULUM BUILDING.

### 1.3. Conclusion

The comparative analysis of the state of education and training of VET teachers in Croatia, recommendations of international organisations and the situation in the EU Member States allows us to draw a clear conclusion that the answer to the mentioned rhetorical question is positive.

Regardless of the fact that Croatia is lagging behind in relation to the international organisations' recommendations and the state in the EU Member States, which we should take as the reform objectives, we can hope that, on the basis of our own experiences, we shall more easily plan and implement the upcoming changes.

Nevertheless, the comparative analysis is the basis for the following conclusions:

- a) in the Republic of Croatia there are certain experiences of initial and continuous training of VET teachers in pedagogy, psychology, didactics and teaching methods which, unfortunately, are not integrated in the lifelong learning and should therefore be changed;
- b) the changes can be accomplished in two ways:
  1. by integrating the existing situation in the concept and system of lifelong learning,
  2. by creating a modern system of initial and continuous training of VET teachers and disregarding the existing situation;
- c) both ways can result in improvements, but the first one can yield faster and cheaper satisfactory solutions for the initial and continuous training of VET teachers in pedagogy, adult education, psychology, sociology, didactics and teaching methods (in further text "pedagogical training");
- d) it is more economical to choose to change (upgrade) the existing situation, because this process can start in a fairly short time;
- e) the upcoming **changes of the situation in initial training** of VET teachers should be directed toward:
  - **integration** of the currently disconnected programmes of internship in the secondary vocational schools and training in pedagogy, psychology, didactics and teaching methods at the teachers' colleges. This integration should result in better connections between the content, organisation and staff of the main actors in the VET teachers' initial training: secondary vocational education institutions as the internship organisers, teachers' colleges responsible for pedagogical training implementation and secondary vocational education institutions authorised as special facilities of the teachers' colleges for practice training in teaching methods,
  - **introducing into the initial pedagogical training curriculum** some currently non-existent subjects (courses) which are essential for a complete pedagogical competence of the VET teachers. These subjects are:
    - common subjects (work pedagogy, work psychophysiology, adult education, education sociology, information and communication technology, finance issues in VET and security at work),
    - specific subjects (practice in teaching methods)
  - **appointing a person in charge of the internship process** in the secondary vocational schools - a specially trained **VET teacher-mentor** who has the right to invite the school manager, secretary and experts to participate in the implementation of some parts of the internship programme,
- f) the upcoming **changes of the continuous training of VET teachers** should be focused on establishing the content, organisation, finance and staff conditions for:

- quality internships in the secondary vocational education institutions (in-service training of VET teachers-mentors),
  - quality management in the secondary vocational education institutions (training of managers),
  - quality functioning of the secondary vocational education institutions as practice facilities for the teachers’ colleges (training of VET teachers-mentors in practice teaching),
  - quality work of selected teachers’ colleges (selection and training of scarce teachers for training in pedagogy, adult education, security at work and VET teaching methods),
- g) in order to build **successful quality relations between secondary vocational education institutions and the labour market**, especially individual companies, these institutions must be adequately staffed for planning and programming the education needs, students’ practical teaching and exercises, VET teachers’ training and participation of production experts (as external advisors) in VET.

## 2. CHANGES IN THE INITIAL TRAINING OF VET TEACHERS

Taking into consideration the results of the comparative analysis of the situation in Croatia and the international organisations’ recommendations, as well as the choice of undertaking (improving) the existing situation, it is clear that the modifications in the initial and continuous VET teachers’ training must include:

- changes in the legislation on VET teachers (legal adjustments),
- changes in the term “VET teacher”,
- changes in initial training.

### 2.1. Changes in the legislation on VET teachers

The key condition for any change in the initial and continuous training of VET teachers is the need to establish legal basis for integration of duties and responsibilities of all the competent ministries (Ministry of Education and Sports, Ministry of Science and Technology, Ministry of Economy and Ministry of Crafts, Small and Medium Enterprises). This integration must result in shifting the issue of initial and continuous training of VET teachers from the position **“in-between the duties and responsibilities of the competent ministries”** to the **focus** of their duties and responsibilities. Changing the duties and responsibilities of the competent ministries for the initial and continuous training of VET teachers will result in more favourable conditions for resolving other questions, such as: standardisation of initial training curricula, conditions for acquiring the right to implement the standardised initial training curricula etc.

### 2.2. Changes in the term “VET teacher”

The modern role of VET teachers implies that the term **“VET teacher”** refers to any person who has the necessary personal, social, professional qualities and qualifications in pedagogy, adult education, psychology, sociology, didactics and teaching methods, works full- or part-time as a public servant in a secondary vocational education institution (public, religious, private), in a licensed crafts workshop or in a company, regardless of whether this is technical, professional or artistic education, and who has been recognised by the society and the education authorities as qualified for attaining the objectives of the secondary vocational education and training of regular, talented, adult and students with difficulties.

This term today refers to a qualified person who individually and/or together with other VET teachers implements the authorised framework curriculum in one or more vocational subjects within his/her own qualifications, whose teaching contributes to developing the students' abilities for individual and teamwork, safe, responsible, quality and efficient work in their future working fields and professions, who prepares students for work and life in conditions of permanent change and lifelong learning and who has been promoted to relevant teaching jobs (mentor, advisor) and to relevant teaching positions (curriculum manager in secondary vocational education institution, school manager in secondary vocational education institution, advisor for secondary vocational education in the ministry, the chamber etc.).

### 2.3. Changes in initial training of VET teachers

The conclusions of the first chapter mention that the changes in initial training of VET teachers should be geared toward:

- the integration of all the actors in initial training,
- introducing into the initial pedagogical training curriculum all the subjects (courses) which are essential for a complete pedagogical competence of the VET teachers,
- appointing trained VET teachers-mentors as persons in charge of the internship process in the secondary vocational schools,
- appointing trained VET teachers-mentors as persons in charge of the VET teachers' practice in teaching methods,
- training the companies and other legal persons on the labour market for establishing successful links between them and secondary vocational schools. This can be achieved by opening their work processes to students and participating with their experts in vocational teaching programmes. This particularly refers to expert training for the job of instructor.

A specific change should be made referring to the titles of VET teachers' professions.

#### 2.3.1. Principles of change

Changes in initial pedagogical training of VET teachers should be based on the following principles:

- *principle of recognition of vocational qualifications* which the teachers have acquired at a relevant tertiary education level (university or college) and at a relevant secondary vocational schools;
- *principle of obligation* of pedagogical training for all those who prepare and conduct vocational training in the secondary vocational education institutions, regardless of the place of training; those who train vocational teachers for individual and group work during their internship; those who manage secondary vocational education institutions and/or educational programmes which run in them and assist vocational teachers in their tasks;
- *principle of adapting the training curriculum* to the teachers' educational qualifications (university, college and secondary education), type of future vocational teaching (vocational theory and/or practical training) and the capabilities of students who will be attending the vocational teaching (average students, gifted students, students with difficulties, adult students, prisoners, war veterans and work disabled).

