E-learning for Sustainable Development: EVS Joop de Kraker

31 March 2014, Tynec, Czech Rep.

european

seminar



E-learning for Sustainable Development

- Education for Sustainable Development
- Role of universities
- Competences
- E-learning
- EVS (European Virtual Seminar on Sustainable Development)

E-learning for Sustainable Development

Education for Sustainable Development

- Agenda 21 (UNCED, 1992): reorientation of education towards sustainable development
- UN Decade of Education for Sustainable Development (2005-2014)





Education for Sustainable Development



EU SD Strategy (2006): Education and training

"Education is a prerequisite for promoting the behavioural changes and providing all citizens with the <u>key</u> <u>competences needed to achieve sustainable</u> <u>development</u>. Success in reversing unsustainable trends will to a large extent depend on high-quality <u>education for sustainable development</u> at <u>all levels</u> of education."



E-learning for Sustainable Development

Role of universities in SD

Operational management:'Greening the Campus'

- Research

– Education

E-learning for Sustainable Development



- EU Sustainable Development Strategy:
 - education should provide all citizens with the key competences needed to achieve sustainable development
 - competences:
 - 'combinations of knowledge, skills, and attitudes appropriate to the context'
 - describe the desired 'output' of HESD

Sustainable Development

- Complexity
 - scales, domains, feedbacks
- Uncertainty
 - mechanisms, impacts, solutions
- Diversity in perspectives
 - socio-economical,
 - cultural,
 - geographical, disciplinary



Sustainable Development

- Effective solutions integrate:
 - different scientific disciplines (natural, social)
 - different types of knowledge (scientific, experiential)

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- different perspectives of stakeholders



Transboundary competence

- The ability to think, communicate, collaborate and learn across the boundaries of different perspectives
- Productive use of diversity in perspectives:
 - use diversity as a source of inspiration for better, socially robust solutions
 - prevent diversity being a source of conflict and political deadlock





Transboundary competence:

- developed through collaborative learning in teams in a cross-boundary context
- use a web-based learning platform to bring dispersed students and teachers together (of different disciplines, cultures, countries, ...)

 EVS: students in virtual, international, multi-disciplinary teams work together on case studies in sustainable development



What is EVS?



- An international course: >10 nationalities
- A multi-disciplinary course: >10 disciplines
- A joint, cooperative course: >10 universities
- A collaborative course: students work together in teams
- A course on Sustainable Development & Europe: 7 case studies
- A web-based (virtual) course: social network platform + extra tools





EVS: History 2001-2013

Year	Universities	Countries	Groups	Case studies	Students enrolled
2001	9	4	6	3	59
2002	11	5	6	4	45
2003	15	9	11	5	61
2004	18	11	13	5	78
2005	12	9	10	5	68
2006	9	8	8	6	36
2007	6	5	3	3	22
2008	13	11	8	5	58
2009	11	9	8	7	74
2010	12	10	9	9	88
2011	12	10	9	7	73
2012	12	10	9	7	74
2013	10	9	9	6	61

EVS 2013-2014

- 10 universities
- **61 students** •
- 9 student groups

University of Antwerp

6 case studies

european seminai

Carl von Ossietzky Universität Oldenburg **FernUniversität Open Universiteit** Hagen **Charles University in Prague Karl-Franzens University in Graz University of Bucharest University of Maribor**

Universidade Aberta

University of the Aegean

EVS: Major goals



- Understand the concept of sustainable development and apply it to a case study in a European context
- Collaborate with students from other disciplines, countries and cultures, using internet technology



