



Professional Environmental Training in Eastern Europe: Challenges and Opportunities

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Issues addressed:

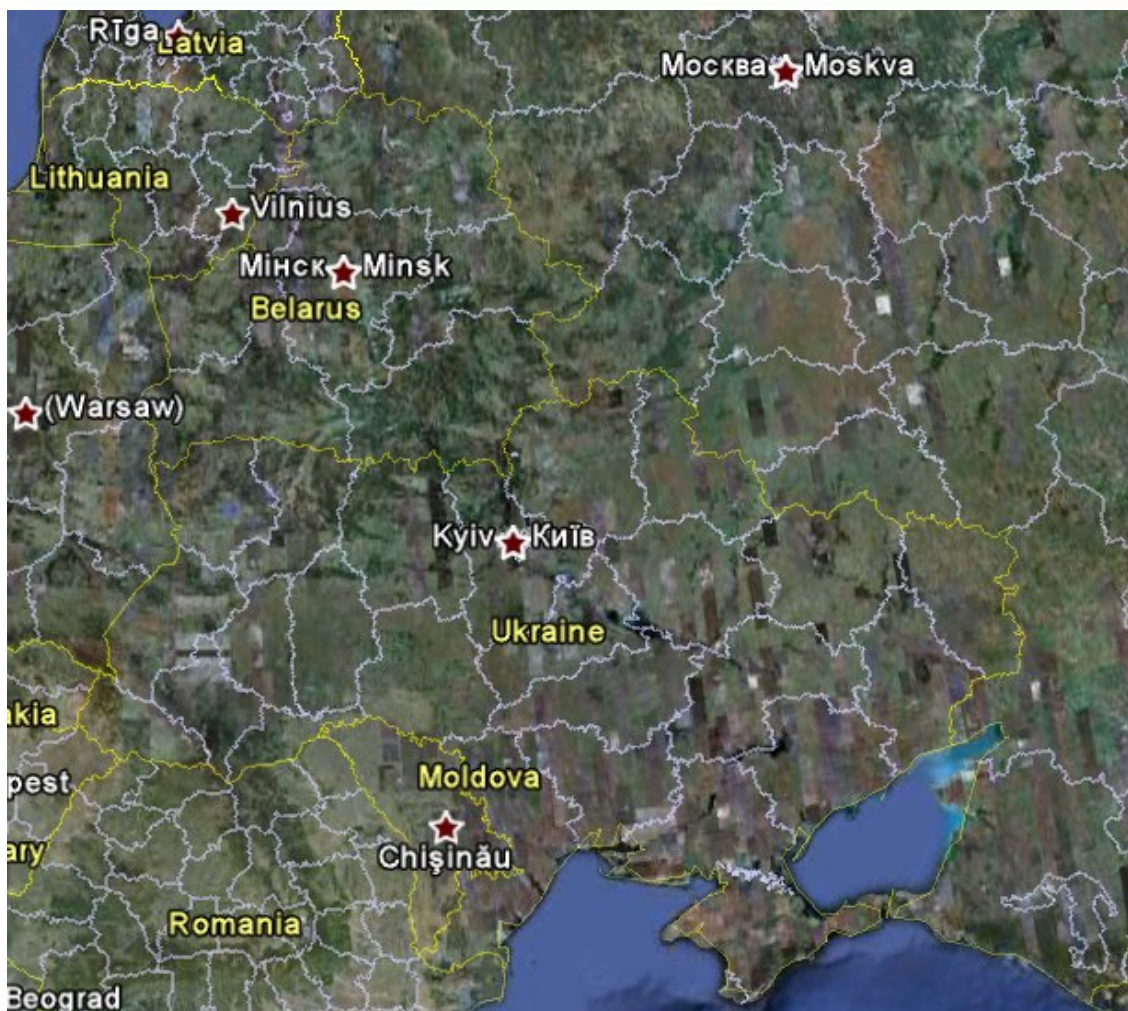
- Professional environmental training in Eastern Europe: legislation and institutional set-up
- Contents and process
- International assistance: formulated objectives vs. implementation problems
- Interventions needed

Experince from:



- TEMPUS SCM Analysis and Action for Higher Environmental Education in Belarus
- TEMPUS JP Improvement of education in the field of environmental management

Legislation and institutional set-up (1)



Bologna-oriented:

- Moldova 
- Ukraine 
- Russia 

Unchanged:

- Belarus 

*Any effect?
Too early to judge...*



Legislation and institutional set-up (2)

- Strong traditions of top-down governance in education
- Minimum or no university autonomy; minimum or no autonomy of units within a university etc
- National Ministries of Education setting up standards and verifying that curricula and study plans conform with them



Professional environmental training

- No competition between universities
- Wrong motivation of applicants/students
- Accreditations do not pursue objectives of academic excellence
- => No incentives to learn more / teach better
- Thinking themselves out of the international context
- No need to engage in scholarly networks / interact with employers to increase the competitiveness
- => Isolation and segregation of the national environmental educational space

