EdGATE

‘Vocation in Education’ Priority Areas:

Vocational Education and ICT (e-inclusion): Best Practice Manual – EdGATE Interim Report

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North East South West
INTERREG IIIC

PROJECT PART-FINANCED BY THE EUROPEAN UNION

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Foreword

'The regions of the enlarged Europe are confronted with similar economic and social challenges, in particular the rapidly evolving technological changes, the need for sustainable development, the progress of the information society and its consequences, trade globalisation, safety of supplies, unemployment, and the continuing need to promote equality of opportunities.'
Jean-Pierre Berg, Head of the ECOS Unit, Innovative Actions, European Regional Development Fund (2002)

Education definitely plays an important role to meet these challenges. The function of education in this regional development process is manifold. It could act as an ice-breaker to overcome barriers and prejudices; it could also function as a supporter and promoter of regional development; but it could also be a door-opener for new perspectives.

Having this in mind educational experts from ten regions across Europe decided to set up a network within the framework of the EU Programme INTERREG IIIC in order to share experience, develop ideas and to initiate projects for the benefit of their regions - in other words they decided to open a gate - the 'EdGATE'.

To fulfil the tasks they set themselves means a lot of work and commitment of the partners involved. The results achieved so far are very promising and the impact on regional development is more than could have been expected or dreamt of.
At this interim stage of the project let me take this opportunity of thanking all those who have contributed to the project.
In particular I would to thank the EdGATE Teams in the partner regions and the continuous support of the Joint Technical Secretariat (JTS) of INTERREG IIIC East.

My special thanks go to the coordination team in Vienna guided by its highly committed Project Coordinator - Stuart Simpson.

Franz Schimek, Head of Project

Impressum

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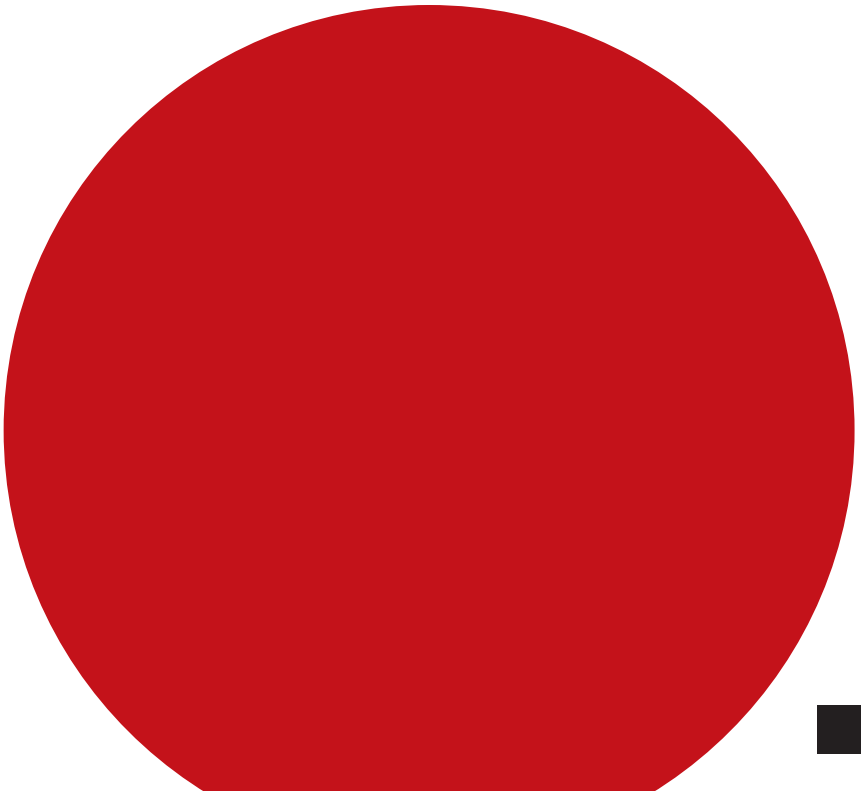
Introduction: EdGATE, the 'EdGATE Vision' and European Networking

What is EdGATE?

EdGATE (Education Gate) is a network to foster professional educational exchange between institutions and their representatives from all over Europe with the aim of strengthening economic and social cohesion. 12 partners from ten regions are involved in the project.

EdGATE is part-financed by the EU in the context of INTERREG IIIC, a programme that helps Europe's regions form partnerships to work together on common projects; by sharing knowledge and experience. These partnerships enable the development of solutions to common economic, social and environmental challenges. There are currently 270 INTERREG IIIC projects running involving 2700 local and regional actors from 50 countries.