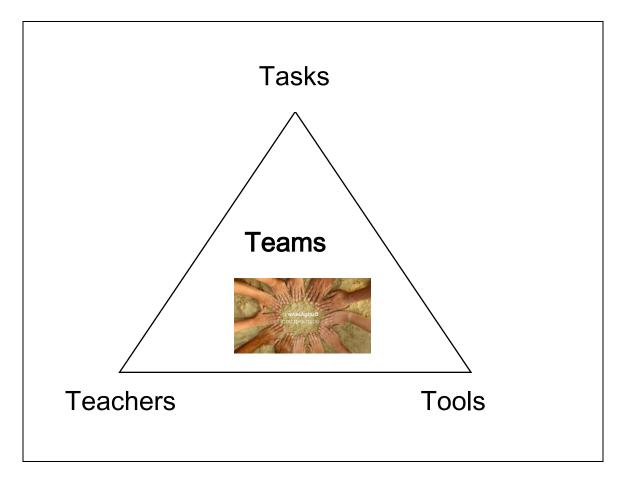


EVS - Stages

Stage	Period	Study load	Activities	Deliverable
Student enrolment & orientation	October-November	5 h	Enrolment per university; Registration on EVS platform; Individual activities	Personal profile page
Group formation & activities	November	10 h	Discuss SD concept; Apply to case study; Inventory of expertise	Case-specific definition of SD
Group research proposal	December	25 h	Joint development of research proposal	Draft + final research proposal
Research & report writing	January-February	50 h	Literature+data collection; Analysis of results; Discussion of conclusions; Draft report writing	Draft group research report
Final report & presentation	February-March	30 h	Rewriting draft report; Making presentation; Reflection on group process	Final research report; PPT presentation; Group reflection report