Contents

Russia, BSc 		Belarus, diploma 	
Экология (101)	Ecology (101)	Радиоэкология (1)	Radioecology (1)
Экологическая геология (4)	Environmental geology (4)	Экологический менеджмент и аудит в	Environmental management and audit for industries (1)
Природопользование (56)	Use of natural resources (56)	Охрана окружающей среды и рациональное использование природных ресурсов (1)	Environmental protection and wise use of natural resources (1)
Биоэкология (37)	Biological ecology (37)	Биоэкология (4)	Biological ecology (4)
Геоэкология (38)	Geoeology (38)	Геоэкология (2)	Geoeology (2)
Агроэкология (36)	Agroecology (36)	Экология сельского хозяйства (1)	Agriculture and environment (1)
Защита окружающей среды (177)	Protection of environment (177)	Экологический мониторинг,	Environmental management and audit (1)
Природообустройство (17)	Management of nature (17)	менеджмент и аудит Медицинская Экология (1)	Medical Ecology (1)
Природоохранное природообустройство территорий (17)	Environmental management of nature for territories (17)		

Opinion of employers (1)

22 questionnaires, spring-summer 2008, Belarus:

Qualification and suitability:

- 55% do not have an opinion
- 33% believe that graduates are adequately trained
- 15% feel that expertise of graduates is not sufficient

Environmental experts have a degree in environment:

- 64% have no information
- 18% have a degree
- 18% do not have a degree
- 64% of companies need no an expert in environment

22 questionnaires, spring-summer 2008, Belarus:

Employment perspectives:

- 82% will not employ experts in environment
- 18% have an interest in experts in environment
- 36% have positions for experts in environment
- 27% do not need experts in environment with degrees in environment

Quality of professional training:

- 50% have no opinion
- 50% think it is high

22 questionnaires, spring-summer 2008, Belarus:

Competences needed:

- Professional skills
- Self-learning
- Work in team
- Communication (social) skills

Practical skills:

- Understanding legislative and regulatory aspects
- Organisational skills
- Understanding of theoretical and practical issues

31 questionnaires, spring-summer 2008, Belarus:

Job hunting and work experience:

- 90% found relevant jobs
- 42% got from the university enough knowledge to do the job; 29% missing some, and 29% missing a lot
- 53% are optimistic about their employment perspectives; 47% are not
- Most common employers: planning or industrial design companies, research, teaching in schools and universities, PhD studies

Opinion of alumni (2)

31 questionnaires, spring-summer 2008, Belarus:

Useful competencies acquired:

Essential competencies	To what extent they were developed
Responsibility for the quality of output	To a certain extent
IT skills	To a full extent
Fundamentals of the theory	To a certain extent
Research skills (starting, planning and developing project)	To a certain extent
Ability for practical application	To a certain extent
Social skills (networking, negotiating etc)	To a little extent
Strategic thinking, forecasting	To a little extent
Creativity	To a little extent
Decision-making	To a certain extent
Search, analysis and presentation of information	To a certain extent
Individual time management in a teamwork	To a certain extent

Opinion of alumni (3)

31 questionnaires, spring-summer 2008, Belarus:

Useful competencies acquired:

Essential competencies	To what extent they were developed
Entrepreneurship	To a little extent
Teamwork	To a little extent
Need to be successful	To a certain extent
Criticism and self-criticism	To a full extent
Interpersonal skills	To a certain extent
Basic knowledge of different disciplines / subject areas	To a full extent
Writing, speaking and presenting on a foreign language	To a little extent
Writing, speaking and presenting on a national language(s)	To a little extent
Self-development and self-improving	To a certain extent
Analysis and integration	To a certain extent
Ethical values	To a full extent



Opinion of students (conclusions)

201 questionnaires, spring-summer 2008, Belarus:

- Mostly found what they wanted
- Interest to look for relevant jobs
- Most interested in specialisation courses (+foreign language at one university)
- Least interested in humanities (non-specialisation)
- Find classes and equipment “satisfactory”
- Teachers are knowledgeable and know how to explain, but do not use many teaching (especially interactive) tools
- Want separate student evaluations of courses and teachers
- Feel they can develop most of important competencies while studying at the university
- Would like the competence of English writing and speaking be developed better

Problems recognised / addressed:

- EC TEMPUS:
 - *Ignored Bologna process (development of ECTS-compatible systems, quality assurance tools etc) (- -)*
 - *(Supposedly) low quality curricula / insufficient capacity to develop it (curriculum development actions) (+ -)*
 - *Low integration into the EU research/educational space (encouraging the engagement into training networks) (+ +)*
- Nordic Council:
 - *Lack of university autonomy (financing a private university) (?)*



The problem that **CAN** be addressed

- Undeveloped mechanism for the formulation of educational objectives (competences etc): employers are unqualified to identify them, while educators do not have skills to do this on their own
- => simulating the environment / establishing good practices for learning/teaching (international expertise needed)



Actions to be taken

- Simultaneous curriculum and institutional development actions with heavy mobility packages
- Accent on the participation of academic partners from Central Europe that experienced the transformation
- Emphasise on quality control: involving external experts, setting up an advisory board



1. The value of social learning cannot be overestimated
2. International mobility cannot be too much
3. Too difficult to make people to talk to each other if they are not accustomed too
4. For a lively discussion one needs to secure people from outside (asking unexpected questions) and a foreigner to look after