

IPA COMPONENT IV - HUMAN RESOURCES DEVELOPMENT - EUROPEAN UNION PROGRAMME FOR CROATIA

PROJECT

# Implementation of New Curricula

(SERVICE CONTRACT)

Compendium of VET schools projects financed under IPA Component IV grant scheme Implementation of New Curricula

#### MAIN PROJECT PARTNER

Agency for Vocational Education and Training and Adult Education Radnička cesta 37b, Zagreb www.asoo.hr

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### IPA - Instrument for Pre-Accession Assistance

The Instrument for Pre-Accession Assistance (IPA) is a pre-accession programme for the period 2007-2013 which has replaced the previous CARDS, Phare, ISPA and SAPARD programmes.

The main goals of this programme are: providing assistance in institutional capacity building and the rule of law, human rights including constitutional rights, minority rights, gender equality and non-discrimination, administrative and economic reforms, economic and social development, reconciliation and redevelopment, as well as regional and cross-border cooperation.

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The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders".

The European Commission is the EU's executive body.

#### **PROJECT**

# Implementation of New Curricula

(service contract)

The project is a part of a wider modernisation process of Vocational Education and Training system (VET) in line with the objectives set by the Development Strategy of the Vocational Education System in the Republic of Croatia 2008 – 2013. Capitalising on the work already undertaken within CARDS programme this project will reinforce the innovative capacities of VET schools and enable them to be engaged even more in being the key promoters of VET innovations.

Growing relevance of Vocational Education and Training calls for a more active role of VET schools and promotion of school-based innovations. Therefore it is needed to increase VET schools motivation and initiative as well as level of their participation in the process of identifying necessary changes and improvements.

#### **OVERALL OBJECTIVE**

Overall objective of the reform to which this project is contributing is to reinforce overall modernisation and flexibility of the vocational education and training in Croatia so as to improve its labour market relevance and responsiveness to structural changes in Croatian economy in compliance with the EU acquis in the relevant fields.

#### PROJECT PURPOSES

- To foster introduction of the new, high-quality curricula and related systemic approach to the development of innovative culture in the VET schools in line with the needs on the labour market at the local and/or regional level;
- To develop the capacities of the AVETAE and the VET schools for successful preparation and implementation of grant scheme and projects

#### PROJECT ACTIVITIES

VET schools in Croatia and the Agency for Vocational Education and Training and Adult Education (AVETAE) will have the main role in project activities.

#### WITHIN COMPONENT 1

- The project work will also include representatives of different stakeholders who will through working group develop Strategic framework that will define a wider scope of eligible school-based innovations and the mechanisms and recommendations for their recognition and implementation.
- The project will identify and convey existing **know-how on innovation** from VET schools that already have experience and good results in regard to this issue. Once developed, Strategic framework will be discussed and evaluated within broader group of VET schools and relevant stakeholders.

#### WITHIN COMPONENT 2

- A help-desk is established for VET schools grant beneficiaries of Implementation of New Curricula grant scheme. Workshops on project implementation were also organised for grant beneficiaries;
- Group of experts will **complete training** enabling them to assist VET schools (grant beneficiaries) during the implementation of their projects within the ongoing grant scheme Implementation of New Curricula. Also, within the project a help-desk will be established as a support for the above mentioned VET schools.

#### **FOREWORD**

# Dear readers,

It is with great pleasure that I present you the projects of 18 VET schools that have been awarded funds within the "Implementation of New Curricula" grant scheme under IPA (Instrument for Pre-Accession Assistance) Component IV.

"Implementation of New Curricula" is a project designed by the Agency for Vocational Education and Training and Adult Education. Its aim is to provide vocational schools with a chance to further develop vocational education and training in the Republic of Croatia with their projects while improving the working conditions in the schools and raising the competencies of their staff and students. Moreover, the projects serve to develop new and innovative approaches to defining required student competencies, appropriate learning contents and teaching methods, all with a view to harmonising vocational education with the current and future needs of Croatian economy, tertiary education and labour market as a whole.

In accordance with "Implementation of New Curricula" project purpose – which, among other things, is to use the awarded grants for the modernisation of existing curricula based on learning outcomes and in line with local and/or regional labour market changes – the 18 vocational school projects encompass a wide array of innovative activities and solutions regarding:

- Effective planning and implementation of innovations in VET schools, primarily those related to the introduction of new or modernisation of existing vocational curricula
- в. Strengthening capacities of VET schools
- **c.** Up-to-date learning contents (equipment and/or teaching aids) for an improved teaching process

- **D.** Training the teachers to adopt and apply state-of-the-art, student-oriented approaches to teaching
- E. Fostering partnerships and connections between VET schools and labour market stakeholders.

With that in mind, it becomes clear that the VET schools that have been awarded grants are proof of VET schools' readiness and ability to independently recognise both local and national educational challenges posed by the Croatian economy and overall Croatian society as well as to face those challenges by developing new VET curricula, raising the competence level of teaching staff and equipping the classrooms and workshops up to the highest standards.

Moreover, the high-quality project proposals developed by the schools indicate that their clear vision of progress can be achieved with the assistance of EU funds.

Agency for Vocational Education and Training and Adult Education emphasises the utmost importance of supporting the successful VET schools and promoting their results, especially since there is an increasing need to prepare and enable all VET schools to use the funding available through EU funds in order to improve the quality of their work. The idea behind this compendium is to present excellent project ideas proposed by 18 vocational schools and thus, hopefully, inspire and encourage other vocational schools in Croatia to show their readiness and initiative by making use of the available EU funds.

#### IVAN ŠUTALO

Director Agency for Vocational Education and Training and Adult Education NAUTICAL SCHOOL SPLIT

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Compendium of VET schools projects financed under IPA Component IV grant scheme Implementation of New Curricula

# Nautical School Split

Modification of the Existing Curricula by Introduction of New Technologies GRANT BENEFICIARY

PROJECT TITLE

#### PARTNER

Nautical School Zadar

### LOCATION OF THE PROJECT IMPLEMENTATION

Split-Dalmatia County, Town of Split and Zadar County, Town of Zadar

#### TOTAL BUDGET (EUR)

#### 169,760.00

- Amount financed by the EU: 144,296.00
- Own funds: 25,464.00

#### PROJECT DURATION

September 2010 – September 2011

#### PROJECT PURPOSE

Young people are one of the most vulnerable social categories in Croatia. After graduation they find it almost impossible to get employed – partly due to a general lack in employment possibilities and partly due to the fact that schools provide them with solely theoretical knowledge without practical skills needed on the labour market. Hence, the existing curricula need to be modified and didactic equipment and materials improved.

Nautical school Split is the biggest Croatian nautical school with 585 students in four different courses. VET schools of this profile attract less and less young people every year. In order to attract more young people, prepare them for the contemporary labour market and increase their employment possibilities, didactic equipment needs to be improved.

In cooperation with potential employers of nautical school graduates in the region we have arranged for appropriate practical learning conditions and use of didactic materials in educating the future



workforce for a professional profile needed by their companies.

Nautical schools Split and Zadar have purchased part of the necessary equipment form the funds allocated to them by the Ministry of Science, Education and Sports. The remaining part, needed for acquainting the students with new technologies, was too expensive and the schools could not afford it. The project that we propose should enable us to purchase all the necessary equipment and to modify the curricula for the following two courses: marine engineering technician and fishing and navigation technician.

The students will be taught in line with potential employers' requirements. This will optimise their efficiency on the labour market and create a benefit for employers. Additional didactic equipment, new learning materials, high-qualified and experienced staff are going to turn Split and Zadar nautical schools into some of the best equipped schools in Croatia.

#### SPECIFIC OBJECTIVES

- **A.** To modify the existing VET curricula through introduction of new technologies and make the schools more attractive to potential students. (It is important to modify the existing curricula and improve didactic equipment in order to provide the students with practical knowledge and to attract future generations.)
- в. To improve VET teachers' vocational and educational skills and expertise in line with the modified curricula. (It is essential to further develop both vocational and educational skills of VET teachers, so that they could apply the new methodologies in their work with students.)
- **c.** To increase availability of flexible learning materials. (As the existing learning materials are quite outdated, we are going to translate the chosen new materials, adjust them to our needs and use them accordingly.)



#### TARGET GROUPS

- Primarily young people, up to 19 years old, students of Split and Zadar nautical schools
- VET teachers, since the project will provide them with further education
- The schools will benefit from the project by getting new didactic equipment and learning materials, thus enabling them to upgrade the quality of education.

#### FINAL BENEFICIARIES

- Split and Zadar secondary school students – 300 students per generation
- Mechanics and electronics teachers
   13 teachers
- VET schools two schools.

#### MAIN PROJECT ACTIVITIES

- Forming the Project Management Board
  - To ensure successful project implementation and safeguard the partnership principle, the Project Management Board has been formed at the very beginning of the project. The Board is composed of at least two representatives of and two students from each of the schools.
- 2. Improving didactic equipment At the beginning of the project two rooms in each of the schools have been chosen, which are going to be furnished with the necessary water and electricity supplies, furniture (desks and chairs) and appropriate didactic equipment (models of electric machines, models for the course in basics of electrotechnics, safety protection when working with electric installations, sensor simulators, PLC simulators for automated systems, peripheral simulators, hydraulics and electrohydraulics, pneumatics and electropneumatics). While



the majority of equipment will be installed in the Nautical school Split, Nautical school Zadar will be in charge of hydraulics and electrohydraulics.

### 3. Staff education and training

A study visit to Antwerp, where the best equipped nautical school with an optimum theory-practice ratio is located, will be organised for Zadar and Split school teachers and principals. Based on information and experiences gathered in the course of the visit, the visitors are expected to find a way to copy the Antwerp model and adjust it to Croatian VET schools. As already arranged with the representatives of the Antwerp Maritime Academy, the study visit will take place in March. Along with this, there will be 6 training sessions for VET teachers on the following topics: hydraulic systems, pneumatics, electrical machines, basics of electrotechnics, PLCs and automated systems and safety protection when working with electrical installations

#### 4. Developing flexible learning materials

Appropriate learning materials will be chosen, translated and prepared for use in classes

#### 5. Disseminating information and promoting VET

- Preparing and distributing promotional materials (2,000 copies of leaflets promoting project activities, goals, planned and achieved results will be distributed to all VET schools in Croatia and during School Open Days).
- Preparing and distributing brochures promoting VET schools (2,000 copies of brochures describing possibilities and benefits that VET schools offer and promoting modified curricula and newly equipped classrooms).
- School Open Days promoting VET and informing primary schools students (target audience – 8th grade students and their parents).



#### Monitoring, evaluating and reporting

The project team in cooperation with the staff delegated by the project partner will be in charge of monitoring, evaluating and reporting.

#### EXPECTED RESULTS

- Modified and improved curricula
- Classrooms equipped for classes in new technologies
- VET teachers have acquired knowledge and skills in line with the new modified VET curricula
- Flexible learning materials have been developed

#### ROLE OF THE PROJECT PARTNER IN PROJECT IMPLEMENTATION

#### **NAUTICAL SCHOOL ZADAR**

As real improvements can only be achieved through joint efforts, Nautical school Zadar will be in charge of organising two educational workshops, preparing promotional materials and publications, and participating in other project activities. Both partners on this project are two most important nautical schools in Dalmatia with an excellent cooperation record and located at a distance convenient for mutual study visits.

#### SUCCESS STORY

Although still in its implementation phase, the project has strengthened the existing cooperation between the management and teaching staff of the schools involved, in a joint attempt to provide the students with better theoretical and practical education and the best possible preparation for the labour market.

The public has been informed through the media about active engagement of both schools in improving the quality of education.

#### MORE INFORMATION

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.pomsk.hr

#### **GRANT BENEFICIARY CONTACT DETAILS**

MARIJA MARTINIĆ, PROJECT ASSISTANT DRAGAN PAVELIN, PRINCIPAL OF THE NAUTICAL SCHOOL SPLIT TELEPHONE 098 / 509 985

095 / 380 7649

E-MAIL marija.martinic@zdravi.grad.hr

dpavelin@pomsk.hr

ADDRESS ZRINSKO-FRANKOPANSKA 36, 21 000 SPLIT

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

Strong involvement of the teaching staff in preparing and implementing the project is essential to its success. A longer adjustment period is needed to learn specific implementation and reporting procedures according to PRAG.

# Technical School Karlovac

E-learning in Automechatronics

GRANT BENEFICIARY

PROJECT TITLE

#### **PARTNERS**

- City of Bristol College, Bristol, United Kingdom
- Community of Technical Culture, Karlovac County, Town of Karlovac

### LOCATION OF THE PROJECT IMPLEMENTATION

Karlovac County

#### TOTAL BUDGET (EUR)

#### 371.256,74

- Amount financed by the EU: 298,935.93
- Amount financed by Karlovac County: 23,352.05
- Own funds: 48,968.76

#### PROJECT DURATION

September 2010 – November 2011.

#### PROIECT PURPOSE

The need to implement this project was determined based on the following settings:

- Uncertain future for graduates of three-year programmes in a competitive market economy
- Maintenance and repair workers of vehicle mechatronic systems uncompetitive on the labour market
- VET system non-responsive to labour market needs.