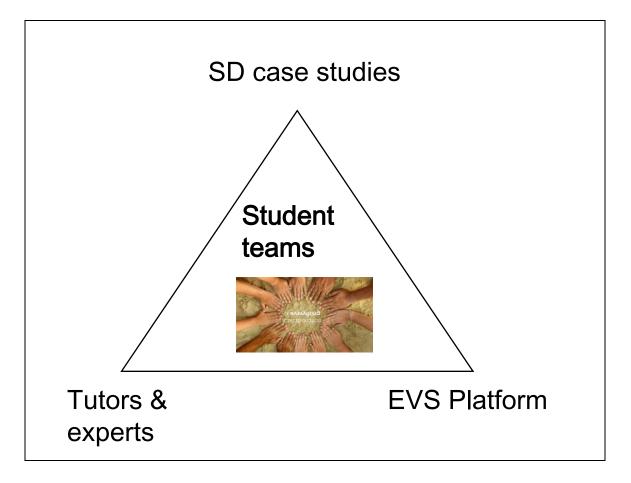






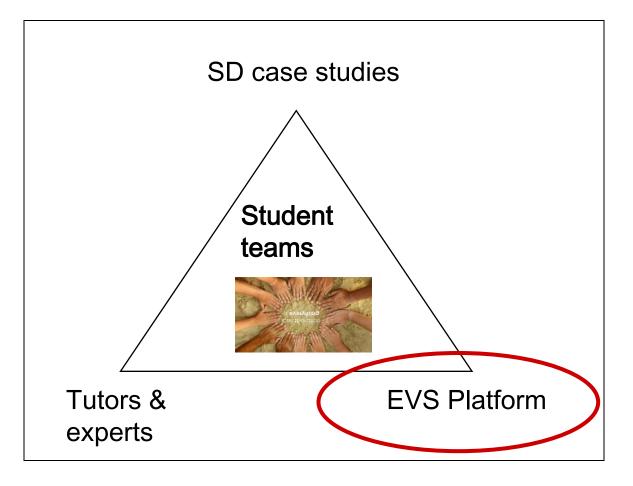
EVS: Key components

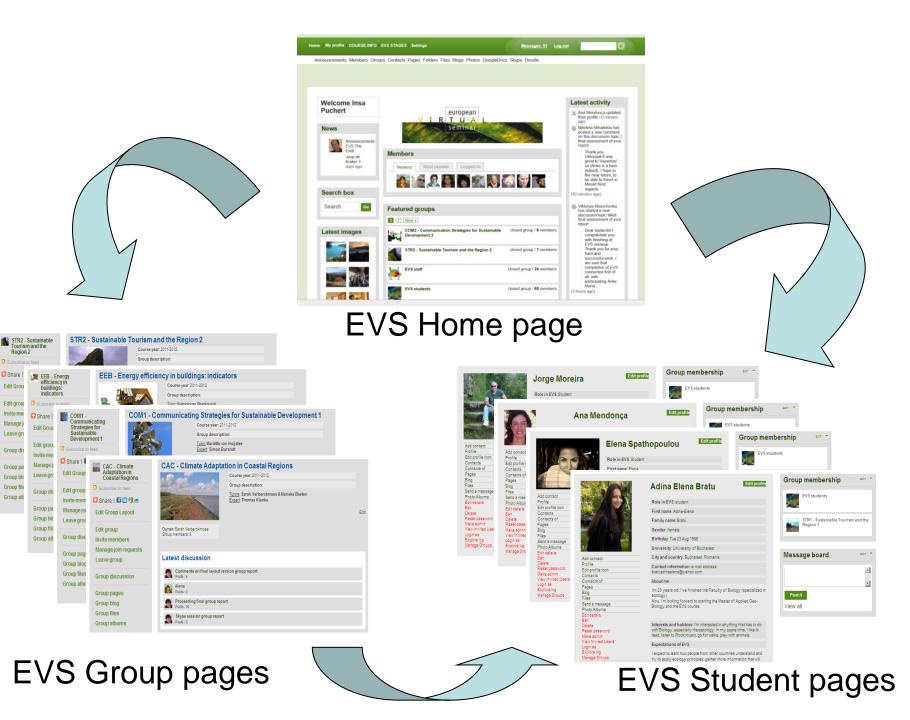




EVS: Key components





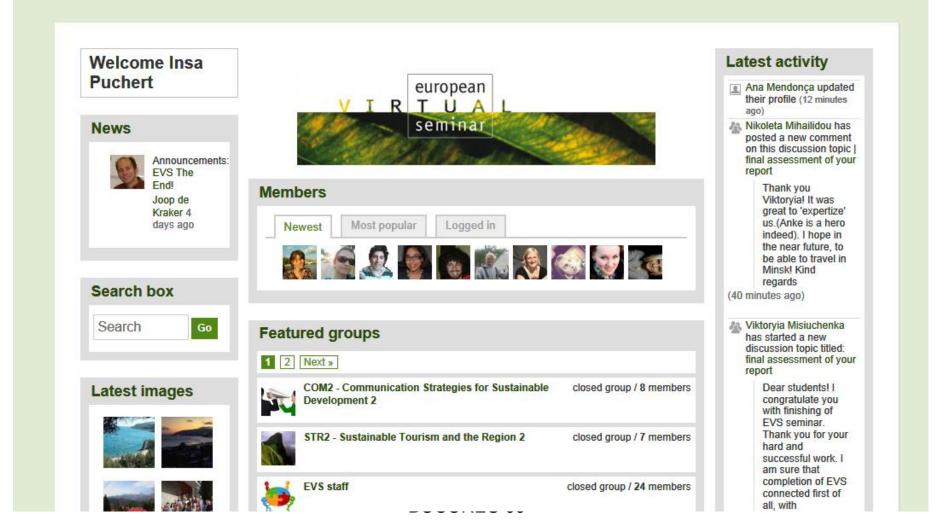


EVS Platform - Home