#### 2.3.2. Concept of initial training of vocational teachers

In this document the term "initial training of vocational teachers" refers to an objective-driven, planned, curriculum-organised process of pedagogical training of persons who have acquired relevant vocational qualifications at a relevant higher or secondary education level, who have adequate personal and social skills, who have been selected as future vocational

teachers in secondary vocational schools and who will be trained either in secondary vocational school (during internship) or at a relevant teachers' college (by attending relevant courses). This term also refers to selected persons in companies who act as instructors and persons who have passed the craftsman examination.

Initial pedagogical training can also be attended by experts with relevant vocational qualifications who are not employed in secondary vocational schools, but are legally obliged to acquire such competencies, unemployed persons with adequate vocational training and regular students attending the last year of studies at relevant universities, if they show the necessary personal and social skills.

### 2.3.3. Target groups

Initial pedagogical training will first of all be attended by those experts who have legal obligation to acquire such competencies, who have been selected in secondary vocational education institutions and act as instructors in companies.

Experts (candidates for VET teachers) can be differentiated by the level of their education qualifications, by scientific fields and/or working fields which their professions belong to, as well as by age and capabilities of students/trainees who will attend their vocational teaching. Therefore they will be divided in the following target groups during their initial pedagogical training:

1. candidates for a job of “*vocational theory subject teacher*”. This target group will include experts with higher education qualifications (university and college) and will not be subdivided for training in pedagogy, adult education, psychology, sociology and didactics. However, for training in teaching methods, this target group will be subdivided according to scientific fields their professions belong to:
  - subgroup for teachers in the field of technical science;
  - subgroup for teachers in the field of biotechnological science;
  - subgroup for teachers in the field of biomedicine;
  - subgroup for teachers in the field of social sciences;
  - subgroup for teachers in the field of liberal arts;
  - subgroup for teachers in the field of natural sciences;
2. candidates for a job of “*teacher of practical courses*”. This target group will include experts with college (2-year higher) education and will not be subdivided for training in pedagogy, adult education, psychology, sociology and didactics. For training in teaching methods, this target group will be subdivided according to scientific fields their professions belong to:
  - mechanical engineering, shipbuilding, electrotechnics and telecommunications,
  - chemical technology and metallurgy,
  - geology, mining, oil,
  - economy and trade,
  - catering, food processing and tourism,
  - agriculture, forestry and fisheries,
  - veterinary,
  - wood processing,
  - civil engineering, geodesy, construction materials and glass processing,
  - transport (road, marine, river, port, air and rail) and domestic transport,
  - graphics,
  - textile and leather technology,
  - health and optics,
  - personal and other services,
  - music, visual arts and dance,
  - protection of persons, property and environment,
  - meteorology.

3. candidates for a job of “*trainer of practical courses*”. This target group will include experts with secondary vocational education qualifications and will not be subdivided for training in pedagogy, adult education, psychology, sociology and didactics. For practical training in teaching methods skills, this target group will be subdivided according to the same rules as the teachers of practical courses.

#### 2.3.4. Objectives of the initial training process

Objectives of initial training are allowing the experts with no pedagogical qualifications to acquire these qualifications in an organised way and, with regard to their teaching qualification (*first teaching license*), putting them on an equal level with the teachers who have acquired these qualifications during their regular studies. This will provide them with a possibility to apply for professional examination (*second teaching license*).

#### 2.3.5. Initial training curriculum

Curriculum for initial training of experts with no pedagogical qualifications encompasses three parts:

- a) acquiring pedagogical qualifications (first license) for teaching at an authorised teachers’ college or in an authorised secondary vocational education institution which organises practical teaching methods training,
- b) internship in a secondary vocational education institution,
- c) preparation for the professional examination and the exam itself (second license).

##### a) *Curriculum for initial training in pedagogical knowledge and skills (first license)*

In order to achieve the objectives of the initial training of VET teachers, the secondary vocational education institutions should, immediately after selecting the experts, report them to the authorised teachers’ college so that they could be included in pedagogical training and acquire their first license. The authorised teachers’ colleges will organise the training process for experts with university and college education according to one curriculum and for those with secondary vocational education according to another curriculum. It would be very useful for both experts and the quality of their overall initial training if this training were organised contemporarily and entirely within the period of the teachers’ introductory programme. This would mean that some parts of the teachers’ internship programme (attending demonstration classes and teaching) could be implemented in an easier and more efficient way.

**Curriculum model** for experts with university and college education:

##### A.COMMON PART\*

1. Pedagogy	30 hours
2. Work pedagogy	20 hours
3. Education psychology (for teaching students with average capabilities, gifted students, students with difficulties and adult learners)	50 hours
4. Psychophysiology	15 hours
5. Didactics	30 hours
6. Adult education	20 hours
7. Education sociology	20 hours
Information and communication technology	15 hours
8.	
9. Basic methodology for vocational curriculum building	20 hours
10. Financial programming for vocational education	10 hours
Total:	230 hours

\* *In some working fields and for some occupations (hairstylist, pedicure, beautician, photographer etc.), vocational theory subjects are taught by persons with secondary vocational education (assistants in practical teaching), which creates a problem: according*

*to which curriculum model are these persons supposed to acquire their initial pedagogical skills?*

## B. SPECIALIST PART

1. Teaching methods
  - 1.1. for experts with higher education who are trained for vocational theory subject teaching\*
    - 1.1.1. theoretical part – according to scientific fields 35 hours
      - technical field
      - biomedicine
      - biotechnology
      - social field
      - liberal arts
      - natural sciences
    - 1.1.2. attending demonstration classes in vocational education institution\*\*
    - 1.1.3. teaching methods practice 1 demonstration class/candidate  
x 2 hours/class
  - 1.2. for experts with university and college education who are trained for practical course teaching\*\*\*
    - 1.2.1. theoretical part 40 hours
    - 1.2.2. teaching methods practice 1 demonstration exercise/candidate  
x 3 hours/exercise (on average)
    - 1.2.3. attending demonstration classes in vocational education institution\*\*

*\* Both theoretical and practical contents of the teaching methods in vocational theory subject teaching will be adapted not only to the scientific fields, but also to the capabilities and age of students, which will depend on the teachers' fields of educational work and on their interests. This practically means that the vocational theory subject teachers who would be teaching gifted students or students with difficulties or adult learners should acquire specific knowledge and skills on the teaching methods adapted to such students.*

*\*\* Experts employed temporarily in secondary vocational education institutions will attend demonstration classes within their internship programme in the institutions where they have been selected, while the other experts (unemployed and regular students of non-teachers' universities) will attend demonstration classes in practice institutions (secondary vocational education institutions which have been selected as practice institutions of teachers' colleges) for a minimum of 60 teaching hours.*