The project aims to ensure prosperity in a competitive market economy and under the protection of a welfare state, while encouraging VET teachers to adopt modern approaches to teaching, which are student-oriented and essential to implementation of new curricula.



#### SPECIFIC OBJECTIVES

The main objective of the project is to develop new modular curricula based on learning outcomes, especially with a view to adopting a systemic approach to innovations in VET, corresponding to local and regional labour market changes and in line with the new methodology and requirements posed by the Vocational Education Act and the National Framework Curriculum.

#### TARGET GROUPS AND FINAL BENEFICIARIES

- 2,500 primary school graduates
- 40 automotive service providers
- 10 licensed car dealerships
- 50 VET teachers.

#### MAIN PROJECT ACTIVITIES

- developing curricula
- 2. developing catalogues of exam questions for qualification exams at the end of the 2nd year and for final exams at the end of the 3rd year for car mechanics or at the end of the 4th year for technicians for mechatronics
- 3. educating teachers to apply modern teaching methods
- 4. educating teachers to use modern didactic equipment
- 5. equipping the school practicum
- 6. equipping the mechatronics classroom
- 7. introducing extracurricular activities into primary schools
- **8.** organising lectures to break the prejudices about mechatronics technician as an occupation reserved for men
- 9. modifying the practical teaching methodology
- 10. developing specialised literature
- 11. lectures and leaflets promoting environmental protection



#### EXPECTED RESULTS

- students are acquiring vocational knowledge and skills that will make them competitive on the labour market
- teachers have been educated to work with modern technologies
- teachers have been educated to apply modern teaching methods
- cooperation with automotive service providers has been improved
- environmental protection awareness has been raised
- interest of female students for occupations in the automotive sector has been awakened.

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

The role of the partner from Bristol is of consultative nature, due to their rich experience with similar projects.

The role of the Community of Technical Culture of the Karlovac County is to promote technical culture in primary schools and create a pool of future Technical School attendants.

#### SUCCESS STORY

The Community of Technical Culture of the Karlovac County organised a winter robotics workshop. It took place from 3rd to 8th of January 2011, lasting 20 school hours. The workshop was originally foreseen for 15 participants, but in the end due to great interest 21 students participated.

#### MORE INFORMATION

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.tehnicka-skola-karlovac.hr

#### **GRANT BENEFICIARY CONTACT DETAILS**

MILAN BIJELIĆ, GRADUATE MECHANICAL ENGINEER. CONSULTANT PROFESSOR, PROJECT MANAGER

TELEPHONE 047 / 615 805 091 / 379 1017

E-MAIL

ADDRESS TEHNIČKA ŠKOLA KARLOVAC

milan.bijelic1@gmail.com

LJUDEVITA JONKEA 2A, 47 000 KARLOVAC

Participants were primary school students, six of them girls. Only five of them had some previous knowledge about robotics. Their interest in the workshop was great; they brought friends and parents with them and were looking forward to spring and summer workshops. After this first workshop, the interest of children from the Karlovac County in technical culture has risen significantly and the number of students participating in regular workshops in the Community has doubled.

#### AN EXTRACT FROM A TV REPORT CAN BE FOUND ON THE FOLLOWING WEB PAGE

http://www.youtube.com/user/ marketingtv4r?feature=mhum

#### KEY LESSONS LEARNED

In a relatively short period of time we had to think about too many details and make plans for a great number of activities, which now demand active involvement of the whole team and of the people without direct involvement in the project. Along with their daily work, the teachers invest significant efforts in implementation of this project. We should have foreseen a way to ensure funds to award them for their efforts.

# Technical School Daruvar

GRANT BENEFICIARY

TEHNOTRONIK – Application of New Technologies Curricula to Technical School Daruvar Vocational Education Program

PROJECT TITLE

#### **PARTNERS**

- Technical School Slavonski Brod
- Croatian Employment Service (CES), Local Office Daruvar
- 3. Bjelovar-Bilogora County
- 4. Croatian Chamber of Trades and Crafts (CCTC), Bjelovar-Bilogora County

### LOCATION OF THE PROJECT IMPLEMENTATION

Town of Daruvar, Bjelovar-Bilogora County

#### TOTAL BUDGET (EUR)

#### 254,163.07

- Amount financed by the EU: 198,831.77
- Own funds: 55,331.30

#### PROJECT DURATION

September 2010 - September 2011

#### PROIECT PURPOSE

Modernisation of technical and professional capacities of VET curricula within the existing educational system in the Bjelovar-Bilogora County will lead to improved teaching conditions in the school itself, while generating a significant improvement in the Croatian educational system as a whole. Strengthening educational structures and capacities has proven to be the most important prerequisite for societal development and solving the problems of unemployment and lack of adaptability of the educational system and working population to the labour market.

The town of Daruvar – where the project is implemented – is well known for its strong VET, especially in electrotechnics and mechanical engineering, and for the companies in the area, which used to provide sufficient employment possibilities for secondary school and university graduates. Unfortunately, recent economic developments have led to a decrease in employment possibilities for graduates of the existing educational system. New curricula



should provide them with additional knowledge and skills and create new employment possibilities for graduates of Technical school Daruvar.

Along with this, implementation of this project will strengthen school capacities to implement other projects through pre-accession and other EU support programmes.

#### SPECIFIC OBJECTIVES

The project will provide material and technical prerequisites for the implementation of new curricula, which will provide students and adults involved in the implementation with new knowledge and skills related to new technologies (renewable energy sources, industrial programming, Java programming, applied physics).

The project will establish modular varieties of VET programmes for the application of new technologies in Technical school Daruvar.

#### TARGET GROUPS

The main target group are VET teachers from Technical school Daruvar and Technical school Slavonski Brod along with teachers from other technical schools in the Bjelovar-Bilogora County (Garešnica, Grubišno Polje, Bjelovar and Cazma). 54 VET teachers will participate in educational activities.

#### FINAL BENEFICIARIES

Final beneficiaries of the project are 3rd and 4th grade students of Technical school Daruvar (120). Every year 120 students enrol in technical programmes the school offers. The available programmes are divided into 26 different classes: electrical technicians, IT-technicians, traffic technicians, electro-installers, car mechanics, different sorts of installers etc. The 3rd and 4th grade students will be offered specialisations related to new curricula implemented within the project.



993 unemployed persons registered in Daruvar branch office of the Croatian Employment Service and further 11.517 unemployed registered in Bjelovar are also considered final beneficiaries of the project. 55% of them have finished a three or four year vocational technical programme. This percentage is even higher in the Town of Daruvar, where they make up for 64% of total unemployed persons. They will be offered an additional specialisation to help them find new employment.

#### MAIN PROIECT ACTIVITIES

- Designing classrooms for new educational programmes
- 2. Furnishing the classrooms
- **3.** Supplying equipment for new curricula
- Educating VET teachers
- 5. Developing materials for new educational programmes.

#### EXPECTED RESULTS

- More room for implementation of new curricula has been created -150 m2 of newly furbished space
- Didactic equipment and models for new curricula have been supplied;
- Four new curricula have been developed
- VET teachers have been updated on the new vocational programmes in the Bjelovar-Bilogora County and Brod-Posavina County
- Practical teaching materials for new curricula have been developed.

#### MORE INFORMATION

ON THE PROJECT CAN BE FOUND ON THE WEB PAGE http://www.tsd.hr/site/category/djelatnosti/ skola/događaji/

#### GRANT BENEFICIARY CONTACT DETAILS

SANJA KLUBIČKA, GRADUATED ENGINEER, PRINCIPAL

TELEPHONE 043 / 331 030

ravnatelj@tsd.hr E-MAIL

ADDRESS GUNDULIĆEVA 14

43 500 DARUVAR

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### **TECHNICAL SCHOOL SLAVONSKI BROD**

- knowledge and experience transfer from already implemented curricula; experience transfer from implementation of other EU programmes, participation in implementation of project activities.

#### CES

- promoting project activities and new educational programmes; directing unemployed persons from technical sector to further education.

#### ССТС

- promoting project activities and new educational programmes among employers in the Bjelovar-Bilogora County; sending potential beneficiaries to in-service training through new curricula.

#### **BJELOVAR-BILOGORA COUNTY**

 supporting the project and promoting project activities.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

More active involvement of other participants is needed in planning and writing of the project.

# Technical School Ruđer Bošković

GRANT BENEFICIARY

Creating New Opportunities for Knowledge-Based Economy in the Field of Computing and Computer Engineering

PROIECT TITLE

#### **PARTNERS**

- School of Electrotechnics Split
- Secondary School Krapina
- 3. Croatian Employers' Association

### LOCATION OF THE PROJECT IMPLEMENTATION

City of Zagreb, Krapina (Krapina-Zagorje County), Split (Split-Dalmatia County)

#### TOTAL BUDGET (EUR)

#### 343,754.47

- Amount financed by the EU: 294,438.15
- Own funds: 53,316.32

#### PROJECT DURATION

October 2010 - November 2011

#### PROJECT PURPOSE

The project aims to boost national competitiveness and stimulate development of knowledge-based economy in the field of computing and computer engineering in Croatia; to raise awareness and promote educational programmes leading to technical and engineering vocational qualifications/occupations and careers in the field of computing, as a cornerstone for future development of the national economy; to strengthen VET schools' and VET teachers' capacities in applying new methods and technologies in education.



#### SPECIFIC OBJECTIVES

Specific objectives of the project are to raise the level of knowledge and competencies in the field of computing for approximately 1,300 final year students - technicians annually, as a basis for their employability and successful enrolment into university programmes, by developing a top-quality curriculum for computing in line with requirements of the labour market, including a whole set of new teaching materials for 8 subjects and education of at least 24 teachers for new subjects.

#### TARGET GROUPS

- VET students enrolling into programmes leading to vocational qualification/occupation computing technician, around 5,000 students in total or 1,250 new students a year
- VET schools and teachers of computing subjects.

#### FINAL BENEFICIARIES

- Croatian economy, particularly ICT (information and communication technologies) sector and all companies in Croatia employing computing technicians or computer engineers
- Colleges and universities in the field of computing.

#### MAIN PROIECT ACTIVITIES

- 1. Research activities: needs assessment analysis of relevant users as a basis for new curriculum development; needs analysis of employers and higher education institutions regarding new curriculum; needs analysis of VET teachers from partner institutions, in order to create their personal education plan
- 2. Developing curriculum and teaching materials: preparing new curriculum and materials for students and teachers and pilottesting them



- 3. Installing equipment: purchase and installation of teaching and communication equipment and furniture
- 4. Teaching and cooperation activities: education of teachers based on the needs analysis and establishing a communication platform for education of other VET teachers in the field of computing
- 5. Awareness raising activities: preparation of career guides for students and teachers: education of teachers to act as career advisors for students; organising a final conference for relevant users.

#### EXPECTED RESULTS

- New educational standard for obtaining vocational qualification/ occupation and new curriculum in the field of computing developed and implemented; with access to materials by all VET schools in Croatia:
- Top-quality teaching materials for 8 new or improved subjects developed and ready for use in line with the new curriculum:
- New communication and collaboration platform for education of all VET teachers of new educational programme for new qualification/ occupation established;
- 24 VET teachers have been trained;
- At least one lecture in each of the 8 new subjects for all interested VET teachers conducted;
- A conference on education in the field of computing organised and awareness raising activities related to new curriculum and student career possibilities implemented.

#### MORE INFORMATION

ON THE PROJECT CAN BE FOUND ON THE WEB PAGE http://www.tsrb.hr/new/index.hp?option=com c ontent&task=blogcategory&id=72&Itemid=257

#### GRANT BENEFICIARY CONTACT DETAILS

ĐURĐICA FUŠTAR, PRINCIPAL

#### TELEPHONE 01 / 237 1061

tsrb@tsrb.hr E-MAIL

ADDRESS GETALDIĆEVA 4

10 000 ZAGREB

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

Project partners are in charge of disseminating project objectives and results and coordinating project activities. Employers (CEA) play an important role, as well as institutions of higher education (Faculty of Electrical Engineering and Computing and College for Applied Computer Engineering) and IEEE, which have made a significant contribution in preparing a top-quality curriculum.

#### SUCCESS STORY

AVETAE has recognised the employers' needs analysis methodology through an online questionnaire, which was supported by the CEA, as a success story and decided to use it in all educational sectors. The approach aiming to develop a curriculum which will be used at national level (in all VET schools) adds value to the project as a whole, the applied approach being wider than the interest of involved partners.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

Good cooperation between institutional partners can lead to a relevant project proposal that recognises a broader national context. Only strong involvement of partners and collaborators and good internal cooperation in the implementation phase can ensure the successful implementation of such a complex project without exceeding foreseen deadlines and budget.

# Economy School Varaždin

GRANT BENEFICIARY

Education and Career Harmonisation Operations (ECHO)

PROJECT TITLE

#### **PARTNERS**

- Economy School Mijo Mirković Rijeka
- Tourism and Hospitality School Dubrovnik
- 3. Secondary School Ivanec

### LOCATION OF THE PROJECT IMPLEMENTATION

Varaždin County, Primorje-Gorski Kotar County and Dubrovnik-Neretva County

#### TOTAL BUDGET (EUR)

#### 188,512.06

- Amount financed by the EU: 158,368.98
- Own funds: 30,143.08

#### PROJECT DURATION

September 2010 – November 2011

#### PROJECT PURPOSE

This project should serve as an example for other similar projects in Croatia. It aims to increase employability of VET school graduates.