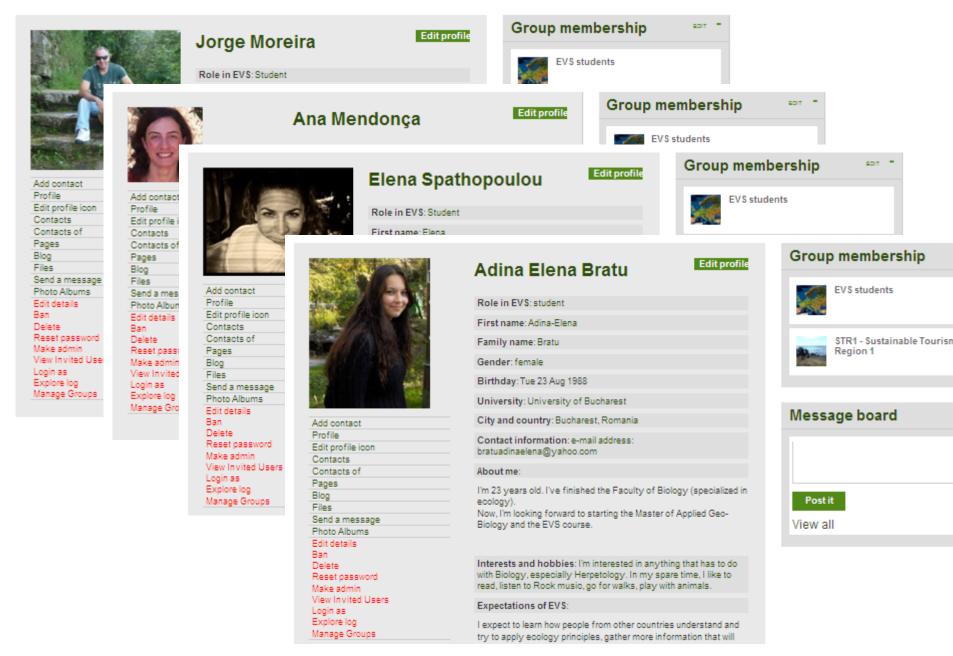
Home | My profile | COURSE INFO | EVS STAGES | Settings

Messages: 91 Log out

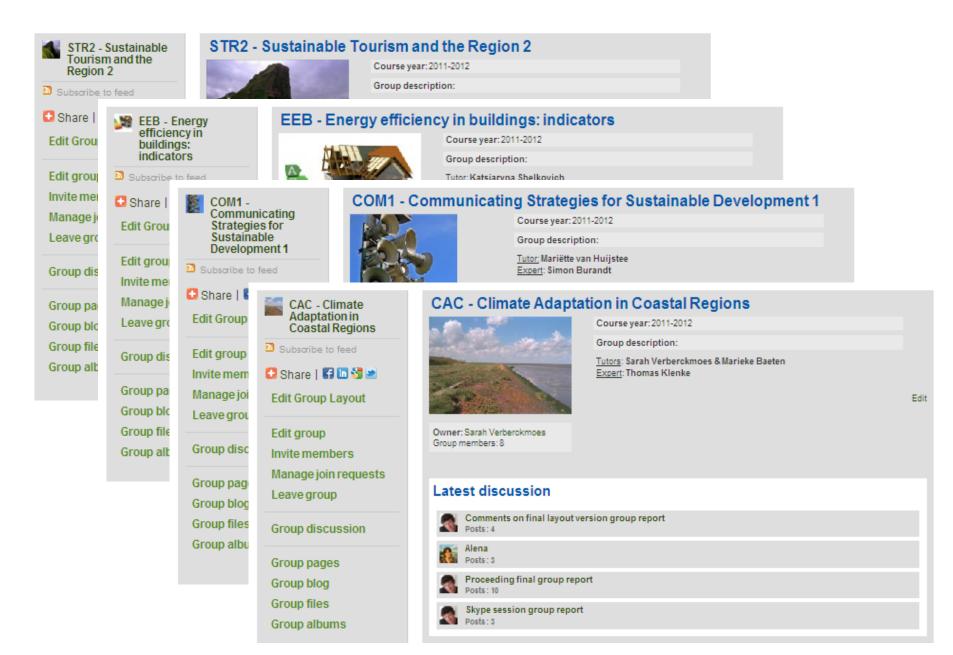
Announcements Members Groups Contacts Pages Folders Files Blogs Photos GoogleDocs Skype Doodle