*\*\*\* Long training experience in practical teaching methods indicate a possibility of a unified theoretical training for all candidates regardless of their different working fields and occupations, if the theory is presented on a level of principles and the teaching methods principles are logically implemented in concrete working fields and occupations.*

**Curriculum model** for experts with secondary vocational education:

### A. COMMON PART

1. Basics of work pedagogy	30 hours
2. Basics of work psychophysiology	30 hours
3. Basics of work sociology	20 hours
4. Basics of adult education	20 hours
5. Security at work and environmental protection	20 hours
<b>Total:</b>	<b>120 hours</b>

### B. SPECIFIC PART\*

1. Teaching methods in practical teaching - theory 40 hours

2. Attending demonstration classes in a secondary vocational education institution\*\*

3. Teaching methods practice

1 demonstration exercise/candidate  
x 3 hours/exercise (on average)

*\* Long experience in training future assistants in practical teaching in secondary vocational schools methods indicate a possibility of a unified theoretical training in “teaching methods in practical teaching” for all candidates regardless of their different working fields and occupations. This approach to the theoretical aspect of “teaching methods in practical teaching” means that methods are presented on a level of principles and these teaching methods principles are logically implemented in concrete working fields and occupations.*

*\*\* Experts employed temporarily in secondary vocational education institutions will attend demonstration classes within their internship programme in the institutions where they have been selected, while the other experts (unemployed) will attend demonstration classes in practice institutions (secondary vocational education institutions which have been selected as practice institutions of teachers’ colleges) for a minimum of 60 teaching hours.*

In order to have quality in the implementation of the mentioned curricula, it is necessary to elaborate *more articulate contents* for them.

Detailed contents for these curricula would be elaborated in a subsequent phase of this project.

## **H. Changes in professional titles**

According to the existing regulations, VET teachers do not have any professional title until they have passed their professional examination.

VET teachers with higher vocational education are granted their first license after passing their exams in pedagogy, psychology, didactics and teaching methods, but do not get any professional title at that point, although they are, in fact, by this event put on an equal level with the teachers who have completed regular studies at teachers’ colleges and are granted both their first license and their title of teacher at that moment. It is necessary to make these two groups of teachers equal by granting the VET teachers the title of teacher of vocational theory or practical courses in a specific field.

This would open a possibility for VET teachers with college and secondary vocational education to acquire adequate titles. Namely, VET teachers with college vocational qualifications could in that case get a title of teacher of practical courses and VET teachers with secondary vocational qualifications could get a title of trainer of practical courses.

### ***b) Internship programme in secondary vocational education institution (attending demonstration classes)***

It is proposed that the internship programme runs for 12 months from the date of selection of the relevant expert in the secondary vocational school and that it includes the following parts:

- *programme of introduction into the field of secondary vocational education and into the life and work of the institution.* This part introduces the intern to the:

- Constitution of the Republic of Croatia, Labour Law, Law on Protection at Work, Law (and secondary legislation) on Secondary Education and the internal acts of the secondary vocational education institution,
- rights and duties of the VET teacher,
- activities and internal structure of the institution,
- framework curricula which s/he will use in teaching the students,
- annual curricula of the institution,
- pedagogical documentation and archives in the institution,
- expert and management bodies of the institution,
- planning, curriculum-building, implementation and internal evaluation of teaching.

The implementation of this programme is managed by a trained *mentor*, who is, if necessary, assisted by the secretary, manager and experts of the institution. The introductory programme has a two-month duration beginning with the intern's selection date.

- *programme of attending demonstration classes*. This program takes place for four months beginning with the selection date. During the first month of the programme, the intern attends classes conducted by a trained *mentor* with no direct participation in teaching. During the next three months, the intern prepares and conducts the classes under the mentor's supervision up to six hours per week for a maximum of two teaching subjects.

- *programme of teaching*. This programme presents a continuation in content and time to the programme of attending demonstration classes and lasts for eight months. During this programme the teaching obligation is extended to ten hours per week. The intern may perform one part of these classes without the mentor's supervision.

c) Programme of preparation and taking of the professional examination (second license)

After successfully completing initial pedagogical training and internship programmes, VET teachers may take their professional examination within 12 next months (get their second license). By passing their professional examination, VET teachers are granted relevant teachers titles, the right to independent teaching and the possibility of collecting references for their subsequent promotion to other teaching jobs and teaching positions, as well as the right to specialist and scientific training.

The professional examination programme includes:

- written essay,
- one teaching unit/exercise conducted for students before the examination committee,
- analysis of the conducted teaching unit/exercise,
- oral examination in teaching methods, Constitution of the Republic of Croatia,

Law (and secondary legislation) on Secondary Vocational Education, Statute and other general acts of the secondary vocational education institutions, and pedagogical documentation.

After passing their professional exam, VET teachers confirm their teaching occupations:

- teacher of vocational theory subjects if s/he has university qualifications,
- teacher of practical courses if s/he has university qualifications,
- trainer of practical courses if s/he has college qualifications,
- assistant in practical teaching if s/he has secondary vocational qualifications.

Teachers who acquired their first license, but did not go through an internship programme in a secondary vocational education institution are obliged to do a preparation programme for the professional exam in the duration of 12 months from the date on which the intern was selected by the institution.

### **3. CHANGES IN CONTINUOUS (PERMANENT) VOCATIONAL AND PEDAGOGICAL TRAINING OF VOCATIONAL TEACHERS**

Changes in permanent continuous, vocational and pedagogical training of VET teachers refer to:

- changing the approach to curriculum-building of VET teachers' continuous training after the second license, i.e. in their basic teaching professions,
- changes in training of mentors and advisors in the secondary vocational education institutions,
- changing in training of managers of secondary vocational education institutions.

When building curricula of continuous professional training of VET teachers and VET teachers-mentors and advisors, some **requirements or principles** should be adhered to:

- adjusting the teaching curricula to the VET teachers' continuous training curricula, i.e. harmonising what and how the teachers teach with what and how they are expected to teach,

- overcoming the dichotomy between the professional and the pedagogical training of VET teachers and providing them with cultural knowledge which is much wider than the mere school curriculum,
- apart from knowledge transfer, the teacher training must include an affective aspect,
- professional training curricula should respect differences in the training needs of VET teachers,
- practice shows that the need for beautiful and exceptional written and oral expression should always be stressed,
- professional training curricula should give priority to those fields which are currently problematic and present a special issue for the pedagogical practice,
- accepting the fact that in pedagogical theory and educational practice there is no static and untouchable area which could not become a subject of discussion and change,
- creating educational situations which would permit (through implementation of efficient strategies and learning techniques) the acquisition of quality knowledge and development of capabilities, skills and educational values,
- participating and evaluating (through standardised criteria and measures - points) the results of the professional training process, which would influence the possibility of teachers' promotion.