#### **SPECIFIC OBJECTIVES**

- A. Strengthening VET schools' capacities to adjust to changes on the labour market with help of the modular curriculum based on harmonising labour market needs with learning outcomes
- B. Enhancing employer participation in harmonising the modular curriculum with labour market needs.





#### TARGET GROUPS

- 4 VET schools
- 13 teachers
- VET students
- 90 employers.

#### FINAL BENEFICIARIES

- 20 VET schools
- 100 teachers
- 2.000 VET students
- 1.500 employers
- Croatian Employment Service.

#### MAIN PROJECT ACTIVITIES

- Conducting current state analysis along with the employers' needs analysis and comparing them with results of educational programmes in VET schools
- 2. Adopting methodology for development of the modular curriculum in line with labour market needs
- 3. Establishing mechanisms for monitoring changes and needs on the labour market through an interactive ICT system
- **4.** Establishing a virtual network for the exchange of best practices and joint development of new VET curricula
- 5. Developing a pilot modular curriculum according to the defined methodology
- **6.** Educating VET teachers on innovative methods of student career training
- 7. Raising awareness on the importance of cooperation between employers and VET schools in

#### MORE INFORMATION

ON THE PROJECT CAN BE FOUND ON THE WEB http://echo.com.hr

#### GRANT BENEFICIARY CONTACT DETAILS

KATICA KALOGJERA-NOVAK. PRINCIPAL OF THE ECONOMY SCHOOL VARAŽDIN TELEPHONE 042 / 492 271

E-MAIL gospodarska.echo@gmail.com

ADDRESS BOŽENE PLAZZERIANO 4

42 000 VARAŽDIN

#### harmonising labour market needs and learning outcomes

- **8.** Evaluating and adjusting the newly adopted methodology
- 9. Development, maintenance, assessment and adjustment of training programmes for VET teachers on innovative consulting and student career training
- 10. Developing a campaign to raise awareness on the importance of cooperation between VET schools and employers
- 11. Developing and disseminating advertising materials (ID cards, leaflets, brochures)
- 12. Organising seminars and conferences as part of the campaign.

#### EXPECTED RESULTS

- A modular curriculum developed;
- VET teachers and other school staff educated in innovative student career training methods in line with the modular curriculum;
- Employers' awareness of their importance in harmonising labour market needs with learning outcomes of the new modular curricula enhanced.

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

Active participation in meetings, gathering information and exchanging experiences.

> KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

Initiative and proactive approach is the key to success.

# Secondary School Bedekovčina

**Pedology Curriculum** 

GRANT BENEFICIARY

PROJECT TITLE

#### PARTNERS

- Secondary School Dragutin Stražimir. Sveti Ivan Zelina
- 2. Economy School Čakovec
- 3. Zagorje Development Agency

### LOCATION OF THE PROJECT IMPLEMENTATION

Krapina-Zagorje County (Bedekovčina), Osijek-Baranja County (Osijek), Zagreb County (Sveti Ivan Zelina) and Međimurje County (Čakovec)

#### TOTAL BUDGET (EUR)

#### 137,304.17

- Amount financed by the EU: 116,708.54
- Own funds: 20,595.63

#### PROJECT DURATION

September 2010 - September 2011

#### PROJECT PURPOSE

To facilitate the development of the new modular curricula based on learning outcomes, in line with the new methodology and requirements embedded in vocational laws and in the National Framework Curriculum for secondary schools, thus increasing the number and quality of agricultural products directly connected to soil analysis.

#### SPECIFIC OBJECTIVES

- Improve VET teachers' capacities to start applying a studentoriented teaching approach while implementing new educational programmes
- B. Adopt methods and cooperation mechanisms essential for efficient planning and implementation of vocational programmes based on innovations related to education and training



- c. Involve VET students and teachers in local community agricultural development
- **D.** Prepare new curricula for MoSES approval.

#### TARGET GROUPS

The target group encompasses 67 students from Secondary school Bedekovčina in the school year 2009/2010, students from partner schools – 76 students from Secondary school Zelina and 198 students from Agricultural school Cakovec, teachers from Secondary school Bedekovčina and its partner schools, non-governmental organisations – 48 agricultural producers' organisations in Krapina-Zagorje County along with young people working in agriculture, either for own needs or to sell on the market. There are 7,506 family farms and 174 legal entities with registered agricultural activity in the Krapina-Zagorje County.

#### FINAL BENEFICIARIES

Final beneficiaries are current and future students of secondary schools and other educational institutions involved in the project and family farms using pedology lab services. The existing curriculum does not offer practical classes for students due to the lack of equipment and instruments for soil analysis. Implementation of project activities should result in a new and improved curriculum, providing students with basic knowledge of pedology. The new curriculum will also include a combined interaction between theoretical and practical education held in the lab. The pedology laboratory will create better material prerequisites for education, especially through analyses. Students will have the opportunity to analyse both chemical and physical soil characteristics through experiments and observations. Teachers have not been able to convey their knowledge due to lack of content in the existing curriculum and insufficient technology.



#### MAIN PROJECT ACTIVITIES

#### 1. Advertising activities

Different advertising activities including newspaper articles, press conferences and radio programmes will follow project implementation, with the aim of informing the public about the objectives, activities and results achieved and to stress the importance of developing new and modernising the existing curricula – in line with labour market needs.

#### Pedology curriculum development

The existing pedology curriculum can only be modified through cooperation of experts in the field of agriculture and new trends with experts for pedagogy and didactics. Project activities will lead to modifications of the existing curriculum. The new curriculum will be implemented throughout the teaching cycle (from the 1st to the 4th grade) in both theoretical and practical segment. The curriculum will be harmonised with other learning contents from the field of fruit, grape and vegetable growing.

#### 3. Establishing a pedology laboratory

Establishing a pedology laboratory will include the following activities:

- Providing equipment and installations for Secondary school Bedekovčina and Zelina
- A study visit for teachers from Bedekovčina, Zelina and Cakovec to the Pedology Laboratory of the Croatian Centre for Agriculture, Food and Rural Affairs in Osijek
- Educating VET teachers to work with the laboratory equipment and to prepare it for certification for conducting official soil analyses
- Developing the measurement software for the laboratory.

ON THE PROJECT CAN BE FOUND ON THE WEB www.tehnicka-skola-karlovac.hr

#### **GRANT BENEFICIARY CONTACT DETAILS**

ZLATKO RADMAN, PRINCIPAL MIRJANA HUDI-VLAHEK, PROJECT MANAGER TELEPHONE 049 / 213 514

049 / 213 994

sskola-bedekovcina@kr.htnet.hr E-MAIL

mirjana.hudi@gmail.com

ADDRESS GAJEVA 1, 49 221 BEDEKOVČINA

#### 4. A study visit for students from Bedekovčina and Zelina

50 students from Secondary school Bedekovčina accompanied by 6 teachers are going to visit Secondary school Zelina and actively participate in the process of soil analysis and other activities in the laboratory. 50 students of Secondary school Zelina accompanied by 6 teachers are going to visit Secondary school Bedekovčina.

#### 5. Educating VET teachers from Secondary school Bedekovčina

The following activities are foreseen for VET teachers' education:

- workshop IT skills for 40 teachers
- workshop Presentation skills for 40 teachers
- workshop Didactic and pedagogic skills.

#### 6. Round table

One of the planned project activities is the round table. The topics of the round table will be: adjusting the existing curricula to the current situation in local agriculture and developing new curricula in line with new trends in agriculture. Main participants will be representatives of secondary schools, Croatian **Employment Service, Regional** Office Krapina, Krapina-Zagorje County, Croatian Chamber of Economy, Croatian Chamber of Crafts and Trades, and employers.

# Economy and Administration School Bjelovar

Training Firm as Journey to Real Life Experience

**GRANT BENEFICIARY** 

PROJECT TITLE

#### **PARTNERS**

- Tourism, Hospitality and Food Industry School Bjelovar
- 2. Town of Bjelovar
- 3. Bjelovar-Bilogora County

## LOCATION OF THE PROJECT IMPLEMENTATION

Bjelovar-Bilogora County

#### TOTAL BUDGET (EUR)

#### 195,678.99

- Amount financed by the EU: 157,893.38
- Own funds: 37,785.61

#### PROJECT DURATION

September 2010 – September 2011

#### PROJECT PURPOSE

- To develop a better curriculum for training firms applied in VET schools;
- To increase the number of VET schools with training firms;
- To improve competences of students preparing for the labour market through modern educational trends.

#### TARGET GROUP

VET students and teachers

#### **FINAL BENEFICIARIES**

Bjelovar VET schools, companies located in Bjelovar and elsewhere in the County.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE http://economics-school-bjelovar.htnet.hr

#### **GRANT BENEFICIARY CONTACT DETAILS**

VOJISLAV KRANŽELIĆ, PRINCIPAL

TELEPHONE 043 / 244 029

ebb-tajnistvo@bj.htnet.hr E-MAIL

ADDRESS POLJANA DR. FRANJE TUĐMANA 9,

43 000 BJELOVAR

#### MAIN PROJECT ACTIVITIES

- equipping the training practicum in the Economy and administration school and Tourism, hospitality and food industry school;
- 2. organising five three-day seminars - teacher training (seminars held by top experts for training firms from Austria)
- 3. teacher training in Vienna (visiting training firms and their fairs), training in Baška and Daruvar (for students too)
- 4. organising a cross-county training firms fair (for around 50 training firms) at the Spring Fair in Gudovac
- 5. opening new training firms in the Economy and administration school Bjelovar and Tourism, hospitality and food industry school Bjelovar

- 6. organising Free Class Days to educate both students and teachers on around 20 topics – renowned lecturers from different parts of Croatia
- 7. final objective of the project is to develop and publish a training firms curriculum.



## Technical School Čakovec

From Computer to Computing Technician - Adapting to the Changes of the Labour Market GRANT BENEFICIARY

PROIECT TITLE

#### **PARTNERS**

- Secondary School Ban Josip Jelačić, Zaprešić
- School of Electrical Engineering and Computer Sciences, Ptuj, Slovenia

## LOCATION OF THE PROJECT IMPLEMENTATION

Međimurje County (Čakovec), Zagreb County (Zaprešić)

#### TOTAL BUDGET (EUR)

#### 135,921.66

- Amount financed by the EU: 114,962.54
- Own funds:
  - Technical School Čakovec: 17,180.50
  - Secondary School Ban Josip Jelačić, Zaprešić: 3,778.62

#### PROJECT DURATION

October 2010 - December 2011

#### PROJECT PURPOSE

This project is the result of an analysis of the current curriculum for the profession *Technician for computing* that is completely outdated, inflexible and irrelevant in relation to labour market requirements, insufficiently practice-oriented and also insufficiently adapted to student interests. The project allows teachers to acquire new knowledge and teaching methods that can be applied in work with students. It will support the development and increasing number of technical intelligence among prospective students.

#### SPECIFIC OBJECTIVES

The project aims to contribute to the adaptation of VET to local and regional labour market changes, while simultaneously creating human and material preconditions for the implementation of the new modular curriculum in the field of computing and enabling vertical mobility in the education system.

The primary purpose of the project is to introduce a new, modified, modular



curriculum adapted to labour market needs as soon as possible. In addition to introducing a new curriculum, it aims to develop material and human capacities in both schools and, through cooperation with EU partners that possess years of experience in implementing the new curriculum, develop the entire educational system from local to national level.

#### TARGET GROUPS

#### A. Students:

- Local: target groups includes students of final grades of elementary schools that annually enrol in the Technician for computing programme, in both schools (Technical school Čakovec enrols two classes and Secondary school Ban Josip Jelačić enrols one class – a total of about 90 students)
- At the national level: the target group includes all final year students of primary schools

- who enrol in the Technician for computing program (there are 35 secondary vocational schools with a total of about 1,400 enrolled students in the Republic of Croatia).
- B. Teachers of both secondary schools: Technical school Čakovec currently employs 78 and Secondary school Ban Josip Jelačić 83 teachers. Since both schools are multifunctional and offer a number of programmes, around 60 teachers from both schools work with students enrolled in the Technician for computing programme.

#### FINAL BENEFICIARIES

Present and future students of VET schools in the computing sector: at the beginning of 2010/2011 school year, of the overall 48,227 enrolled students, 18,997 of them, or 40%, enrolled in first grades of four-year occupations. About 1,400 students or around 8% of those enrolled in four-year occupations, enrolled



in the Technician for computing programme. The goal is to increase the number of students who will enrol in the stated occupation by 20% in school year 2012/2013 i.e. to enrol about 1,700 students.

- Institutions of higher education in the region and country: the number of students who completed their education for Technicians for computing and enrolled at a technical college by the end of 2016 should increase by 15% compared to the current situation.
- Entrepreneurs from the computing (ICT) sector in the region and country – the number of students who completed their education for Technicians for computing and were hired in their field of study after finishing Secondary school i.e. within 6 months should, by the end of 2016, increase by 20% compared to the current situation.