EdGATE is:
Management and Coordination
Organisation of the project.
Regional Implementation
Regional decision-makers are cooperating to find ways and means how specific project outputs can help strengthen their regions.
Mobility and Exchange
Regional experts are meeting to exchange best practice models and to develop new educational concepts for their regions.
Pilot project: European Regional College (ERC)
Regional experts are developing a concept for a new type of European school for the 6-18 year-olds (the European Regional College (ERC) – the 'EdGATE vision').
Dissemination
Information and publicity measures are informing an interested public about the progress and outcomes of the project.



The EdGATE Vision – MOBILITY for Europe – a MOBILE Europe - The European Regional College (ERC)

A modern united Europe needs **MOBILITY**. Why?
The European labour market is in a process of transition. Citizens, if necessary, might have to move to other European regions. An important consideration for parents contemplating such a move is the type of schooling for their children. If families have to move to another region, they will want to find a school that, in terms of its basic concept, is similar to the one attended at home.

In this context, one of the main aims of EdGATE is to develop a new educational concept for a European Regional College (ERC) that will enable European students aged 6-18 to become mobile in a united Europe of tomorrow.

MOBILITY of Communication – ERC students will be perfect European ambassadors with outstanding competence in their mother tongue plus English plus another European language. They will learn to listen to others and communicate without difficulty.

MOBILITY of Thinking – ERC students will learn to be mobile in thinking, studying according to a European Curriculum and focusing on European themes in a new study field called 'European Studies'. They will learn to understand European issues and positively contribute to the region and the wider society they are living in.

MOBILITY of Interaction – ERC students will learn to work and cooperate with other European students either at their own ERC or in other European regions. They will learn to face challenges, solve problems and look for common solutions with colleagues from all over Europe.

European Networking – EdGATE Component 3: Mobility and Exchange

An important aim of EdGATE is to bring together regional educational institutions, their experts and decision-makers in a lasting Europe-wide network.
Shared knowledge and experience is being used in a networking process to identify best practice and develop joint concepts to improve regional educational policies, which in turn are helping to strengthen economic and social cohesion within the European Union.

Component 3: Mobility and Exchange is dedicated to networking ***between*** the regions. It is also the component in which the majority of content work is being carried out. The aim is, in joint exchange between the regions, to understand and describe the connection between educational measures and a positive regional economical development.

Goals:
- Building durable networks between the project partners, regional representatives and regional experts, which are supporting and fostering a dynamic exchange of knowledge and experience between the various regions and varying actors, and as a result documenting the connection between education and regional development
- Fostering and supporting exchange between regional experts through workshops and study visits
- Fostering and supporting partner mobility
- Exchanging and comparing *Best Practice*
- Producing *Best Practice Manuals*, containing examples of best practice in various educational areas – in the EdGATE context they are called *Priority Areas*. Based on this *Priority Areas New Models Catalogues* are being developed
- Supporting the development of a concept for a European Regional College.

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In the context of this component, workshops and study visits are being carried out focusing on the eight listed Priority Areas. These Priority Areas represent the central content axis of the EdGATE operation and can be divided into the following four emphases areas:

Equality in Education	**Europe in Education**
1) Social inclusion 2) Gender mainstreaming	5) European dimension in education 6) Modern language tuition
Quality in Education	**Vocation in Education**
3) Quality assurance 4) Teacher education	7) Vocational education 8) ICT (e-inclusion)

Results are being implemented at regional level and will contribute to the development of the concept for a new type of regional school for students aged 6-18 (the European Regional College - ERC) for the benefit of the ordinary European citizen – the 'EdGATE Vision'.

Priority Areas Workshop 4 'Vocation in Education' focussing on Priority Areas 7) Vocational Education and 8) ICT (e-inclusion)

On 23-24 January 2005 Regional Experts from the EdGATE partner regions met in Vienna, Austria to exchange Best Practice models from their regions in the Priority Areas: 7) Vocational Education and 8) ICT (e-inclusion).

The following publication will give insight into the varying models and challenges throughout Europe in the area of 'Vocation in Education' – Vocational Education and ICT (e-inclusion) - based on spoken and written statements made by these experts as well as drawing conclusions and making suggestions for the way ahead.