Due to the great importance of continuous professional training of VET teachers, the following steps should be taken:

1. structure a comprehensive modern **concept of continuous professional training** of VET teachers,
2. adopt new **regulations on teachers' promotion** to higher teaching jobs and positions,
3. establishing an efficient **network of professional conferences**,
4. **activate** the promoted VET teachers-mentors and advisors,
5. adopt a special **professional training curriculum** for some of the non-promoted and the promoted VET teachers-mentors and advisors enabling them for dissemination with clearly defined tasks,
6. establishing **stimulation institutes for increasing professional competence levels** (scholarships, education cheques, job and position promotion, salary, international exchanges, paid vacation...),
7. **publishing a magazine** which will include theoretical and practical issues from specific professions.

**Criteria (measures) on the basis of which the network of professional conferences is established are the following:**

- professional profiles of VET teachers or experts,
- types of educational institutions according to their objectives and curricula (vocational schools, art, crafts schools, dual system...),
- concentration (or dispersion) of particular professions (in urban or in rural environment – number of teachers, number of schools – curricula),
- transport connections.
- teachers' working experience,
- centres for expertise and teaching methods (implementation and analysis of innovations, presentation, internships, development research, experiments...),
- financial means.

#### ***Facilities, material and technical conditions for the continuous professional training***

In order to have high quality professional training and functioning advisory activities it is important to ensure an **efficient flow and exchange of information among schools (and advisors)** – software for data processing, graphs, reference sources, networking, informing

the advisers about the most recent IT developments and methods for their application in schools.

It is necessary to acquire (complete) quality computer configuration, which would support network connections, effective use of the newest electronic multimedia information (knowledge) sources and their presentation to the teachers.

The development of hardware and software should be monitored, in particular the development of applications which could be useful for improving the content, didactics and teaching methods of the teaching process.

Cooperation with the relevant press and electronic media should be enforced.

New Croatian and foreign professional expert publications (books and magazines) should be systematically purchased and, if necessary, translated.

An important precondition for the professional training is further modernisation of school libraries: bibliographic catalogue descriptions for the automatic data processing, following scientific developments in the field, reporting and recommendations on new releases to the VET teachers.

The Institute should ensure publication of at least one magazine and some other expert publications.

All advisers should be internally connected by a computer network and provided with Internet access.

Resources-information centres in the education institutions should be equipped and put in function. This refers primarily to teaching aids and technical equipment, information providers and collections (library etc.). This activity must be supported, elaborated and monitored by the Institute.

Due to technological, expert, scientific, organisational and staffing reasons, an *Institute or State Centre* for the training of VET teachers who have been promoted to mentors and advisers. Possible facilities (with possible boarding services) exist in Ivanić Grad, Crikvenica etc., where a postgraduate specialisation course could also be organised, focused on teaching methods in particular vocational professions.

During the elaboration of this concept, normative regulations and implementation plan should also be taken into consideration: regulations, tendering procedure for the providers of professional conferences (training), categorisation (evaluation) of the conferences, possibility of issuing training cheques, teachers' training needs analysis and allocation to specific content and type of training, elaboration of an annual (or biannual) training programme – catalogue, regulating the obligatory character of training, continuity, evaluation of the importance of a particular training, participants involvement during the training preparation, implementation, as well as the dissemination of results and application of new knowledge and skills.

It is necessary to foresee the *financial means from the state budget, donations, sponsorships, market – intellectual services*.

It is extremely important to plan methods, means, instruments, techniques and procedures of quality evaluation of the training programmes.

### 3.1. Changes in the approach to curriculum-building of VET teachers' continuous training in their basic teaching professions

In this document the term “basic teaching profession” refers to the job which the VET teacher has been granted after passing the professional exam (getting a second license). In this context, the basic teaching professions in VET teaching are:

- teacher of vocational theory subjects in a particular scientific field or working field,
- teacher of practical courses in a particular working field,
- vocational trainer for practical courses in a particular working field,
- assistant in practical teaching for a particular working field and occupation.

Change in the approach means that the VET teachers with the second license who have not been promoted to higher teaching jobs and positions would form one target group. Its continuous training provider (Institute for Education Development) would organise two- to five-year training cycles in relevant aspects of professional training, pedagogy, adult education, psychology, sociology, didactics, teaching methods and other. The continuous training provider would, during the practical implementation of this change, subdivide this large group into adequate subgroups. Training curricula for these subgroups would take into consideration the information collected from the teachers themselves and the changes taking place in the teachers' basic professions, in pedagogy, adult education, psychology, sociology, didactics and teaching methods, legal regulations etc. The subgroups would be formed by specific scientific or working field of the participant teachers, i.e. vocational theory subject teachers in the construction field, vocational trainers in textile technology etc.

**Disseminators** (mentors, advisers, team leaders, trainers) should be systematically trained to take over the organisation and implementation of continuous training for all other VET teachers.

Training curriculum should reflect the needs and interest of teachers, as well as the needs of modern education and the society as a whole.

Training needs analysis is an important step in building the professional training curricula, taking place on different occasions, particularly at the professional conferences. After analysing the training needs and interests of teachers and education institutions, topics (training content) and type (form) of training is selected and defined, as well as all other organisational details that are important in defining a complete training curriculum. Thus, the curriculum should reflect the real training needs of VET teachers.

Continuous training curricula should focus on problem-solving, improving the expertise and qualifications and supporting innovation. This approach means appointing a certain number of mentors who are skilled in team work and personal relations.

Teachers should be guaranteed to find an appropriate course or professional conference to respond to their training needs.

### 3.2. Changes in the training of mentors and advisers in the secondary vocational education institutions

#### ***Defining the term "VET teacher-mentor"***

The concept of mentor in education generally refers to his/her practical work with students – future teachers (in the practice institution), with the teachers-interns, with the participants of various professional conferences (particularly courses, pedagogical workshops, individual assistance and consultations, training etc.). They should in fact act as the thinking practitioners and researchers.

Mentor is a person, an expert, an artist who continuously researches, creates and through his/her creative work educates others and stimulates their interest for work and learning. Together with the VET teachers (trainers), s/he directs the activities of creative work and research in teaching, which results in the school transforming into a creative vocational-pedagogical workshop.

#### **Characteristics of an excellent teacher-mentor**

*A quality mentor knows well the efficient teaching techniques and achieves a high level of communication. A teacher-mentor must be skilled in leading group and individual work with teachers. This, of course, means that it is necessary that he has a high level of professionalism, working culture, literacy and speaking skills, self-assurance, positive attitude and optimism, use of modern teaching skills. A mentor should develop capacities and*

*skills for good curriculum-building and preparation for teaching activities. This is possible only with continuous self-education and –training (with the person as an active participant).*

Mentor's special capacity is inventiveness in work, because s/he should look for new procedures, methods and forms of work. His work should therefore serve as a model.