#### MAIN PROJECT ACTIVITIES

#### Modification of the existing curriculum

- Analysis of the existing curriculum – employer opinion poll
- Roundtables gathering stakeholders - schools, universities and entrepreneurs
- Transfer of knowledge and good practice examples from Slovenia
- new draft curriculum prepared for verification by the competent authorities
- Trial testing of a new curriculum

#### 2. Teacher training for the purpose of implementing the new curriculum

- Planning and organisation of training intended for the teaching staff
- Specialised computer courses



Educating teaching staff in the field of innovative studentoriented teaching methods and developing an entrepreneurial culture among students

#### 3. Equipping the laboratory

- Providing the laboratory with computer equipment, specialised computer-related literature and programming support
- Teacher training on how to handle new equipment and technology

#### 4. Disseminating information on new curriculum availability

- Open days for primary school pupils and other interested stakeholders
- Designing, developing and distributing promotional materials, press conferences, project website.

#### **EXPECTED RESULTS:**

- Modified the existing VET curriculum for better adaptation to local and regional changes; modularly structured curriculum with contents clustered by programming area, system maintenance, or multimedia
- Teachers trained to teach the modified curriculum and introduce modern student-oriented approaches
- Improved conditions and laboratories with state-of-theart equipment for the practical application of acquired knowledge
- A new curriculum with general subject contents fully compatible with the material checked at the state graduation exam. Students will be well prepared for state graduation exams and for continuing their education at institutions of higher education in the computing sector.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.tsck.hr

#### **GRANT BENEFICIARY CONTACT DETAILS**

DRAŽEN BLAŽEKA, PRINCIPAL

TELEPHONE 040 / 328 881

098 / 241 278

drazen.blazeka@ck.t-com.hr E-MAIL

ADDRESS ŠPORTSKA 5

40 000 ČAKOVEC

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### SECONDARY SCHOOL BAN JOSIP JELAČIĆ

- Analysing the existing curriculum for Computer Technicians
- Participation of team members at round tables and meetings related to the development of a new curriculum
- Participation of about 10 VET teachers in additional training on the implementation of the new curriculum and new student-oriented teaching methods
- Procurement of the necessary equipment for vocational laboratories.

#### SCHOOL OF ELECTRICAL ENGINEERING AND COM-**PUTER SCIENCES, PTUJ**

- In the course of analysing the existing curriculum, team members from the town of Ptuj will inform us about their experiences in implementing a similar curriculum and the experiences of their students who enrolled in a related occupation
- Team members will take part in round tables and conferences, and, if necessary, assist in the work of expert teams preparing a new curriculum.

#### SUCCESS STORY

Many schools educating students to become computer technicians are highly dissatisfied with the current situation and have been waiting for years for "someone" to initiate a change (the current curriculum was adopted in 1995 but the know-how within curricula tend to become outdated and obsolete within a few years). During all presentations and discussions held on various occasions about our project, these schools contacted us to express their gratitude that we had started this project. They also provided assistance in curriculum development through their experience and suggestions, public approval and support by launching activities aimed at modifying the present curriculum.



# School of Electrotechnics Zagreb

With Flexible Learning Approach and Curricula Innovation towards the Labour Market GRANT BENEFICIARY

PROIECT TITLE

#### **PARTNERS**

Electromechanical Engineering School Varaždin

## LOCATION OF THE PROJECT IMPLEMENTATION

City of Zagreb and Varaždin County

#### TOTAL BUDGET (EUR)

#### 334,460.00

- Amount financed by the EU: 284,291.00
- Own funds: 50,169.00

#### PROIECT DURATION

September 2010 – September 2011

#### PROJECT PURPOSE

As technology in the field of electrical engineering and IT is becoming more competitive at the EU level, the requirements for vocational students possessing relevant professional skills and abilities are developing more rapidly. Based on the number of employees in the IT sector, Croatia is slightly above 40% of the EU average ("The Economic Impact of IT Software and the Microsoft Ecosystem on the Global Economy", IDC, 2007). A study published by Cisco Systems Croatia in March 2006 showed that the average rate relating to the lack of IT professionals in the Croatian market was 16% in 2005 with a planned growth of up to 25% by 2008. (i.e. Croatia lacked more than 5,000 IT professionals in 2008).

This means that the relevant VET schools in Croatia have huge needs to develop VET through flexible programmes that, among other things, stimulate interdisciplinary thinking, vocational education and training of students through individualised teaching and learning approaches





in accordance with their personal interests / abilities. There is also a need for a larger, comprehensive and active role of vocational teachers in teaching and conducting the respective procedures, including education for career guidance. For the purpose of producing comprehensive and flexible programmes, additional efforts of relevant VET schools are required to establish links with leading companies for professional training for the certificates required today, particularly with companies that offer such certification procedures which could be integrated into regular VET programmes and outside the compulsory VET curriculum (e.g. in the form of courses). Furthermore, socially relevant issues, such as the relationship between entrepreneurship, the environment and promotion of gender equality in industries dominated by men, should be identified and included in the school curriculum and learning process (including relevant extracurricular activities offered by the relevant VET schools).

#### SPECIFIC OBJECTIVES

- **A.** Further improve flexibility and innovation of VET school curricula through modern contents in the field of electrical engineering and IT, an adaptable approach to learning and teaching and adaptability to labour market sector requirements.
- B. Strengthening VET teachers' and relevant VET school staff capacities in electrical engineering and IT necessary for their active and sustainable role in planning the innovation curriculum and applying flexible learning methods in vocational education and training of students.

#### TARGET GROUPS

- 60 VET teachers from both partner schools and non-teaching staff that will adopt a variety of modern / holistic approaches necessary for introducing further flexibility in vocational programmes in electrical engineering and computer science sectors
- 30-40 VET students in each partner school who will be directly

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.ss-elektrotehnicka-zg.skole.hr

#### GRANT BENEFICIARY CONTACT DETAILS

IVO KLARIĆ, PRINCIPAL

TELEPHONE 091 / 366 114

E-MAIL ravnatelj@ets.t-com.hr

ADDRESS KONAVOSKA 2

10 000 ZAGREB

involved in the pilot project activities

at least 100 companies / small businesses dealing with electrical engineering and computer science, involved in the project component 3.

#### FINAL BENEFICIARIES

VET students in electrical engineering and IT sector attending VET programmes offered by partner schools who will ultimately benefit from more modern and innovative vocational skills and knowledge that will facilitate their integration into the labour market or the establishment of their own small or medium businesses.

#### MAIN PROJECT ACTIVITIES

The project consists of three components:

**Component 1** – Development of the "flexible learning" model tailored to the needs of partner schools and the national strategic / legal framework in the field of VET

**Component 2** –Training of teachers from two partner schools in the following areas:

- Introduction and application of "flexible learning" models in accordance with examples of good practice in EU Member States
- Advising students on career development
- Neuro-linguistic programming for secondary school teachers
- Train-the-trainer courses on the introduction of internationally recognised certificates in the field of "green / smart" construction (Konnex) and renewable energy sources (Solarteur ®)
- Advanced level of e-learning in schools.

**Component 3** – Procurement of appropriate equipment and piloting of an adjusted/modified "flexible learning" model, including the pilot implementation of the Centre for Career Development.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

Through education, preparation and implementation of the project, we eventually gain valuable experience on:

- How to develop a project in accordance with European standards
- How to test the quality and complexity of a plan through the

- implementation of a serious and demanding project
- How to develop cooperation with our partners and use the resources we have
- How to use teamwork in resolving misunderstandings and difficulties, avoiding at the same time the occurrence of new problems.

#### EXPECTED RESULTS

- Vocational education and training of teachers / staff of two VET schools – project partners – will strengthen the understanding of flexible learning approach / model applicable in the Croatian VET system and of all factors affecting the effective implementation of the curriculum / educational innovation.
- Two VET schools and their key stakeholders will, in the course of their mutual cooperation, develop basic strategic elements / practical application of the flexible learning model that will allow schools to include more innovation in their VET programmes i.e. to adopt a wider range of flexible teaching contents and learning methodologies in different learning environments for individual VET student needs / interests.
- VET teachers will acquire new knowledge and skills necessary (I.) to provide effective vocational education and training for students who will continue their further

education / training and employment and (II.) to maximise teaching and learning through Neuro-Linguistic Programming tools.

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

Electromechanical engineering school Varaždin takes active part in the implementation of all activities through its representatives in the Implementation Team and Board of Directors. The school also has equal access to all project activities and results: it trains its teachers, procures the same amount of teaching equipment, disseminates its results and ensures visibility in its area, and participates in co-financing the project budget with an equal share of financial contribution.

# Secondary School Oroslavje

Increasing Knowledge and Information on Renewables

GRANT BENEFICIARY

PROJECT TITLE

#### **PARTNERS**

- Technical School Ruđer Bošković, Zagreb
- 2. Town of Oroslavje

### LOCATION OF THE PROJECT IMPLEMENTATION

Oroslavje, Krapina-Zagorje County, City of Zagreb

#### TOTAL BUDGET (EUR)

#### 274,978.95

- Amount financed by the EU: 225,482.74
- Own funds: 49,496.21

#### PROJECT DURATION

September 2010 – September 2011

#### PROJECT PURPOSE

The focus of the project is improving the VET curriculum in Croatia by education and increasing awareness on renewable energy sources (RES). In order to introduce a new profession in Croatia that would deal with energy efficiency and environmental protection, Secondary school Oroslavje and its partners – the town of Oroslavje and Technical school Ruđer Bošković from Zagreb - were awarded funds to implement teacher and student training on renewable energy sources (solar photovoltaics, solar thermal, geothermal energy, biomass, wind energy, small hydro power plants, fuel cells). During project implementation (12 months), 10 teachers from both schools will go through comprehensive training on the above topics (in Croatia and abroad) and in the second stage of implementation the trained teachers will organise workshops for other VET schools on RES. A team of 10 teachers will, in cooperation with project experts, develop manuals (theory and practice) for VET



teachers and coursebooks and exercises for students. As part of the project, both schools will procure teaching tools for photovoltaic and solar heating systems for the practical implementation of acquired theoretical knowledge. In the final project stage, a pilot group of students will be selected from the above schools and these will receive training on the new optional subject Renewable Energy Sources.

Overall objective of the project is a reduction in CO2 and other greenhouse emissions by increasing awareness on RES through creation of new education programmes for secondary school. By implementation of new programmes in schools and changes in people's habits with regard to RES, this project should contribute to the creation of new workplaces and business opportunities.

#### TARGET GROUPS AND FINAL BENEFICIARIES

Target groups on this project are VET teachers from secondary VET schools in Croatia (60 teachers who will be trained on 7 types of renewable energy sources), teachers from Secondary school Oroslavje and Technical school Ruđer Bošković (5 teachers from each school will get intensive training on RES and will inform school staff of project activities) and students from both schools (20 students will go through RES pilot training on equipment, using the coursebooks and exercises prepared for that training).

However, the final beneficiaries of this project are not only the teachers and the students but also the wider public, as it is affected indirectly through awareness raising on RES and energy efficiency at all education levels.



#### MAIN PROJECT ACTIVITIES

- Teacher training on RES technologies
- Preparation of coursebooks and exercises for teachers and students
- **3.** Production of didactic equipment for solar photovoltaic (PV) energy and heating systems
- **4.** Training for a group of teachers
- 5. Training for the student pilot group
- **6.** Promotional activities regarding the project and RES
- 7. Proposal of the new curriculum.

#### **EXPECTED RESULTS**

- 10 teachers trained on 7 renewable energy sources
- Coursebooks and exercises for teachers and students on 7 RES

   solar photovoltaics, solar heat, geothermal energy, biomass, wind energy, small hydroelectric power plants and fuel cells – prepared and printed
- Didactic equipment on photovoltaic solar energy and solar heating systems – produced (student laboratory for Secondary school Oroslavje and Technical school Ruđer Bošković)
- 60 VET school teachers trained on RES
- Pilot group of students from Secondary school Oroslavje and Technical school Ruđer Bošković trained on RES
- Wider public aware of the RES project and the advantages of RES
- New curriculum for RES prepared.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.ipa-oie.com

#### GRANT BENEFICIARY CONTACT DETAILS

NATALIJA MUČNJAK, PRINCIPAL

#### TELEPHONE 049 / 588 740

ravnateljica-sso@kr.t-com.hr E-MAIL

ADDRESS LJUDEVITA GAJA 1

49243 OROSLAVJE

#### ROLE OF THE PROJECT PARTNER(S) IN PROJECT IMPLEMENTATION

Technical school Ruđer Bošković from Zagreb is active in implementing all project activities (teacher and student training, preparation of training materials, promotional activities, setting up a student laboratory) and the town of Oroslavje provided financial and marketing support to the project.

#### SUCCESS STORY

Enthusiasm and commitment of teachers from partner schools and experience gained thus far through project implementation resulted in teacher networking in other areas (teacher exchange and teaching in partner school). The acquired experience has been transformed into willingness and plans to continue working together and participating in similar projects funded by the EU or other donors. Likewise, the connections established by students from pilot groups made them think about forming a joint student company.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

At the very beginning of project implementation, we made a Gantt chart of project activities and tried to forecast the time needed for preparation and implementation of each activity. It was through our joint efforts in developing project activities that we realised we would have to start sooner than originally planned in order to avoid delays. This made the implementation of a major part of the project in the first few months possible and served as a preparation for final activities that are yet to be implemented.