For updates on the Priority Areas 7) Vocational Education and 8) ICT (e-inclusion) visit 'Project Results' at www.edgate.eu.com

Introductory Statement

Vocational Education
'The European Council set the strategic objective for the European Union to become the world's most dynamic knowledge-based economy. The development of high quality vocational education and training is a crucial and integral part of this strategy, notably in terms of promoting social inclusion, cohesion, mobility, employability and competitiveness.'
(Copenhagen Declaration, 2002)

ICT (e-inclusion)
'The role that ICT plays for fostering production in the economic system should not obscure the role that ICT may play in fostering citizenship and personality building in the education system.'
(European Commission: Implementation of 'Education & Training 2010' work programme, Working Group C 'ICT in education and training' progress report, November 2004)

The necessity of Vocational Education and ICT (e-inclusion) in the European context
Apart from broad general education the technical and vocational education sector has to provide students with high quality initial technical and vocational training. This is all the more important considering one of Europe's most pressing problems that is generally high unemployment and youth unemployment rates. Social peace is at stake if society cannot provide young people with realistic prospects for their future.
The main objectives of vocational education are therefore not only to reach a higher level of occupational mobility and flexibility, but also to develop the individual student's creativity, to foster critical thinking, teamwork, communication skills and social consciousness.

The importance of Vocational Education and ICT in the context of the Vienna region
In the Vienna region, Vocational Education and especially the dual system of company-based training complemented by education in part-time vocational schools for apprentices plays an important role by offering opportunities to less privileged young people who might not have access to higher education. It contributes to social cohesion and to the integration of young people with a background of immigration. The 'girls go tech' initiative will contribute to reduce the gender gap in the technical sector which is also a main objective of the European Union.

Vocation in Education
In the context of the EdGATE project, the Priority Area Vocational Education and ICT has to provide an important input for the concept of a European Regional College by defining goals for entrepreneurship and civic education and by defining the role of ICT in teaching and learning including the consequences for teacher training.

As the following pages will show the main emphasis of Vocational Education and ICT is to reduce – in the EdGATE regions – on the one hand a lack of entrepreneurial thinking and on the other hand the so-called 'digital divide'.

Katharina Fillinger, EdGATE Regional Expert, Vienna

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Vocation in Education – Vocational Education

A journey through the EdGATE landscape

***Explanation**: In many cases, regional educational policy is identical with national education policy. For this reason the following statements taken from written and spoken statements from the EdGATE Regional Experts before and during the Priority Areas Workshop 4 'Vocation in Education' focussing on the Priority Area 7) Vocational Education (23-24 January 2006 in Vienna, Austria) quote the country.*
In some cases, the region is mentioned where it refers to local and regional educational measures.

Vocational education varies from region to region.
Several challenges for development were identified.

In *Poland* national career classifications distinguish between careers that can only be taught at four grade secondary vocational schools and those which can be taught at two or three grade basic vocational schools.
Vocational schools offer practical training on a regular weekly basis in their own school workshops and laboratories, in training centres, and at specially organised training sites in companies in the form of apprenticeship as well as temporary placements which usually last 4-6 weeks per year.
Some basic vocational schools only admit candidates for the first year of vocational training who already have a three year apprenticeship contract. They are taught general and theoretical subjects (two or three days a week); receive wages and are treated as a category of employees protected by special regulations.

Ms Kucinska, Regional Expert from Cracow, says:
'Labour markets are very unpredictable therefore it is necessary to be more proactive in order to make people more familiar with market economy, mobility and lifelong learning. Business education should be integrated at all levels.'

In *Austria* Vocational Education and Training Schools/Colleges provide initial vocational training in addition to a broad general education from the ninth year of schooling.
There are various types: Part-time Vocational Apprenticeship Schools (dual system), Schools and Colleges of Engineering, Business Schools and Colleges of Business Administration, Schools and Colleges for occupations in the social services sector, Nursery Teacher Training Colleges and Colleges for Agriculture and Forestry. These Schools and Colleges can last between one and five years. Part-time Vocational Apprenticeship Schools usually last for three years.

In *Romania* students have to alternate between full-time and vocational studies. Qualifications are offered by a variety of institutions.

Bosnia Herzegovina has a part-time dual system and there are many Vocational Colleges providing training for a variety of trades.

In the *Ukraine* there are special Vocational Colleges that offer one or two or four year full-time vocational courses. There is no dual system for apprenticeships and part-time education starts only at university level. The vast majority of students attempt to go on to university education hoping for better career prospects.

Challenges for vocational education: there are several aspects that have to be taken into consideration when thinking about improvements in vocational education.
One important challenge is the problem of unmotivated students.

Ms Kucinska, Regional Expert from Cracow, is of the opinion that:
'It is often difficult to find out what motivates learners. But it is important for them to have the feeling of success and self-esteem.'

Ms Fillinger, Regional Expert from Vienna, shares this opinion:
'Students are often not aware of why they have to go to school. This is a serious issue for teacher training: how to promote positive attitudes and student motivation?'