### **Mentor services**

On the basis of the existing individual and common needs (environment) and in accordance to the relevant objective, further steps in the development of the mentor curriculum (concrete tasks, methods and forms of work, procedures, techniques, structure, methods of self-evaluation and evaluation etc.) should be defined. Due to different possibilities of selection and combination of the curriculum elements, the mentor's roles are very complex.

The roles are:

**role of a model** (quality innovative teaching);

**information role;**

**advisory role** (in preparation of presentations, promoting positive leadership and management, use of excellency and monitoring techniques and analysis of the teaching activities, as well as the principles of consultancy and team dynamics);

**evaluation role;**

**role of organiser of certain activities;**

**networking role** etc.

Consequently, the mentors should be more interested in the modern techniques which could, on one hand, influence the improving of their own expert-pedagogical competencies and personal development and, on the other hand, raise the competencies level of VET teachers through continuous training, all with the aim of changing the passive and traditional habits and the rigidities in the education process.

Instead of using the term "*savoir*" (knowledge serving its own purpose), mentor's activities should be aiming at "*savoir-faire*" (know how to do something).

### ***Elements of mentor's competency***

If the mentor is to be competent for his work, he should:

- have a wide knowledge, skills and capabilities in their own profession, general culture, pedagogy, psychology, didactics and teaching methods,
- understand the nature of professional and other development processes of VET teachers (trainers),
- understand the core of the teaching process,
- have a wide understanding for the interpersonal relations and know how these relations influence the teacher (trainer, student etc.) and which type (model) of behaviour is appropriate for particular real situations,
- be capable to implement a choice of specific technical skills in order to, for example, advise, monitor, get feedback, instruct, evaluate and assess,
- have a thorough knowledge of instructing techniques,
- be trained for partnership relations in his/her mentor work. Mentorship is a dynamic and two-way relationship between the mentor and the teacher in their working environment, aimed at a comprehensive (professional and other) development of both of them.

The bottom line of this definition is that the interests of the mentor and of those who expect his/her assistance are reciprocal.

### ***Key conditions for mentorship in VET are the following:***

1) Defining and describing minimum conditions, which the VET teachers (in specific professional fields) must fulfil, as well as the level of education necessary for successful

management of teaching and curriculum processes. This refers to the quantity and quality of the body of knowledge, skills and capabilities in the field of the basic profession, general knowledge, pedagogy, psychology, didactics and teaching methods, as well as the teacher's practical skills in teaching methods, which are necessary for successful teaching and organised learning. The Institute for Education Development should articulate the **basic conditions set by the labour market** for all the education institutions that are within the area of responsibility and under the authority of the Ministry of Education and Sports.

- 2) Relieving the mentor/adviser of some regular daily duties in order to be able to realise the tasks stemming from his specialised working field (interns, training, students, research...)
- 3) Improving working conditions (facilities, material, financial, organisational conditions...).
- 4) Raise the level of awareness about the necessity of rewarding the mentors and advisers for their positive results in work (i.e. funding for training, paid leave, replacements, awards and certificates...),
- 5) Intensify the continuous professional training of mentors and advisers aimed at introducing innovation in education technology.
- 6) Elaborate written and other training materials (books, manuals, instructions on teaching methods, exercises, bibliography, computer software – diskettes, CDs...).
- 7) Monitoring the balance of teachers' promotions according to the structures and geographic distribution.
- 8) Introducing a system of additional training (compensation education), which would complete the knowledge acquired during the undergraduate studies and later training.
- 9) Define more detailed criteria and measurements for the promotion of VET teachers to higher jobs.
- 10) Define in more detail and set the legal framework for the working conditions of vocational teacher-mentor and –adviser (i.e. for teaching, implementing the Institute's policies etc.)

### **3.2.1. Training vocational teachers-mentors**

The term “vocational teacher-mentor” in this document refers to the VET teacher who has acquired second license and who has, on the basis of his teaching work results, been promoted to the job of mentor and trained for directing the future (new) VET teachers through their internship programme in the secondary vocational education institution (introduction, attending demonstration classes, teaching). Vocational teacher-mentor may have the task of mentoring future teachers of vocational theory subjects and/or of practical courses, vocational trainers of practical courses and assistants in practical teaching. As there is no certified training programme for vocational teachers-mentors in the Republic of Croatia, hereafter we present a proposal for such a programme.

Continuous training curriculum must always be in function of a clearly defined objective. VET teachers promoted to mentors, during their initial training for the teaching profession, have not been trained for elaboration and implementation of internship programmes for VET teachers in secondary vocational education institutions. Because of that, and in the interest of preserving the authority and further development of mentors, as well as in the interest of quality training of VET teachers-interns for numerous demanding and responsible tasks, vocational teachers-mentors should be trained in an organised way for their new tasks.

Great importance of practice institutions as facilities for teaching methods practice for students (future teachers) results in the need for elaboration and implementation of a curriculum for mentor training in these institutions. This should include defining the criteria and method for the selection of mentors who would work in these institutions, meaning their necessary qualifications and how/where they can be acquired.

One of the objectives is to improve the level of professional, pedagogical and general competencies of the VET teacher throughout his/her career.

If the vocational teacher-mentor is to successfully perform his/her tasks, s/he should during the training process acquire the following **contents, i.e. new knowledge and skills:**

- cause-effect relationships between the scientific-technological development, labour market (labour mobility, employment and unemployment), occupations and education system,
- concept and systems of lifelong learning, particularly in the vocational field,
- teacher's role in the implementation of lifelong learning,
- styles of leadership and counselling of other VET teachers (persons),
- elaboration methods for internship curricula and the elaboration method for operational internship plans for individual interns,
- contents (elements) of monitoring the teaching activities of other VET teachers and discussing the results of monitoring,
- planning and enforcing human rights,
- importance of standardising framework curricula and existing knowledge and skills, and the "translation" of the informally and spontaneously acquired knowledge and skills into formally recognised qualifications,
- elaboration methods for framework and implementation curricula and the elaboration of operative teaching plans,
- internal regulations (legal acts) and the pedagogical documentation and archives for vocational education and training,
- planning and implementing ecological issues in teaching,
- communication skills etc.,
- learning and understanding the process of teacher's professional (career) development,
- learning and understanding problems facing VET teachers, recognising the causes and development of problems and ways of solving them,
- willingness to assist in building and understanding the interconnectedness of the pedagogical theory and practice. Teachers should have a clear understanding of the process of learning by experience and practice.

#### ***Principles of successful mentorship***

- attempt to create partnership relations between the mentor and the teacher, because every mentorship is a two-way, reciprocal process
- feel and express the basic need for assistance in professional and personal fields
- create a comfortable working environment (discussing without fear or embellishments, speaking directly and openly about weaknesses and mistakes etc.)
- learn to look at oneself in relation to others
- respect oneself, but without dismissing too quickly opinions of others
- if it is necessary, give up some habits and
- control one's thoughts (concentrate on the event)
- keep searching for the way to success (avoid hopelessness)
- give teachers the freedom of speech, allow them to search for answers, discuss etc.
- rise above problems in order to find the solutions more easily
- the most important motivation is self-respect and positive self-image
- train and practice an ideal listening model (keep still while listening without making judgements and conclusions).