# Economy School Čakovec

Agrofutura

GRANT BENEFICIARY

PROJECT TITLE

#### **PARTNERS**

- 1. Secondary School Bedekovčina
- Regional Development Agency (REDEA) Čakovec
- Association of Employees of Agricultural Schools in Croatia

## LOCATION OF THE PROJECT IMPLEMENTATION

Čakovec, Međimurje County, and Bedekovčina, Krapina-Zagorje County

#### TOTAL BUDGET (EUR

#### 310,231.13

- Amount financed by the EU: 262,517.58
- Own funds: 47,713.55

#### PROJECT DURATION

September 2010 – November 2011

#### PROJECT PURPOSE

The purpose of this project is to modernise curricula for gardener and general agricultural technician professions by introducing new training and education. If such improvements are to reach final beneficiaries, we must provide an intermediate pillar in the educational axis for agriculture. The capacities of teachers in agricultural schools and advisers for the Croatian Institute for Agricultural Advisory Service – CIAAS have to be improved in order for them to be able to transfer technological novelties to final beneficiaries (students and farmers).

This project will provide the students, teachers and CIAAS advisers with training on contemporary methods and tools, making them more competitive in the global labour market. The main issue lies in weak competences acquired in schools due to obsolete curricula that need to be changed and tailored to the current technological developments. For such change to take place, it must be ensured that persons implementing change in educational



processes have the necessary competences. The location of project implementation is characterised by small estates and high population density in rural areas, making these technologies an ideal tool for existential and demographic problem solving.

By creating and introducing new and modifying existing curricula, opportunities will be created for the introduction of new technologies thus increasing employability, income and productivity of agriculture in Croatia.

#### SPECIFIC OBJECTIVES

- A. to improve and set up a technology transfer system, from science to direct beneficiaries - students, with a focus on strengthening the middle link in that chain - VET teachers and CIAAS advisers
- B. to modernise the learning process and advisory services by demonstrating the application of cutting edge findings in technological cen-

- tres, motivate direct beneficiaries to change and adopt technological novelties as soon as possible in order to increase their productivity
- c. to develop partnership and cooperation between secondary schools with agricultural education programmes, their students and teachers, the Croatian Institute for Agricultural Advisory Service (CIAAS), on the one hand, and the Regional Development Agency (REDEA) and leading experts (university professors) on the other, as they have the knowledge and insights into particular type of production; and to transfer advanced technologies to final beneficiaries-students, and in the next phase to the farmers.



#### TARGET GROUPS

- A total of 12 teachers trained to apply new technologies that they will actually use in daily work with students
- A total of 55 students trained up to the level of acting parties and successfully taking part in lessons
- A total of 8 CIAAS advisers qualified as trainers for the application of new technologies.

Teachers in agricultural schools and CIAAS advisers lack the opportunities for systematic and organised professional training. They are all agronomists who have not had the chance to work with state-of-the-art equipment. They are lacking in the knowledge and practical experience in applying methods of highly intensive flower and vegetable production. There are 46 agronomy experts employed in schools of the north-west counties (Međimurje, Varaždin, Krapina-Zagorje and Koprivnica-Križevci counties) and 12 within the CIAAS. They should be the first ones to get information, verify it based on their expertise and forward it in modified form to lower levels (students and farmers).

There is a total of 8 classes of general agricultural technicians and 3 classes of gardeners, with altogether 209 students. The target group consists of 1st grade students from the Economy school Čakovec (ESČ) -general agricultural technicians and gardeners, and 1st graders – general agricultural technicians in the Secondary school Bedekovčina, altogether 65 students.

#### FINAL BENEFICIARIES

Final beneficiaries are former, current and future students and agricultural producers in the area of project implementation as well as experts. The social group faced with most difficulties when adjusting to new market conditions in liberal agriculture are our former students and agricultural producers. In the four north-western counties (Međimurje, Varaždin, Krapina-Zagorje and Koprivnica-Križevci counties) there are 250 unemployed persons registered with Croatian Employment Service offices with three or four years of secondary school education in agriculture.





#### MAIN PROIECT ACTIVITIES AND EXPECTED RESULTS

#### **Educational activities**

- 16 workshops for teachers and advisers
- Two seminars
- Two study visits
- One international science conference
- One round table
- Workshops for students

#### Pilot production

- Lettuce and bell peppers, in the new centre for hydroponics in ESČ
- Tomatoes, in the existing centre at the school in Bedekovčina

#### 3. Editions in electronic and paper form

- Conference Proceedings 300
- "Instructions for Growing Hydroponics" - 300 copies

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### **ECONOMY SCHOOL ČAKOVEC**

Economy school Čakovec has through various activities and projects established long-standing cooperation with all partners. This particularly means assistance in getting started and maintaining production, provision of advice for teaching programme issues, mutual professional training etc.

#### THE ASSOCIATION OF EMPLOYEES OF AGRICULTU-RAL SCHOOLS (AEAS) IN CROATIA

AEAS in Croatia is a professional association of all persons employed in agricultural schools through which agricultural schools have been defining and forwarding their interests to competent ministries and agencies. In this case, AEAS will act as coordinator for non-partner schools whose teachers are interested in the training. Due to transportation issues, only schools from the north-west of Croatia were planned to be involved but members from the rest of Croatia will also be eligible to join should they show interest. They will take part in the preparation and development of the new curriculum, and in other teacher activities.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE: www.ss-gospodarska-ck.skole.hr

#### GRANT BENEFICIARY CONTACT DETAILS VLADIMIR MASTEN, PROJECT MANAGER

TELEPHONE 099 / 431 2189

E-MAIL vladimir.masten@gmail.com

ADDRESS VLADIMIRA NAZORA 38 40 000 ČAKOVEC

#### SECONDARY SCHOOL BEDEKOVČINA

Secondary school Bedekovčina shall take part in all project activities on an equal basis. It will play a key role in the implementation of a project activity involving the construction of a greenhouse, for which purpose a small facility will be set up in Bedekovčina for the growing of tomatoes (100 m<sup>2</sup>), whereas lettuce (200 m<sup>2</sup>) and bell peppers (200 m<sup>2</sup>) will be grown in Čakovec.

#### REDEA

Regional Development Agency – will support project implementation through expertise, based on its experience with EU projects implementation.

#### CIAAS

CIAAS will act as an associate on the project, providing and taking part in professional training. This will result in the establishment of new connections between teachers and advisers, thus creating new forms of partnerships and knowledge transfers.

#### SUCCESS STORY

Getting AEAS as partner on the project is deemed a particular success, as it gave other schools with agricultural programmes the opportunity to get their teachers involved in the training. The first series of four seminars was attended by 29 participants from 7 schools and a representative of the Međimurje Vegetable Growers' Association, with whom a training agreement was signed.

#### KEY LESSONS LEARNED **DURING THE PLANNING AND** PREPARATION PHASE

We believe it is important to have an idea of what the needs are and to elaborate that idea, regardless of the funding. If the idea is right, sooner or later a source of financing will be found. It took us about three years to realise ours, but now we are happy that we will get the chance to implement it, equip the school and train the teachers and the students.



# Veterinary School Zagreb

Development of New Curricula and Capacity Building of Veterinary Teachers at Veterinarska škola Zagreb – VETVET

GRANT BENEFICIARY

PROJECT TITLE

#### **PARTNERS**

- Economy School Križevci
- Džakula Family Farm

#### LOCATION OF THE PROJECT IMPLEMENTATION

City of Zagreb, Koprivnica-Križevci County, Sisak-Moslavina County

#### TOTAL BUDGET (EUR)

#### 266,021.87

- Amount financed by the EU: 208,614.35
- Own funds: 57,407.52

#### PROJECT DURATION

September 2010 – September 2011

#### PROIECT PURPOSE AND SPECIFIC **OBJECTIVES**

This project developed as part of the school's efforts to provide its students with education that would ensure competitiveness and employability in new market conditions. Therefore, the project will focus on:

- A. Developing new nation-wide curricula for veterinary technicians
- **B.** Ensuring a sustainable system to improve existing and introduce new curricula based on learning outcomes and recommendations of the Accreditation Committee of Veterinary Nurse Education – ACOVENE.
- c. Developing new teacher skills and competences for the implementation of student-oriented training and teacher capacity building on new technologies in veterinary practice.

#### TARGET GROUPS

The primary target group are teachers at Veterinary school Zagreb and Economy school Križevci. The secondary target group are the students.





#### FINAL BENEFICIARIES

Employers and higher educational institutions.

#### MAIN PROJECT ACTIVITIES

- Innovative training of teachers on new tools and methods in veterinary practice
- **2.** Pilot testing in new, studentoriented teaching methods and new technologies in veterinary practice
- 3. Developing a new curriculum.

#### EXPECTED RESULTS

- Teachers trained for new diagnostic and laboratory technologies, and tools and methods used in presentday veterinary practice
- Teachers trained in new, studentoriented teaching methods
- Teachers trained in English language skills, with a special focus on professional vocabulary related to veterinary medicine
- Teachers trained on modern educa-

- tion and information technologies and their application in veterinary practice
- Implemented pilot projects on new technologies in veterinary practice and in state-of-the-art, studentoriented teaching methods
- Didactic and laboratory equipment procured
- A study visit to the Hansenberg **Education Centre in Denmark** undertaken
- Existing curriculum evaluated
- Advisory visit of the ACOVENE Accreditation Committee realised
- New content implemented in the existing curriculum
- A new curriculum created.

#### GRANT BENEFICIARY CONTACT DETAILS

SMILJANA GAMULIN, PRINCIPAL

TELEPHONE 01 / 299 2354 091 / 585 0880 E-MAIL ss-zagreb-524@skole.htnet.hr

ADDRESS GJURE PREJCA 2 10 000 ZAGREB

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### ECONOMY SCHOOL KRIŽEVCI

Economy school Križevci was founded in 1860 and it was the first agricultural school to be opened in Croatia and in South-East Europe. It has extensive experience in education, especially in breeding large, primarily domestic animals. Practical lessons are held and supplemented in cooperation with this school since students of Veterinary school Zagreb mostly practice on smaller animals and pets.

#### **DŽAKULA FAMILY FARM**

Džakula Family Farm is a highly reputable farm that has been awarded numerous production and processing certificates. It applies a combination of traditional and modern cattle breeding and farming, thus providing the teachers with a chance to go through all the stages of such (sustainable and environmentally friendly) production. The farm has recently been granted the status of a training centre.

#### SUCCESS STORY

After going through intensive and demanding educational training provided at Džakula Farm, three teachers inquired about the possibilities of getting involved in mobility projects (Comenius, Leonardo da Vinci). This inquiry was the direct result of project activities since the programmes concerned had previously been offered to teachers but without positive feedback.

#### KEY LESSONS LEARNED **DURING THE PLANNING AND** PREPARATION PHASE

The most important thing about the planning and preparation of a project is getting as many teachers involved in the idea development stage as possible and creating a positive environment and a sense of active participation in the development of the school.

# **Technical** School Nikola Tesla Vukovar

Together towards a New Curriculum GRANT BENEFICIARY

PROJECT TITLE

#### PARTNER

Economy School Vukovar

#### LOCATION OF THE PROJECT **IMPLEMENTATION**

Vukovar-Srijem County

#### TOTAL BUDGET (EUR)

#### 261,439.57

- Amount financed by the EU: 213,674.56
- Own funds: 47,765.01

#### PROJECT DURATION

October 2010 - November 2011

#### PROIECT PURPOSE

The purpose of this project is to encourage the development of VET curricula with a focus on learning outcomes and accumulation of knowledge, skills and competences that would meet labour market demand and comply with the Vocational Education Act and the National Framework Curriculum.

#### SPECIFIC PROJECT GOALS

- A. Improve systematic cooperation and capacities of schools and relevant institutions of Vukovar local community by establishing a multi-disciplinary team that would focus on modernising the curricula
- B. Strengthen VET teachers' capacities for teaching process preparation, performance and evaluation in accordance with the European Curriculum Reform and the National Framework Curriculum
- c. Motivate the local community to take on a more active role in the systematic improvement of VET curricula and teaching processes quality, whereby promoting VET



D. Improve the quality of lessons in accordance with curricular reform requirements by equipping classrooms and vocational laboratories with modern didactic tools.

The project will establish cooperation between different local authority institutions important for school programme and curriculum development. As a result, it will be easier for VET schools to adapt to labour market changes, new technologies and changing environments. Training all participants, sharing experience and best practices will mean a more efficient use of the potentials of all parties involved in the education process, the development of their competences and enhanced motivation to improve the teaching process. By developing their school curricula, VET schools will profile themselves in accordance with EU trends and innovations in VET, and in the long run the quality of classes will improve as the laboratories get equipped with state-of-the-art didactic tools.