Nowadays it is necessary that students have more than just 'normal' professional knowledge; soft skills are increasingly required and are just as essential as vocational training.

Another issue of importance is the unappealing image that often surrounds certain vocations. To prevent increased unemployment and to assure the availability of these professions counter-measures have to be developed and implemented.

Ms Njuhovic, Regional Expert from Sarajevo, states that:
'Too many students want to become hairstylists and not enough are interested in becoming plumbers. Therefore we have too many hairstylists and not enough plumbers.'

Examples of Vocational Education Best Practice in the EdGATE regions

In *Poland* vocational training models are implemented at district/regional and not at a national level. Basically, the promotion of vocational education in the *Małopolska* region aims at: lowering the unemployment rate, providing a higher quality of vocational education, providing young persons with knowledge of the market economy and its institutions, fostering a readiness for life-long learning and developing general employees' skills and abilities.
In order to achieve these aims, the task of maintenance, administration and financing of vocational schools has been transferred to district and regional self-governments. District self-governments hold the responsibility of providing adequate vocational school networks, according to local needs and conditions as well as guaranteeing better access to facts and data on the unemployment rate and employment opportunities. They are also responsible for the development of career advisory services, the promotion of secondary education and programmes and projects supporting the employment of school leavers; for developing new curricula for vocational schools, and implementing a new system of examinations leading to career certification. Vocational education is obligatory in all secondary schools.

An important development in *Austria* regarding Part-time Vocational Apprenticeship Schools (dual system) is the Youth Education Promotion Act (JASG), which was first introduced in 1998 with the aim of reducing increasing youth unemployment.
It provides special courses for young people who cannot find apprenticeship employment, and offers them the opportunity of receiving the practical training they would normally receive in companies during their apprenticeship in specialised institutions funded by the government.
In the academic year 2006/2007, nearly 2000 apprentices in 35 different trades benefited from this measure in the *Vienna* region.

Vocation in Education – ICT (e-inclusion)

A journey through the EdGATE landscape

***Explanation**: In many cases, regional educational policy is identical with national education policy. For this reason the following statements taken from written and spoken statements from the EdGATE Regional Experts before and during the Priority Areas Workshop 4 'Vocation in Education' focussing on the Priority Area 8) ICT (e-inclusion) (23-24 January 2006 in Vienna, Austria) quote the country.*
In some cases, the region is mentioned where it refers to local and regional educational measures.

Integration of ICT in the curricula.

In the Canton *Sarajevo* ICT is integrated in the curriculum as a compulsory subject and as an interdisciplinary tool at all levels of education. During primary and secondary education students are trained to work with computers, including knowledge of the components of the computer; they gain basic word processing skills as well as the use of presentation tools and the Internet.

In the *Austrian* Part-time Apprenticeship Vocational Education sector a number of new trades have been created: EDP equipment trader, IT merchant, EDP technician, IT electronic technician, applied data processor, communication technician specialising in electronic data processing and telecommunication, and media expert specialising in design or in media technology.
In full-time vocational education, technical departments with a special IT focus have been created such as information technology, technical computer science, computer and control technology, network design and management, internet and media technology, business information technology, electronics in telecommunication, etc.
Also a number of colleges with an IT profile have been created, specialising for example in entrepreneurship and management (including digital business), information management or business computer science – digital business, media and information studies, communication and media design, information management and many more areas.

In *Poland* ICT inclusion in the core curricula for academic school subjects is obligatory. Core curricula for particular careers describe teaching aims, content, student achievement, and teaching environment in a way that provides for ICT inclusion. Recommended handbooks, teaching materials and aids as well as guidelines on organisation and methods of teaching clearly refer to ICT inclusion.

Availability of funding for hardware and teacher training.

In *Kiev* there have been heavy investments in hardware and each Kiev school has a smart board; unfortunately in many cases teachers are not confident enough to use them to the full extent.

In *Romania* all schools that focus on technical and vocational training are equipped with networks and internet. In *Calarasi* teachers are supported by the Microsoft Cooperation with the aim of training them to use IT.

In *Cracow* financing is available for IT in-service courses for teachers as part of their career development provision.

Examples of ICT (e-inclusion) Best Practice in the EdGATE regions

In 2003 in *Austria* a large-scale initiative was launched to supply about 25% of instruction in all subjects with learning soft- and hardware.
Within the context of the campaign 'eFit Austria – learning, teaching and research for a networked knowledge-based society', attention is placed on teaching with the new media, an IT training campaign, the eLearning portal http://www.bildung.at and educational content in electronic format and the promotion of IT-infrastructure and IT-related school developmental measures.