#### ***Training curriculum for vocational teachers-mentors***

The starting points are clear objectives – the competencies mentors are expected acquire for their adequate education work.

Training contents will be articulated in two units: common (general) for all mentors and special (specific) for subgroups of VET teachers according to the criteria of education level and type of vocational education and training where they will perform their mentor's duties.

Common contents include the following topics (subject areas):

- scientific and technological development and education

- concept and system of lifelong learning
- role of the VET teacher in lifelong learning
- system of basic and continuous training of VET teachers in the Republic of Croatia
- tasks of vocational teacher-mentor (in didactics, teaching methods, leadership, counselling, evaluation etc.)

Special contents include the following topics (subject areas):

1. Mentorship methods in vocational theory and practice teaching
2. Curriculum of VET teachers' internship in vocational theory and practice teaching (for vocational trainers of practical courses and assistants in practical teaching)
3. Practice in teaching methods for vocational theory subjects and practical courses (for vocational trainers of practical courses and assistants in practical teaching).

### ***Curriculum certification for vocational teacher-mentor training***

In the Republic of Croatia there is no adequate body (i.e. Vocational Education and Training Council) gathering competent representatives of higher education institutions, secondary vocational education institutions, ministries and chambers. Since the curriculum for vocational teacher-mentor training must be certified in order to guarantee rights and define the vocational teacher-mentor's status, we propose that for now the curriculum evaluation is done by the Education Council at a proposal of the relevant expert body (committee) of the Institute for Education Development.

However, if in the future this curriculum is to be raised to the level of postgraduate specialist studies for VET teachers, it will have to be certified in accordance with the provisions of the Law on Higher Education and the Law on Science and Research Activities.

### ***Systematisation of the vocational teacher-mentor training***

Judging by the existing regulations and practice of promoting the VET teachers to mentors and advisers, there should be no major problems with introducing the mentor training into the system of continuous training of VET teachers. According to the existing regulations, this teaching profession is accessible for teachers of vocational theory subjects and practical courses, as well as for trainers of practical courses. This means that at the moment, the question is open whether to also introduce assistants in practical teaching, instructors in companies and craftsmen into this system.

In order to incorporate this training into the system of continuous training of VET teachers, it is necessary to adopt, beside the existing regulations, some others referring to assistants in practical teaching, craftsmen and instructors in companies. Moreover, specific issues should be clearly defined: the ***obligation of participation*** for the participants (teachers) and institutions included in the process of mentor training, the ***provider*** of this training, ***criteria for selection and capacity (readiness)*** of the secondary vocational education institutions which would accept mentors for practical training, ***selection criteria*** for mentors' trainers and their rights, ***state budget as the source for financing the participants*** (financial incentive, salary) and other factors of motivation.

### ***Role of the secondary vocational education institution***

The selected institution for secondary vocational education where the practical training of mentors would take place should be granted certain rights (i.e. financial) on the basis of contract relationship with the training provider. It should also take on some concrete duties and responsibilities (i.e. provision of facilities, material, technical, organisational conditions and staff, reporting and presentation work etc.)

### ***Implementation of the curriculum for mentor training***

The certified training curriculum for vocational teachers-mentors would be implemented **during one calendar year** (generally during school holidays). The training curriculum would be divided into common (general) part and specific part. The common part of the curriculum would be implemented for all participants at the same time in a selected secondary vocational education institution. The specific part (in teaching methods) would be implemented in subgroups according to the criteria of education level and type of vocational teaching where the mentorship would take place.

### ***Evaluation of mentors' competencies***

At the end of the training cycle there is an oral and written exam and practical exercise to evaluate the competencies of the vocational teacher-mentor to accomplish certain tasks.

### ***Final certificate***

Every vocational teacher-mentor who successfully finished training has the right to the Certificate *for trained vocational teacher-mentor in a specific field*. The certificate is registered in the employer's staff documentation (secondary vocational education institution) and the Institute for Education Development. The certificate data may be introduced in the VET teacher's employment record card.

## ***3.2.2. Training of vocational teachers-advisers***

Profile of the vocational teacher-adviser

Vocational teacher-adviser is a person who assists individual teachers or groups of teachers in solving professional or pedagogical problems appearing in the education process and in improving this process. It is clear that the adviser must have continuous quality training, for which a minimum number of hours (i.e. 100 hours per year) should be reserved within the total annual working hours of the teacher.

Advisers represent a link between the pedagogical theory and educational practice. They translate the theoretical knowledge in pedagogy and other sciences into concrete terms and into the practitioner's language while transferring open issues in pedagogical practice to pedagogy and other theories.

Vocational teachers-advisers, who will have a very professional and complex work programme, should be very carefully selected. The advisers must satisfy high professional competency criteria.

### **Some elements of the adviser's competency**

- expert knowledge in relevant working fields
- verifiable and proven successful teaching and mentorship pedagogical experience
- capability to present theoretical knowledge and practical pedagogical experiences
- knowledge and skills for modern education technologies
- ability to create partnership relations and communication skills
- competencies for implementation of modern methods in counselling and continuous training in accordance with the developments in science and professional fields in Croatia and in the world
- authority built primarily on the basis of professional, pedagogical and general competencies
- adviser's work evaluation should be based on his/her professional competency, humanity, consistency, impartiality, responsibility and communication culture (politeness). Every criticism (including negative ones) can be expressed in a polite human and encouraging way (and not by threats, humiliation, paternalism, punishment etc.)

The adviser must be prepared to react and solve various problems from the everyday pedagogical practice quickly through ready intellectual operation models.

S/he monitors, initiates, accelerates and anticipates the changes in education.

### ***Tasks (training objectives) of vocational teachers-advisers***

*Vocational teachers-advisers' role and duties are performed in their employing education institution, in other institutions and according to needs of the Institute for Education Development.*

- coordination and participation in permanent and temporary research activities, organising and monitoring experimental research and introducing innovation, organising demonstration and professional-methodical presentations, working on the development of the education system and participating in publishing activities which promote professional theory and practice developments.
- developing the methodology of school curricula-building
- participation in building the implementation curricula (teaching activity plans)
- analysis of school annual work programmes
- introducing new curricula and other innovations into the education activities
- direct monitoring of the teaching and other education activities in the school
- methodology of identification and assistance to gifted children
- methodology of counselling work with students, parents, teachers and others
- methodology of professional information and work counselling of students
- study analyses of particular pedagogical phenomena or parts of the school programme
- elaboration and monitoring of the implementation of the annual training programme
- preparation of professional lectures and lecturing
- organisation of various types of training for the school staff
- conducting demonstration classes for teachers
- informing on modern teaching technology
- selection and purchasing of new professional books and magazines for the school
- participation in introducing the IT in the school education activities.