#### TARGET GROUPS

- VET secondary school teachers from Vukovar and Subotica – the project will include 80 teachers from 3 VET schools
- Representatives of VET schools' working groups -20 representatives from professional working groups (teachers of various professions)
- Around 10 representatives of local community institutions (the Chamber of Trades and Crafts, Croatian Employment Service, Social Welfare Centre, Chamber of Commerce, local authorities, NGOs)
- Parent Council representatives two persons
- Student Council representatives two students
- Students
- **Teachers**
- Parents.



#### FINAL BENEFICIARIES

Citizens, school community, economic operators.

#### MAIN PROJECT ACTIVITIES

- Training for the representatives of schools and institutions who will be involved in curriculum development
- Additional training for VET school teachers on alternative teaching practices and modern teaching methods.
- **3.** Study visits
- 4. School Open Door days
- Equipping specialised laboratories with state-of-the-art didactic tools, which will result in significant teaching improvements.

#### EXPECTED RESULTS

- A project team consisting of 7 members from partner organisations
- A multidisciplinary team of 30 members – consisting of representatives of

- all institutions involved in the project and important for the implementation of VET curricula (teachers of various professions, representatives of Chambers of Economy and Trades and Crafts Chambers, Social Welfare Centres, the Employment Service and local authorities, representatives of the Student Council and of the Parent Council)
- An expert team, consisting of 10 persons selected by the multidisciplinary team and in charge of finalising the proposal for school curricula
- Systematic cooperation between all relevant institutions important for the implementation of VET curricula – as a result of seminars attended by 30 representatives of institutions – members of the multidisciplinary team
- Strengthened capacities and skills of multidisciplinary team members that are crucial for the introduction of VET curricula and training in 5 seminars
- Higher level of knowledge in 80



VET teachers, to be achieved through four seminars on the application of modern teaching methods in VET

- Presentations and information on curricula reform and the importance of taking an active role in its implementation shared with 30,000 citizens of local communities
- Improved visibility of the school, and school and project activities through regular website updates
- Two curricula proposals developed (every school will work on its own curriculum)
- Specific proposals on how innovation can be introduced in the two Vukovar schools, provided based on experience and best practices exchanged during two study visits to schools in Varaždin and Zagreb (examples of optional classes, proposals on how to supplement the curriculum by applying new teaching methods and techniques)
- Higher level of parent and student involvement in the school and its

- operation through School Open Door days (three events will be organised in each school - School Open Door days)
- 20 classrooms and three laboratories equipped with state-of-the-art teaching tools in the Technical school Nikola Tesla Vukovar.

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### ECONOMY SCHOOL VUKOVAR

Technical school Nikola Tesla Vukovar and Economy school Vukovar as project partners will be in charge of preparing the calendar of activities, logistics, evaluating project activities and ensuring active participation in seminars, meetings, study visits and School Open Door days, monitoring implemented activities, tenders and the selection of external evaluator, as well as the publication of a public tender for the procurement of equipment. They are also responsible for the co-ordination of all activities, including the equipping of classrooms and laboratories.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.novikurikulum.com

#### **GRANT BENEFICIARY CONTACT DETAILS**

JASMINA ŠAHOVIĆ ŽABKA. ASSISTANT PROJECT MANAGER TELEPHONE 098 / 987 8872

E-MAIL jasmina sahovic@yahoo.com

ADDRESS BLAGE ZADRE 4

32 000 VUKOVAR

#### POLYTECHNIC SCHOOL SUBOTICA

Polytechnic school Subotica is a friend-school with Technical school Nikola Tesla Vukovar. Cooperation between two schools originally started due to the similar work environments: both schools are multi-ethnic and multicultural and conflicts are common due to lack of mutual understanding between different ethnic groups. Another reason for cooperation is the fact that in the area of Subotica there is a large Croatian minority population maintaining continuous contact with their homeland. Polytechnic school Subotica already gained some experience in the preparation and implementation of European projects (CARDS) therefore the cooperation will enable exchange of experience and transfer of necessary knowledge.

#### SUCCESS STORY

Project implementation had a positive impact on students, teachers and overall atmosphere in the school. They are now motivated and eager to start new activities important for the school and

the community they live in. Having developed a healthy competitive spirit, they now want to further investigate, work and debate, and are extremely interested in transferring their experience to other students and teachers. The school is already working on new curriculum development and numerous ideas are being provided by students and representatives of the local community active in multidisciplinary school teams.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

A well prepared action plan, division of roles and responsibilities is the fundamental precondition for the successful implementation of project activities.



# Secondary School Marko Marulić Slatina

GRANT BENEFICIARY

Introducing E-learning in order to Improve Teaching Processes in Vocational Programmes

PROJECT TITLE

#### PARTNER

Secondary School Isidor Kršnjavi Našice

## LOCATION OF THE PROJECT IMPLEMENTATION

Slatina, Virovitica-Podravina County, and Našice, Osijek-Baranja County

#### TOTAL BUDGET (EUR)

#### 161,163.67

- Amount financed by the EU: 136,876.30
- Own funds: 24,287.37

#### PROJECT DURATION

October 2010 – November 2011

#### PROJECT PURPOSE

The pre-conditions for successful lessons and teaching in all, especially vocational secondary school programmes, are professional teacher training and constantly keeping up-todate with new technologies. Through this project, teachers will acquire new knowledge through e-learning academy and an English language course, two classrooms within the school will be e-learning equipped and during the study visit they will get a chance to see the implementation of such teaching methods in practice, in environments where they are already part of the system.

#### SPECIFIC PROJECT GOALS

- A. Strengthen VET teachers' capacities for the implementation of modern, student-oriented teaching methods, via modern technologies (e-learning) use
- B. Make knowledge and skills acquisition more flexible and more readily available to VET school students in small and under-developed areas



c. General improvement of teaching and learning conditions.

#### TARGET GROUPS

The target group for this project consists of overall 40 VET teachers (20 teachers from Secondary school Marko Marulić Slatina and 20 from Secondary school Isidor Kršnjavi Našice) who will directly benefit from the implementation of this programme.

#### FINAL BENEFICIARIES

The final beneficiaries of VET programmes are students in both of the above schools (804 students in total) whose teachers will apply the most up-to-date approach to teaching and will provide them with knowledge acquisition and evaluation through e-learning. In Secondary school Marko Marulić Slatina, final beneficiaries are 353 students of the following professions: electrical technician, economist, general agricultural technician and

agritourist technician; and students of partner schools – 451 students for the following professions: economist, electronics technician, general agricultural technician and agritourist technician.

#### MAIN PROJECT ACTIVITIES

#### **Teacher training: Lesson** planning and teaching in online environments

A total of 36 teachers are to go through the basic e-learning course. The course involves a high level of interaction among participants, and between participants and the mentor, through online debates, e-mails, various online communication tools and live meetings. Lessons and activities in online environments take place through the Learning Management System (LMS), and in some lessons other tools like the Wiki, blogs or concept mapping tools etc. will be used. In order to be ready for such tools, participants will go through an orientation



and transition workshop. During e-learning academy, participants will do a whole range of activities in online environment and in the classroom: debates, writing papers, research, study foreign literature etc. Part of the content is done via the case-study method, including multimedia materials on Croatian and foreign e-learning projects.

designing online courses Teachers are trained on how to create and design online teaching materials and activities. Through this programme, participants will learn about the pros and cons of independent material development and teamwork, deal with pedagogical principles important for their line of work, study the media and technologies at their disposal and learn how to determine their advantages and disadvantages. This part of the course involves 4 VET

teachers (2 from each school) well

acquainted with new technologies.

2. Teacher training: Creating and

Participants who finalise this programme will be trained to take part in the planning and settingup of e-learning courses in their working environments, through the design and drafting of educational materials in cooperation with teachers of specific subjects who had been trained to teach in online environments.

#### 3. Teacher training through **English language courses** Teachers will come to institutions to provide two levels of language courses. One group will consist of teachers who use English actively but need additional training on the terminology used in vocational programmes. The second group will be made up of teachers whose English language skills are at beginner level and need to be improved in order for them to use e-learning successfully.

4. Creating a database with teaching materials In order to improve the teaching process through increased use



of the internet for e-learning, an activity should be implemented that would involve the creation of a database containing teaching materials needed for e-learning. This part of the work will be implemented upon the completion of an e-learning course. Every teacher should make a database with teaching materials for e-learning lessons. All users will be provided online access in cooperation with software experts.

5. Study visit to Denmark A study visit to Denmark will be organised in order to look into the experience of other countries in using modern and innovative learning methods, and increased

internet and relevant software usage.

6. Establishment of technical preconditions for e-learning During project implementation a brochure on e-learning will be printed for student information purposes; 904 USB sticks will be purchased in order to improve competences for independent

and whole-life learning; and two classrooms will be fully equipped with IT and necessary furniture in order to facilitate the active implementation of e-learning.

#### EXPECTED RESULTS

A total of 40 teachers will be trained for e-learning through this project and will improve their English language skills. Two classrooms will be equipped for e-learning (with 58 computers, 2 servers, 2 overhead projectors, 4 interactive whiteboards, 28 student desks, 2 teacher desks, 56 student chairs and 2 teacher chairs).

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### VIROVITICA-PODRAVINA COUNTY

Virovitica-Podravina County is the founder of the Grant Beneficiary School and finances its material and technical operation expenses. It will partly cofinance the overall project budget.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE www.ss-mmarulica-slatina.skole.hr

#### GRANT BENEFICIARY CONTACT DETAILS

KATA VIDAKOVIĆ, PROF., PROJECT COORDINATOR

TELEPHONE 099 / 814 43457

kata.vidakovic@gmail.com E-MAIL

ADDRESS TRG RUĐERA BOŠKOVIĆA 16

33520 SLATINA

#### SECONDARY SCHOOL ISIDOR KRŠNJAVI

Secondary school Isidor Kršnjavi takes part in project implementation as a partner due to the similarity of programmes implemented and the possibility for Secondary school Marko Marulić Slatina project to be implemented on as wide an area (two towns, two counties) and as many final beneficiaries as possible.

#### KEY LESSONS LEARNED **DURING THE PLANNING AND** PREPARATION PHASE

Preparation of this project proposal allowed teachers to be trained in areas for which it would have been very difficult for them to get training partly due to financing issues and partly due to their obligations and limited time availability. On top of that, the school has been provided with grants for the procurement of valuable equipment. Experience acquired in project development, presentation and implementation will be extremely valuable in future tenders and when using pre-accession funds for the modernisation of the teaching process and school facilities.



# Technical School Slavonski Brod

SB Solar Demonstration Centre

GRANT BENEFICIARY

PROIECT TITLE

#### **PARTNERS**

- 1. Technical School Daruvar, Daruvar
- Croatian Employment Service, Slavonski Brod
- 3. Croatian Chamber of Trades and Crafts, Slavonski Brod

## LOCATION OF THE PROJECT IMPLEMENTATION

Slavonski Brod, Brod-Posavina County

#### TOTAL BUDGET (EUR)

#### 263,939.43

- Amount financed by the EU: 215,638.51
- Own funds: 48,300.92

#### PROJECT DURATION

September 2010 – September 2011

#### PROJECT PURPOSE

The modernisation of the VET system is a strategic priority in several educational institutions in Croatia as it leads to better competences of those involved in vocational education. VET system modernisation is not just about introducing new technological applications (e.g. IT modernisation) but also involves the development of new curricula, more in line with labour market demands. The labour market is generally guided by economic conditions therefore VET needs to continuously work on improving educational programmes in order to ensure the competences required by the labour market.

This project will lead to improvements in technical, material and professional conditions at Technical school Slavonski Brod through the development and implementation of a new curriculum (Solar Power System Management) and through the establishment of a Solar Demonstration Centre.





#### TARGET GROUPS

25 teachers from Technical school Slavonski Brod and Technical school Daruvar.

#### FINAL BENEFICIARIES

Students of the Technical school Slavonski Brod, 3rd and 4th grade students (180 total), students of other technical schools from Slavonia and unemployed persons with a technical background from the Brod-Posavina County (14,902 persons total).

#### MAIN PROJECT ACTIVITIES

- 1. Developing a new curriculum: Solar Power System Management
- 2. Equipping the Solar Demonstration Centre
- Organising teacher training
- Solar power system management
- New learning and teaching methods and techniques
- **6.** Organising study visits
- 7. Visibility activities
- 8. Project management.

#### EXPECTED RESULTS

- New curriculum "Solar Power System Management" developed (96 lessons)
- New programme for adult education developed (200 lessons)
- New teaching techniques and methods incorporated in the new curriculum (3 methods and 4 techniques)
- Materials and technical preconditions for knowledge transfer developed (Solar Demonstration Centre)
- 35 teachers trained in new teaching techniques and methods
- 10 teachers trained on how to implement the new curriculum
- Cooperation between partners established with a view to implement the new curriculum.