In particular, the City of Vienna has invested huge amounts in equipping schools with educational hard- and software e.g. every primary school classroom in Vienna has two computers linked to the internet, printers, and educational software.

In *Bosnia Herzegovina*, with the financial assistance of the World Bank, the first systematic attempt to introduce EMIS (Education Management Information Systems) in primary and secondary school was established. The aim of the system is to achieve a rational management of the limited resources in education.
In 109 schools in the Canton *Sarajevo*, the newly developed software was successfully applied. EMIS supports the development and implementation of an initial set of education management information system software modules; the strengthening of the system platforms (hardware) of the Ministry of Education of Republika Srpska and of all the cantonal Ministries of Education in the Federation of Bosnia Herzegovina; the development and delivery of professional management training in information systems for school principals, school accountants and the staff from the Ministries; and the piloting and dissemination, on the basis of user demand, of a per student education funding model to include an analytical framework as well as accounting documentation and procedures.

Measures implemented in *Małopolska* schools to promote ICT inclusion aim at providing in-service training for teachers on how to use ICT in education, providing adequate hardware, providing adequate software and finding additional financial means to cover costs generated by ICT inclusion. In order to achieve the above mentioned aims courses on ICT inclusion are offered by in-service teacher training centres, universities and other institutions, funded by national, regional and district administrations and self-governments. Modules for teachers on ICT inclusion are incorporated into various courses and projects provided by administrative bodies, institutions and organisations and national and local projects funded from the national budget, self-governments, EU and other sources. Projects have been developed and implemented, to provide schools, psychological centres and special schools with computer classrooms, multimedia-centres, library multimedia-centres, hardware and software items, etc.
Students are encouraged to work on projects and enter competitions related to ICT, offered by universities, private enterprises and educational institutions. An example is the Motorola Project where students are awarded prizes for the best presentations of the use of ICT for school purposes.

Summary and Outlook

Vocational Education & ICT (e-inclusion)

The participants of Priority Workshop 4 'Vocation in Education' agreed on summarising in English different national and regional programmes and models with recommendations from the author(s) and to create input for the European Regional College concept in the following areas:

- Examples of enterprise education (evaluation)
- Examples of civic education
- Examples of inclusion
- Examples and the teaching of communication and presentational skills
- Examples of ICT best practice in the regions (e.g. notebook classes, etc)
- Examples of community learning
- Statistics: regional % of youth unemployment & % of regional household internet access

Input for European Regional College (ERC) concept:

- Defining goals for enterprise, entrepreneurship and civic education
- Possibilities and opportunities for social inclusion – advantages and disadvantages
- Defining the role of ICT in teaching and learning (blended hardcopy/digital teaching material/software) – e-inclusion ('the digital divide'); library/Information Centre/Internet Café (wireless LAN).
- Defining the role of ICT: consequences for teacher training.
- How should the ERC be linked to the community (culture and sport, local and regional companies, offices, institutions, etc)?

EdGATE Vocational Education and ICT (e-inclusion) Regional Experts

Richard EASTON: Edinburgh; University of Edinburgh

Katharina FILLINGER: Vienna; Federal Pedagogic Institute in Vienna

Teresa KUCINSKA: Cracow: Kuratorium Oswiaty w Krakowie

Olena KUZNETSOVA: Kiev: Main Board of Education

Azemina NJUHOVIC: Sarajevo; Ministry of Education and Science Canton Sarajev**o**

Aurel PEICU: Calarasi; School Inspectorate of Calarasi County

The EdGATE Partners

There are 12 partners from ten European regions involved in the EdGATE operation. Five regions are in EU Member States and five regions are from so-called Third Countries. The European Office of the Vienna Board of Education is the Lead Partner (LP).

Partners:

European Office, Vienna Board of Education (AT) - (Lead Partner)

Moray House School of Education, University of Edinburgh (UK)

Cracow Pedagogical University (PL)

Federal Ministry of Education and Science, Bosnia Herzegovina (BiH)

Office for Education and Sport, City of Zagreb (HR)

Department of Education, City Assembly of Belgrade (SCG)

School Inspectorate of the County of Calarasi (RO)

Open & Distance Learning Centre, Calarasi (RO)

Main Education and Science Board, Kiev City State Administration (UA)

Ministry of Education, Science and Cultural Affairs, Mecklenburg-West Pomerania (DE)

Institute for School and Further Education, Mecklenburg- West Pomerania (DE)

State Institute for Schools, North-Rhine Westphalia (DE)

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