### ***Training curriculum for vocational teachers-advisers***

It is important to continue with the successful training of vocational teachers-advisers, at least once a year for all advisers, with common contents for all the professional fields (wide selection of general topics for professional pedagogical upgrading of skills). According to specific professions and education levels, the training should be organised as with mentors in order to train the advisors for particular working fields.

Vocational teachers-advisers who accomplish certain levels (programmes) of professional-pedagogical training and get a relevant certificate become disseminators – experts who can train and give various advice to their colleagues vocational teachers and mentors.

Institute for Education Development should develop a quality system for mentorship and training of the promoted teachers and establish clear relationships with the selected advisers and their employing institutions. This refers primarily to the issues of advisers' legal status, their working hours, rewarding system, authority etc.

*Training areas can include the following topics:*

- news from the professional fields
- new education strategies
- communication skills
- teaching and learning
- mentorship in the education system
- teaching curriculum
- workshop preparation and implementation
- presenting innovation
- methodology of research activities
- evaluation
- leadership and managements etc.

### ***Training organisation (implementation)***

It is important to stress that the planning of adequate methods, means and types of work must correspond to the training objectives, tasks and contents. Special attention should be given to adapting the training to the knowledge, interests and needs of teachers. The didactical principle of combining methods and types of work should be respected, because the results will be better.

Continuous training is interdependent on facilities, staff, material, technical and financial conditions needed for its realisation.

### ***Providers of continuous training***

Institutional training providers for vocational teachers-advisers could be: Institute for Education Development, higher education institutions, companies, professional associations, chambers and other legal persons who fulfil the determined conditions (facilities, staff, material, technical, organisational and other conditions).

Possible participants in the training implementation:

- advisers in specific professional fields employed by the Institute
- advisers – experts
- advisers and other experts working in development and research
- advisers for the general development of education system
- university professors and other scientists from the faculties, institutes, economy, professional associations etc.
- educators, teachers and experts - mentors and advisers
- consultants supervisors
- trained successful practitioners in relevant professions
- foreign experts, institutions and associations (under specified conditions) etc.

For many reasons (professional, material, technological conditions, facilities and staff), the idea about establishing professional-pedagogical and technological teaching (practice) centres throughout Croatia should be realised in the near future.

There is urgent need for such centres, where targeted training programmes of VET teachers, mentors and advisers could be implemented.

Apart from the human resources, in order to successfully implement training, it is necessary to ensure adequate facilities and material-technical conditions for quality work. It should be stressed that facilities already owned by education institutions should be used wherever possible, combined with other facilities, if necessary.

This is an occasion to propose the possibility of using or adapting abandoned school facilities (on islands, mountain villages) for training.

### 3.3. VET teachers' training in direct working processes

The objective of training the VET teachers in direct working processes is to ensure that during their free time (usually summer holidays) they can acquire new knowledge and skills which has appeared through technological development in their field of science or working field. Ministry of Education and Sport – Institute for Education Development, in cooperation with scientific institutions, higher vocational education institutions and companies, organises curriculum building and other conditions for this type of professional training of VET teachers.

VET teachers are obliged to participate and accomplish this type of training in cycles of two to five years. This training curriculum has a duration of cca. 50 hours for teachers of vocational theory subjects and practical courses and 90 hours for vocational trainers and assistants in practical teaching.

Secondary vocational education institution is obliged to send its VET teachers to this type of training. If the teacher participates in such training outside his/her place of residence, s/he has the right to travel expenses and per diems for the duration of training. Participation of VET teachers in this type of training is evaluated and registered as an important reference in promotion to teaching jobs and positions.

### 3.4. Changes in the training of managers in secondary vocational education institutions

#### 3.4.1. Concept of school manager

In this document the term “manager in secondary vocational education institution” is used for persons who are trained for teaching activities in secondary vocational schools (vocational or general knowledge teachers), who fulfil special selection criteria and have successfully completed special training for teaching position of manager in secondary vocational education institution. Modern definition of manager puts the manager in secondary vocational education institution in the group of non-profit managers.

#### 3.4.2. Manager’s tasks

Modern managers in secondary vocational education institutions have several important tasks. The first task is to ***make teachers and other employees (assistants) capable of accomplishing common tasks together through common objectives, common values, correct institutional structure and training, necessary for efficient work and understanding and accepting change.*** The second task is closely connected to the first – defining the institution’s profile on the basis of specific education needs of its environment and continuous concern for the quality of institution’s education activities and “production” of experts who, ***by the end of the education cycle, have all the necessary competencies.*** The third task is to ***ensure continuous quality internal*** (manager – teachers – students – parents – managing bodies) ***and external*** (institution – labour market – scientific institutions – cultural institutions – state and local government) ***networking of the institution,*** so that it could respond to new challenges. The fourth task refers to continuous personal training of the manager, enabling him/her to accept and implement new challenges. Beside the mentioned tasks, the manager is responsible for creating policy and strategy for the institutional development, selection of new teachers and other employees, teacher training during the internship period, continuous professional and pedagogical training of teachers and other employees, monitoring and evaluating the employees, financial incentives for the employees, proposing promotion and rewards for teachers, economic-financial management, innovation in the institution’s organisation, management etc.

#### 3.4.3. Selection and training of managers

The issue of ***selection and initial training*** of managers should be solved in various ways. One type of training is compensation training for the managers who have been at this position for more than four years (***experienced managers***). Second type of training is for newly elected managers (***managers with no experience or management skills***). Third is the training for employed teachers (***potential managers***).

Training for managers on positions (first and second group) should be treated as their work duty.

***Initial training curriculum for experienced managers*** (first group) can be deducted from the analysis of their tasks and current legal and other novelties, as well as from a survey of their training needs. This curriculum could be implemented as three to four weekend courses. In order to evaluate managers’ new competencies, they should be obliged to produce a study,

which would be assessed by a competent three-member committee. After this assessment, the candidate would discuss with the committee the analysed topic.

***Initial training curriculum for managers with no experience and with no management skills*** (second group) should include theory (i.e. education psychology, basic systems theory, curriculum theory, lifelong learning pedagogy, types of people management, interpersonal relations etc.) and practice (i.e. teaching and learning methods etc.).

#### ***Selection and initial training of potential managers***

This process could and should be initiated immediately. To achieve quality implementation, it is necessary to:

- a) establish selection criteria for future managers,
- b) elaborate an initial training curriculum for them,
- c) determine how the training should be completed,
- d) define the title, contents and type of the final document,
- e) establish the education level of this training according to National Standard Classification of Education.

***Training curriculum for all managers*** (first and second group) can be deducted from current changes and from a survey of the managers.

#### ***Provider of initial training of managers***

Experiences of other European countries show that it is necessary to establish a special institution, i.e. **SCHOOL FOR MANAGERS**, which would have professional responsibility for establishing the selection criteria for future managers of secondary vocational education institutions, building of initial training curricula for managers, certification of initial training curricula, introducing the initial manager training into the system of continuous teacher training and other issues.