ON THE PROJECT CAN BE FOUND ON THE FOLLOWING WEB SITE

www.ipa.sb-solar.com

GRANT BENEFICIARY CONTACT DETAILS

VIKICA LUKIĆ, PROJECT ASSISTANT

#### TELEPHONE 098 / 698 770

vikica.lukic@gmail.com E-MAIL

ADDRESS EUGENA KUMIČIĆA 55

35 000 SLAVONSKI BROD

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

#### **TECHNICAL SCHOOL DARUVAR**

- takes part in implementing project activities and promotes the project, new curriculum and the Solar **Demonstration Centre** 

#### CROATIAN EMPLOYMENT SERVICE - SLAVONSKI **BROD REGIONAL OFFICE**

 promotes the new curriculum among the unemployed, sends potential beneficiaries of the new programme for adult learners (Solar Power System Management)

#### CROATIAN CHAMBER OF TRADES AND CRAFTS, SLAVONSKI BROD BRANCH

- promote the new curriculum among its members; send potential programme beneficiaries.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

Project activities need to be planned more realistically. Strengthen capacities of the school team in charge of project preparation and implementation.



# Agricultural School Zagreb

Agritouristic Centre of Excellence (ACI) – Croatian Experience as an Idea for EU model

GRANT BENEFICIARY

PROJECT TITLE

#### **PARTNERS**

- Agricultural and Food Industry School, Požega
- Secondary School Braća Radić, Kaštel Štafilić – Nehaj
- Tourism and Catering School, Zagreb

## LOCATION OF THE PROJECT IMPLEMENTATION

City of Zagreb, Zagreb County, Požega-Slavonia County, Split-Dalmatia County, Kranj and Celje (Slovenia)

#### TOTAL BUDGET (EUR)

#### 284,920.33

- Amount financed by the EU: 231,697.21
- Own funds: 53,223.12

#### PROJECT DURATION

September 2010 – November 2011

#### PROJECT PURPOSE

The original position of grant beneficiary and its partners was based on the fact that the current curriculum for agritourist technician does not meet horizontal and vertical mobility requirements. This opinion is based on a SWOT analysis undertaken by students and teachers, entrepreneurs and representatives of local authorities.

The aim of this project is to continue modernisation of curriculum for agritourist technician, an idea that started four years ago with the CARDS 2003 "Agritouristic Educational Polygon – Croatian Model" project.

Specific project goals need to be met for the curriculum to be further improved:

- A. Propose a modernised curriculum through partnership in the agritourist technician occupation - based on learning outcomes
- Improve basic and vocational competences of VET teachers
- c. Present the Agritouristic Centre of Excellence Croatian Model.



#### TARGET GROUPS

#### A. Teachers:

- Agricultural school Zagreb: 19 female and 6 male teachers – a total of 25 agronomists
- Agricultural and food industry school Požega: 8 female and 5 male teachers – a total of 13 agronomists
- Secondary school Braća Radić, Kaštel Štafilić – Nehaj: 8 female and 2 male teachers - a total of 10 agronomists
- Tourism and catering school: 6 female and 3 male teachers – a total of 10 teachers specialised in tourism and catering.

#### B. Students:

160 girls and 66 boys – overall 226 agritourist technicians from grant beneficiary and partner schools.

#### FINAL BENEFICIARIES

- 168 VET teachers in 14 VET schools in Croatia educating students to become agritourist technicians.
- 663 students in the Republic of Croatia trained to become agritourist technicians.
- Adult learners
- Managers of family agritourist farms in Croatia
- persons with restricted access to the labour market: women, long-term unemployed, young unemployed, persons with special needs and disabilities, persons living in rural areas in underdeveloped regions
- Interested citizens potential visitors of agritourist farms.



#### MAIN PROJECT ACTIVITIES

Modernisation of curriculum for the agritourist technician occupation based on learning outcomes.

This activity is based on:

- Research survey of 25 agritourist farms in 11 counties of Croatia
- Study visit and research conducted on agritourist farms and vocational education and training (VET) in Slovenia
- Defining learning outcomes that will be used as platform for the proposal of a modernised curriculum of agritourist technician occupation
- Dissemination of the results of this activity in the Agricultural school Zagreb, Agricultural and food industry school Požega and Secondary school Braća Radić in Kaštel Štafilić – Nehaj.

#### 2. Improvement of competences of VET teachers.

This activity is based on the following:

- IT education for Agricultural school teachers
- Education for the teachers of Croatian agricultural schools in new learning and teaching methods at the Agricultural school Zagreb, Agricultural and food industry school Požega, and Secondary school Braća Radić in Kaštel Štafilić – Nehaj

#### 3. Presentation of the **Agritouristic Centre of** Excellence (ACI).

This activity is based on the following:

- Establishment of parent plant nursery of traditional and protected plant species in the Agricultural school Zagreb
- Establishment of parent plant nursery of traditional and protected plant species in the Agricultural and food industry school Požega



- Equipping practicum of traditional dishes at the Agricultural school Zagreb
- Equipping practicum of traditional dishes at Kaštel Štafilić – Nehaj
- Equipping practicum of traditional dishes at the Tourism and catering school Zagreb.

#### 4. Project visibility

- Opening ceremony of the works on ACI in the Agricultural school Zagreb
- European conference at the Agricultural school Zagreb
- Publishing brochure "Agritourist Centre of Excellence Project in Agricultural school Zagreb"
- Setting up the www.agroturizam-aci.hr web portal
- Printing guide "10 Golden Rules of Agritourism".

#### EXPECTED RESULTS

- Proposal of a modernised curriculum through partnership in the agritourist technician occupation, based on learning outcomes
- Improved basic and professional competences of VET teachers
- Agritouristic Centre of Excellence Croatian Model presented.

#### ROLE OF THE PROJECT PARTNERS IN PROJECT IMPLEMENTATION

Partners play an active role in the implementation of project activities and delegate two teachers to the project team. This is an active partner contribution to the fulfilment of specific project goals through the implementation of project activities, especially those related to curriculum modernisation, teacher training, hotbed construction and traditional cooking courses development.

ON THE PROJECT CAN BE FOUND ON THE WEB SITE agroturizam-aci.hr www.poljoprivrednaskola.hr

#### GRANT BENEFICIARY CONTACT DETAILS

MARICA BERDIK, PRINCIPAL

TELEPHONE 01 / 298 8670

E-MAIL ss-zagreb-542@skole.htnet.hr

ADDRESS GJURE PREJCA 2

10 000 ZAGREB

#### SUCCESS STORY

During field research, the project team was equally warmly received at all agritourist farms throughout Croatia. Farm owners understood project goals and asked for support through this European project. This is how the project team came to provide advice and assistance in setting up the Association of Agritourist Farms of Istria, in order to encourage the formation of similar associations in other parts of Croatia.

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

In the project planning and preparation phase, we tried to draw on experience acquired through the CARDS 2003 "Agritouristic Educational Polygon – Croatian Model" project. Special highlights can be put on the need for:

- Quality communication with partners
- Publicly available activity calendar
- Public and realistic list of project expenses.



## Economy School Katarina Zrinski

GRANT BENEFICIARY

Modular Curriculum for Training Firms

PROJECT TITLE

#### **PARTNERS**

Economy School Celje, Slovenia

### LOCATION OF THE PROJECT IMPLEMENTATION

City of Zagreb

#### TOTAL BUDGET (EUR)

#### 311,829.70

- Amount financed by the EU: 265,055.25
- Own funds: 46,774.45

#### PROJECT DURATION

September 2010 – November 2011

#### PROJECT PURPOSE

Using active teaching methods to put the student at the centre of attention through a new curriculum for the *Doing Business in a Training Firm* subject is an approach that will give a boost to the Croatian economy. Students will acquire competences that are in line with current market and computer literacy demands and will acquire an additional value: competitiveness when looking for employment.

The aim of this project is to develop a Modular Curriculum for Training Firms for all four secondary school grades based on the needs of local/ regional labour market, good practice example from the EU and compliant with the methodology and requirements of the Vocational Education Act. In the focus of project attention is the improvement of entrepreneurial competences (knowledge, skills and attitudes) of the administration, teachers and students of economy schools. Economy school Katarina Zrinski will test the new curriculum through a pilot project adding new ICT solutions



(software and web portal) so that the curriculum can be freely used by other economy schools and, in the long-run, by all other VET schools. The end result – Training Firms Incubator – will be a virtual spot where training firms ready to do business, associate and cooperate with each other can meet, with the professional guidance of experts from the College of Economics, Entrepreneurship and Management Nikola Šubić Zrinski.

#### TARGET GROUPS

Students, teachers and management of the Economy school Katarina Zrinski.

#### FINAL BENEFICIARIES

Economy schools and non-economy VET schools in the Republic of Croatia, Agency for Vocational Education and Training and Adult Education (AVETAE), Croatian Employment Service (CES), the City of Zagreb, local/regional and, in the long run, national economy.

#### MAIN PROJECT ACTIVITIES

- **Project management** activities are to be implemented by the Project Management Department of the Economy school Katarina Zrinski. The aim of these activities is quality and timely implementation in accordance with the project plan.
- 2. Development of Modular **Curriculum for Training Firms** involves the following activities: Research of existing TF curriculum, research on EU good practice example (Slovenia) and a study visit of TF teachers and students to the Economy school in Celje. The end result of this activity is a Modular Curriculum for Training Firms and an accompanying Manual. The activity is implemented by project work team consisting of curriculum experts from the Economy school Katarina Zrinski; College of Economics, Entrepreneurship and Management Nikola Šubić Zrinski; CES; Croatian Chamber of Economy (CCE) and two companies (Mesnice Fiolić d.o.o. and Rudan d.o.o.).

ON THE PROJECT CAN BE FOUND ON THE WEB SITE http://www.zrinski.org/modvtr/

#### GRANT BENEFICIARY CONTACT DETAILS

MARTINA FERK NOVAKOVIĆ

TELEPHONE 01 / 364 7098

E-MAIL martinafn@zrinski.org

ADDRESS SELSKA CESTA 119

10 000 ZAGREB

- 3. **ICT solutions** will accompany the development of the new curriculum and the Training Firms Incubator and it consists of research on how up-to-date the ICT solutions for TF in Croatia are; development of software and interactive web portal; and drafting of a Manual on ICT solutions for Modular Curriculum for Training Firms. ICT solutions will enable students and teachers to do business with their Training Firm online, announce workshops, projects, publish contents and results of e-learning, case studies, etc.
- 4. Education and training for delivery of this new curriculum and the use of ICT solutions consists of workshops for 3 target groups: school management (5), all teachers (32) and TF teachers (12) of the Economy school Katarina Zrinski. Workshops will be conducted by curriculum experts from Katarina Zrinski and Celje schools.
- The modular curriculum will be designed and tested through a **pilot project** in 2nd and 3rd grades of the Economy school Katarina

- Zrinski during one semester (starting in February 2011). The pilot test will be conducted by TF teachers assisted by the work team. Upon completion the Modular Curriculum for Training Firms will be internally evaluated. External evaluation of the pilot project will be performed by the External Evaluation Body, which will also be in charge of writing a report on the pilot project. The pilot project is closely related to activities on modular curriculum development and feedback from workshops, and assisted by ICT solutions.
- **6.** The end result of the project is a Training Firms Incubator that will involve all training companies within the Economy school Katarina Zrinski. Through web portal and software it will be available to all VET schools that wish to conduct virtual business in their training firms, exchange experience and prepare students for the turbulent business world. The entire incubator development process will be supervised by experts from the Nikola Subić Zrinski College.

KEY LESSONS LEARNED **DURING THE PLANNING AND** PREPARATION PHASE

The project needs to start at the time of tender announcement; project implementation needs to be clearly and carefully planned taking into account available human resources, budget and time.

#### EXPECTED RESULTS

This project will improve the business climate, competences and knowledge acquired within VET in the Economy school Katarina Zrinski by supporting students in doing business, being proactive, innovative and creative in accordance with labour market demands at local and regional level i.e. in the city of Zagreb and Zagreb county. Economy school Katarina Zrinski and its staff will improve their business competences through good practice example of the Slovenian partner school from Celje and through new ICT solution for training firm management. Modular curriculum will be designed for all four grades of economy school. Training Firm Incubator – as end project result – will encompass all training firms within the Economy school Katarina Zrinski and will be open to all interested VET schools through its software and web portal.

#### ROLE OF THE PROJECT PARTNERS IN PROIECT IMPLEMENTATION

The primary role of the partner is to support the transfer of knowledge and experience from the Economy school Celje to the Economy school Katarina Zrinski. The curriculum of the Economy school Celje will be used as an EU good practice example for development of Modular Curriculum for Training Firms. Experts from Celje will take part in all three parts of the project (work team, operative body and external evaluation team) and will be involved in the development of a new modular curriculum and its evaluation.

#### SUCCESS STORY

Media reported on the implementation of project Modular Curriculum for Training Firms thus Nezavisna TV broadcasted a story about the project in the Pismo-glava show, which also included coverage of other EU projects currently implemented by Economy school Katarina Zrinski.

The story can be seen at: http://www. youtube.com/watch?v=HZaE0CyXusI

# Agricultural and Forestry School Vinkovci

**GRANT BENEFICIARY** 

**Next Generation** 

PROJECT TITLE

#### PARTNERS

- Industry and Crafts School Silvije Strahimir Kranjčević Vinkovci
- Private Economy School Katarina Zrinski, Zagreb
- 3. Hrast d.o.o. Development Agency of the Vukovar-Srijem County

## LOCATION OF THE PROJECT IMPLEMENTATION

Vukovar-Srijem County, town of Vinkovci

#### TOTAL BUDGET (EUR)

#### 218,388.70

- Amount financed by the EU: 185,630.39
- Own funds: 32,758.31

#### PROJECT DURATION

September 2010 – November 2011

#### PROJECT PURPOSE

Not enough attention is given in Croatia to the development of entrepreneurship in the formal education system, even though analyses show that most entrepreneurs have a VET secondary school diploma. The aim of this project is to encourage and develop capacities of VET schools to create new curricula based on learning outcomes and in line with changes in local and regional labour markets.

The criteria for the introduction of innovative methods and mechanisms will be met through the implementation of project activities. Such methods and mechanisms will serve as a foundation for the development of new curricula for school cooperatives in two VET secondary schools in Vinkovci – Agricultural and forestry school and Industry and crafts school – and further strengthen VET teachers' capacities to introduce modern, student-oriented approaches to teaching.

We are certain that this project is a contribution to the creation of



favourable conditions for a new generation of young entrepreneurs who, through additional business education in the final grade of secondary school could get a better foundation to start working independently - as future entrepreneurs.

This project will strengthen the capacities of both teachers and students. Innovative workshops will be tailored to specific needs and the circumstances in which the teachers and students of these two schools work.

During the project a curriculum for school cooperatives will be developed and its application in school cooperatives will result in stronger links between theory and practice. For the purpose of this project, entrepreneurs and other local partners will be involved in the development and operation of the cooperatives. The project aims to encourage quality communication between VET secondary schools and entrepreneurs in order to create a more positive business environment as a

precondition for increasing the number of small and medium-sized enterprises (SMEs) which are the drivers of economic development and generators of new jobs.

#### TARGET GROUPS

Students, teachers and school management of two VET secondary schools: Agricultural and forestry school and Industry and crafts school Silvije Strahimir Kranjčević in Vinkovci. Industry and crafts school is attended by 737 students who are educated in 7 fields (mechanical engineering, electrical engineering, catering, construction, personal services, textile and other services). There are 33 classes, 61 teachers and 22 administrative and technical staff. Agricultural and forestry school is attended by 663 students. The school provides regular three- and four-year programmes and adult education courses. There are 27 classes, 63 teachers and 12 administrative and technical staff.



#### FINAL BENEFICIARIES

The final beneficiaries of the project are all other educational institutions i.e. educational programme beneficiaries (both children and adults): this project will encourage others to implement activities that eventually lead to the long-awaited change in education. Finally, entrepreneurs from the Vukovar-Srijem County will feel the long-term benefits of this project – they will employ a better and more educated workforce that will contribute to the development of business and increase competitiveness of the economy. New educational programmes and workshops will be used by the next generation. School cooperatives will promote and support the development of new products and processing capacities, especially those based on existing raw materials.

#### MAIN PROJECT ACTIVITIES

- Project management
- Education
- 3. Preparing curricula for student cooperative
- **4.** Student cooperatives
- Pilot project
- **6.** Study visit.

#### EXPECTED RESULTS

- Develop teacher competences in the implementation of entrepreneurial curriculum for school cooperatives in 2 VET schools
- Increased level of entrepreneurial competences and skills in students upon completion of educational programme
- New curriculum for school cooperatives designed in two VET secondary schools
- Establishing two student cooperatives where students will acquire knowledge on market mechanisms, business management,



teamwork and responsibility, and develop personal skills and competences required for their work as entrepreneurs. Work in student cooperatives will encourage students to have a positive attitude towards work and create a positive entrepreneurial environment among students: it will drive the creation of the "next generation" of young entrepreneurs whose success and good examples will initiate positive change in the environment, attract interest and motivate a greater number of participants towards becoming entrepreneurs.

#### ROLE OF THE PROJECT PARTNER(S) IN PROJECT IMPLEMENTATION

All partners were directly involved in project design, but a special partner relationship and friendship has evolved during the implementation of project activities.

#### AGRICULTURAL AND FORESTRY SCHOOL

Agricultural and Forestry School is equipped with agricultural machines, students do the practical part of the curriculum with their teachers on 77 hectares of agricultural land and 2 hectares of forest. The planting of orchards, vineyards, fruit tree nurseries and various horticultures has been planned – all for the sake of higher quality education for students. The next step in developing and improving the work of the school is to introduce changes and provide the acquisition of knowledge, skills and competences important for the labour market. One of the main activities a student cooperative will focus on, depending on school capacities, is the processing and drying of fruit, vegetables and herbs.





#### INDUSTRY AND CRAFTS SCHOOL SILVIJE STRAHIMIR KRANJČEVIĆ

Industry and Crafts School Silvije Strahimir Kranjčević takes part in all workshops and educational project activities, analyses and evaluations. This school will provide the facilities needed for setup and operation of a cooperative; such facilities will be established and equipped through this project. The school is a logical partner because of its location in the vicinity of the Agricultural and forestry school– which is also one of the reasons why the two schools and their students already have a good relationship. There is a student restaurant in the school where students also have practical lessons that will be further improved by establishment of the cooperative.

#### PRIVATE ECONOMY SCHOOL KATARINA ZRINSKI

Private Economy School Katarina Zrinski is a natural choice due to its many references and experience in this area. Its responsibilities involve: provision of research methodology, good practice and expertise in curriculum development. It will also be in charge of training the teachers, school management and students, it will accommodate students and teachers as an example of good practice in Croatia and organise a visit to a similar school in Regensburg, Germany.

## HRAST DEVELOPMENT AGENCY OF THE VUKOVAR-SRIJEM COUNTY

Hrast Development Agency of the Vukovar-Srijem County has focused part of its activities on the strengthening and promotion of a positive business climate and on the creation of a new generation of entrepreneurs who will put their knowledge and competences at the service of SMEs development, as the key drivers of County development. In its activities, the Hrast Agency lays particular emphasis on promoting VET programmes and developing a model that would both directly and indirectly reduce unemployment rates in the Vukovar-Srijem County.

N THE PROJECT CAN BE FOUND ON THE WEB SITE www.nextgeneration.com.hr

GRANT BENEFICIARY CONTACT DETAILS

MARINKO DŽAKULA, PRINCIPAL

TELEPHONE 032 / 306 601

ss-vinkovci-509@skole.t-com.hr E-MAIL

ADDRESS HANSA DIETRICHA GENSCHERA 16,

32100 VINKOVCI

#### KEY LESSONS LEARNED DURING THE PLANNING AND PREPARATION PHASE

Project planning and preparation is an extremely complex process. After identifying the needs and the project idea, a lengthy process of delivering the project as a joint effort of all partners is started. Sometimes it can be very difficult to keep or modify the original idea and meet the wishes and ideas of all project partners. It truly requires a lot of patience, determination and strength to keep the project team together and to keep them actively involved in all planned activities. It is very important to always keep in mind the project objective and the legacy you wish to leave behind by implementing project activities and at the same time improving the situation in a particular field.

# **European Union** Programme for Croatia

List of the beneficiaries of the Implementation of New Curricula grant scheme

Grants awarded under Call for Proposals Europeaid/128900/M/ACT/HR published on 10 August 2009

PROJECT	GRANT BENEFICIARY	CONTACT INFORMATION
Modification of the existing curricula by introduction of new technologies	Nautical School of Split (Pomorska škola Split)	Zrinsko-Frankopanska 36, Split TEL: 095/ 380 7649 E-MAIL: dpavelin@pomsk.hr www.pomsk.hr
e-learning in Automechatronics	Technical School of Karlovac (Tehnička škola Karlovac)	Ljudevita Jonkea 2a, Karlovac  TEL: 047/615 – 805  E-MAIL: milan.bjelic 1 @gmail.com  www.tehnicka-skola-karlovac.hr
TEHNOTRONIK - Application of new technologies curricula to Technical School Daruvar vocational education program	Technical School Daruvar (Tehnička škola Daruvar)	Gundulićeva 14, Daruvar TEL: 043/331 – 030 E-MAIL: ravnatelj@tsd.hr www.tsd.hr
Creating new opportunities for knowledge based economy in the field of computing and computer engineering	Technical school Ruđer Bošković (Tehnička škola Ruđera Boškovića)	Getaldićeva 4, Zagreb TEL: 01/237 – 1061 E-MAIL: tsrb@tsrb.hr www.tsrb.hr
Education and Career Harmonisation Operations (ECHO)	Business school Varaždin (Gospodarska škola Varaždin)	Plazzeriano 4, Varaždin TEL: 042/492 – 271 E-MAIL: gospodarska.skola@skola.hr http://eco.comhr/
Pedology curriculum	High school Bedekovčina (Srednja škola Bedekovčina)	Gajeva 1, Bedekovčina  TEL: 049/213 – 514  E-MAIL: sskola-bedekovcina@kr.htnet.hr
Training firm as journey to real life experience	Economy and business administration school Bjelovar (Ekonomska i birotehnička škola Bjelovar)	Poljana dr. Franje Tuđmana 9, Bjelovar, TEL: 043/244 – 029 E-MAIL: ebb-tajnistvo@bj.htnet.hr www.economics-school-bjelovar.htnet.hr

DURATION	total budget (eur)	AMOUNT FINANCED BY THE EU
 September 2010 – September 2011	169.760,00	85%
 September 2010 – November 2011	371.256,74	80,52%
September 2010 – September 2011	254.163,07	78,23%
October 2010 – November 2011	343.754,47	84,49%
September 2010 – November 2011	188.512,06	84,01%
September 2010 – September 2011	137.304,17	85%
September 2010 – September 2011	195.678,99	80,69%

From computer to computing technician - adapting to the changes of the labour market	Technical School Čakovec (Tehnička škola Čakovec)	Športska 5, Čakovec те:: 040/328 – 881 в-мли: drazen.blazeka@ck.t-com.hr www.tsck.hr	
With Flexible Learning Approach and Curricula Innovation towards the Labour Market	The School of Electrotechnics Zagreb (Elektrotehnička škola Zagreb)	Konavoska 2, Zagreb TEL: 091/366 – 114 E-MAIL: ravnatelj@ets.t-com.hr www.ss-elektrotehnička-zg.skole.hr	
Increasing knowledge and information on Renewables	Oroslavje Highschool (Srednja škola Oroslavje)	Ljudevita Gaja 1, Oroslavje TEL: 049/588 – 740 E-MAIL: ravnateljica-sso@kr.t-com.hr www.ipa-oie.com	
AGROFUTURA	Business school Čakovec (Gospodarska škola Čakovec)	Vladimira Nazora 38, Čakovec TEL: 099/4312 – 189 E-MAIL: vladimir.masten@gmail.com www.ss-gospodarska-ck.skole.hr	
Development of new curricula and capacity building of veterinary teachers at Veterinarska škola Zagreb – VETVET	Veterinary school (Veterinarska škola Zagreb)	Gjure Prejca 2, Zagreb TEL: 01/2992 – 354 E-MAIL: ss-zagreb-524@skole.htnet.hr	
Together towards a new curriculum	Technical school Nikola Tesla Vukovar (Tehnička škola Nikole Tesle Vukovar)	Blage Zadre 4, Vukovar TEI: 098/987 – 8872 E-MAII: jasmina_sahovic@yahoo.com www.novikurikulum.com	
Introducing E-learning in order to improve teaching processes in vocational programmes in Secondary School Marko Marulić Slatina and Secondary School Isidor Kršnjavi Našice	Secondary School Marko Marulić Slatina (Srednja škola Marka Marulića Slatina)	Trg Ruđera Boškovića 16, Slatina тец: 099/814 – 4345 е-ман: kata.vidaković@gmail.com www.ss-mmarulica-slatina.skole.hr	
SB Solar Demonstration Centre	Technical Highschool Slavonski Brod (Tehnička škola Slavonski Brod)	Eugena Kumičića 55, Slavonski Brod тег: 098/698 – 770 E-ман: vikica.lukic@gmail.com	
Agritouristic Centre of Excellence (ACI) – Croatian Experience as an Idea for EU model	Agriculture School (Poljoprivredna škola Zagreb)	Gjure Prejca 2, Zagreb TEL: 01/2988 – 670 E-MAIL: ss-zagreb-542@skole.htnet.hr	
Modular Curriculum for Training Firms	Economic school "Katarina Zrinski" (Ekonomska škola "Katarina Zrinski")	Selska cesta 119, Zagreb TEL: 01/3647 – 098 E-MAII: martinafn@zrinski.org	
Next Generation	Secondary high school of Agriculture and Forestry Vinkovci (Poljoprivredno šumarska škola Vinkovci)	Hansa Dietricka Genschera 16, Vinkovci TEL: 032/306 – 601 E-MAIL: ss-vinkovci-509@skole.t-com.hr	

October 2010 – December 2011	135.921,66	84,58%
 September 2010 – September 2011	334.460,00	85%
 September 2010 – September 2011	274.978,95	82%
September 2010 – November 2011	310.139,13	84,62%
September 2010 – September 2011	266.021,87	78,42%
October 2010 – November 2011	261.439,57	81,73
October 2010 – November 2011	161.163,67	84,93%
September 2010 – September 2011	263.939,43	81,70%
September 2010 – November 2011	284.920,33	81,32%
September 2010 – November 2011	311.829,70	85%
September 2010 – November 2011	218.388,70	85%