### 3.5. Changes in teachers' colleges

Taking into consideration all the mentioned issues in initial VET teacher training and comparing the proposals for changing the VET teacher training with the existing situation (curricula, staff, organisation and financing) in this training at the relevant teachers' colleges, we can conclude that there is a need for considerable change which should encompass:

- a) selecting teachers' colleges for initial pedagogical training of VET teachers,
- b) selecting and systematic postgraduate scientific training of future professors (course managers) for the courses which are understaffed (i.e. work pedagogy, adult education, vocational teaching methods etc.)
- c) harmonising the internship curriculum in the secondary vocational education institution with the initial pedagogical training at teachers' college,
- d) selecting and equipping the institutions for practice in teaching methods (secondary vocational education institutions), where participants in initial pedagogical training and participants who are not employed in secondary vocational schools should attend demonstration classes/exercises,
- e) producing, certifying and implementing the training curricula which vocational teachers-mentors conduct for VET teachers-interns in secondary vocational education institutions and practice institutions of teachers' colleges.

## **4. TRAINING OF INSTRUCTORS IN COMPANIES\***

In this document the term "***instructor***" refers to a person trained in professional field and pedagogy, employed full-time in a company, who has a full- or part-time job in that company

to train students from secondary vocational education institutions (in a special student workshop, working corner for students, special student working places or in working processes), following the activity programme for practical training and/or to organise the implementation of student summer practice.

Beside these activities, the instructor may conduct practical training of workers for the company where s/he is employed or for other companies.

#### Instructor's tasks

The instructor should be competent in the following activities:

- welcoming and introducing students,
- introducing students to the programme of practical training, work facilities for practical training and the company,
- explaining to students safety issues and measures for personal and technical protection at work,
- elaboration of the activity programme for practical training or for one part (exercise) of this programme,
- preparation and conducting exercises according to the programme,
- keeping pedagogical records,
- monitoring, supervision and evaluation of the students' progress,
- evaluation of the students' behaviour,
- resolving conflict situations and bad behaviour,
- cooperation with secondary vocational education institution, the company and students' parents.

#### **Minimum curriculum for instructor pedagogical training**

If the mentioned activities represent the framework of his/her knowledge and skills, then the minimum curriculum for his/her pedagogical training should include:

1. training needs
2. training objective
3. general training plan

SUBJECT AREAS	THEORY HOURS	PRACTICE HOURS	TOTAL
Basic work pedagogy and work psychophysiology	30	-	30
Basic methods of practical teaching	30	10	40
Evaluation and assessment of students' competencies	20	4	24
Safety at work	10	-	10
Practice in teaching methods	-	40	40
TOTAL cca.	90	54	144

4. training curricula
5. knowledge and skills catalogues.

***\*As this initial pedagogical training aims at employees who are not regulated by the provisions of the Secondary Education Act, all the issues concerning legal regulation and training implementation for instructors in companies should be regulated by a special law, which could authorise the Croatian Chamber of Commerce as the provider of the entire project on instructor pedagogical training.***

## 5. CONCLUSIONS

This document refers only to issues in initial and continuous training in pedagogy, adult education, psychology, sociology, didactics, teaching methods and other fields (further: pedagogical training) of experts with university, college and secondary education who, in the course of their initial vocational education, were not trained to work in vocational teaching professions (teacher of vocational theory subjects or practical courses, vocational trainer in practical courses and assistant in practical teaching) and of instructors in companies. It refers to issues in initial and continuous training of VET teachers who have been promoted to teaching jobs of mentor and adviser or to the teaching position of manager in secondary vocational education institution.

The implementation of the proposed changes in VET teacher training should start in 2002.

The proposals do not include teachers of general knowledge subjects or other experts working in secondary vocational education institutions and student homes, who have the status of secondary school teachers according to the Secondary Education Act.

The proposed changes in VET teacher training comprise changes in their initial (before acquiring the second license) and continuous training (after acquiring the second license), which includes:

- incorporating their initial and continuous training in the context of lifelong learning by training and self-teaching
- adopting legal regulations which would provide for the implementation of the proposed changes, especially those concerning the involvement of companies and the Chamber of Commerce into the secondary vocational education system, changes in the inter-ministerial relations and changes in teachers' colleges which are providers of initial and continuous pedagogical training of VET teachers
- adjusting the selection criteria for future VET teachers and building the curricula for their initial pedagogical training
- adjusting the selection criteria for teaching jobs of mentor and adviser and for the teaching position of manager in secondary vocational education institution, as well as producing the training curricula for their work in these jobs and positions
- including the instructors in companies, who organise practical training and summer practice for students from secondary vocational education institutions, among VET teachers, which obliges them to get pedagogical training according to the relevant curriculum
- linking the contents and organisation of the secondary vocational education institutions which organise VET teachers' internships, secondary vocational education institutions which are practice institutions for future VET teachers and teachers' colleges, all with the objective of improving the quality of initial pedagogical training of future VET teachers.

## **NOTE ON AUTHORS AND TEAM LEADER**

**Dusan Petricevic** (1937) is a VET teacher in the field of mechanical engineering and a pedagogue with a PhD in pedagogy. He has been retired from the post of Head of Development Department at the Ministry of Education and Sport – Institute for Education Development of the Republic of Croatia. He is the president of the Croatian Adult Education Association. Since 1999, he works as an external expert of the Teachers' Academy in Zagreb – Department for Training in Pedagogy, Psychology, Didactics and Teaching Methods for Experts with Non-Teaching Qualifications (university, college and secondary) and teaches courses in Practical Teaching Methods and laboratory exercises. He also works as external expert for the Ministry of Education and Sport on the concept of the adult education reform.

**Mijo Cindric** (1945) is a sports teacher and a pedagogue with a PhD in pedagogy. He worked as teacher in primary school, as adviser at the Institute for Education Development, as assistant minister in the Ministry of Education and Sport and as Head of Department for Training of Primary and Secondary School Teachers at the Ministry of Education and Sport – Institute for Education Development. He works since 2000 at the Teachers' Academy in Zagreb as a professor of didactics. He works as external expert of the Ministry of Education and Sport on the pedagogical training of mentors and advisers and on the project of reform of the primary and secondary school teacher training.

**Vlado Luburic** (1942) is a mathematics and physics teacher. He worked in the technical school "Nikola Tesla" in Zagreb as mathematics teacher. From 1982 to 1988 he was manager for teaching activities in the same school and worked in the Curriculum Council of the Self-governing Interest Community on the curricula in the field of electric engineering and metallurgy. From 1990 to 1995 he work as school manager in the gymnasium "Lucijan Vranjanin" in Zagreb. Since 1995 he works in the Ministry of Education and Sport, first as the Head of Department in the Directorate for School System and now as the Head of Department for General and Special Curricula of the Institute for Education Development.