EVS Platform – Profile pages



EVS Platform - Groups



EVS Platform – External tools



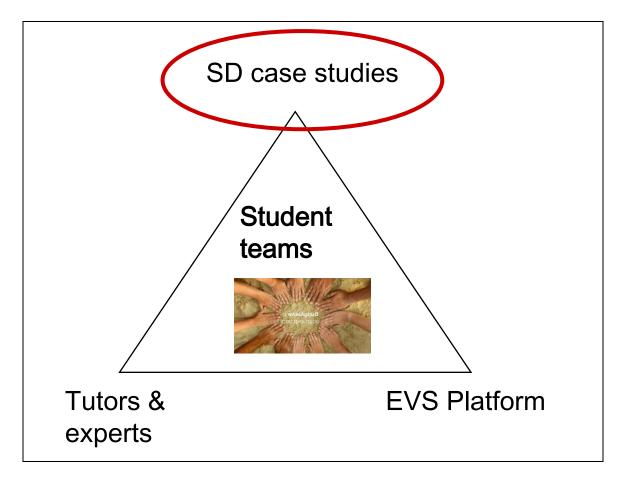


- 1. Skype: real-time group discussions
- 2. Doodle: set appointments for Skype
- 3. Google-docs: simultaneous working on documents



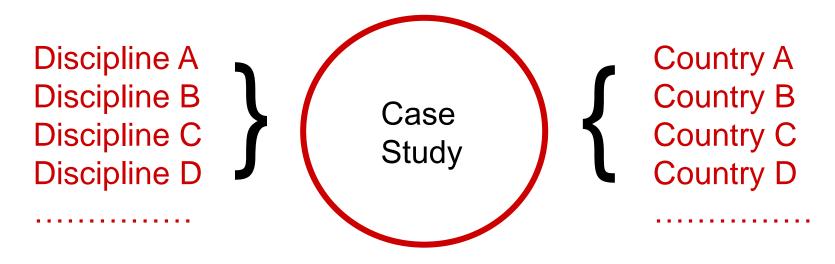


EVS: Key components





Exploiting student group diversity in knowledge & views



International (European) & Multi-disciplinary issues



- CAC = Climate Adaptation in Coastal Regions
- DEC = Decoupling of Environmental Pressure from Quality of Life
- GEO = Geoconservation in Hateg Country Dinosaur Geopark
- SHP = Sustainable Hydropower in the European Union
- STR = Sustainable Tourism and the Region
- URB = Urban Waste Management



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CAC - Climate Adaptation in Coastal Regions



Course year: 2013-2014

Group description:

The goal of this case study is to develop a guideline/framework for sustainable land use management strategies in low lying coastal areas.

Tutors: Sarah Verberckmoes

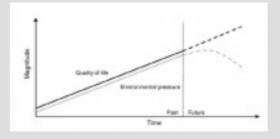
Expert: Leena Karrasch

How to make coastal areas climate proof?



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DEC - Decoupling of Environmental Pressure from Quality of Life



Owner: Laura Henderson Group members: 10 Course year: 2013-2014

Group description:

The goal of this case study is to compare decoupling of several selected environmental pressure indicators from quality of life across various European countries.

Tutor: Laura Machakova-Henderson

Experts: Tomas Hak & Jan Kovanda

Has decoupling of environmental pressure and growth been achieved?



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GEO1 - Geoconservation in Hateg Country Dinosaur Geopark



Course year: 2013-2014

Group description:

The goal of this case study is to come up with proposals for the sustainable development of the Hateg Country Dinosaurs Geopark, for example based on a comparison with other geoparks or regional development projects.

Tutor: Gabriela Iftode

Expert: Alexandru Andrasanu

How can Hateg Geopark be developed more sustainably?



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GEO2 - Geoconservation in Hateg Country Dinosaurs' Geopark



Course year: 2013-2014

Group description:

The goal of this case study is to come up with proposals for the sustainable development of the Hateg Country Dinosaurs Geopark, for example based on a comparison with other geoparks or regional development projects.

Tutor: Cristian Ciobanu

Expert: Alexandru Andrasanu

How can Hateg Geopark be developed more sustainably?



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SHP - Sustainable Hydropower in the EU



Course year: 2013-2014

Group description:

The goal of this case study is to analyse the sustainability of hydropower in the European Union and to identify solutions for minimizing the negative effects of hydro-electric energy production.

Tutor: Roman Mendle Expert: Sebastian Gebauer

How can hydropower be implemented more sustainably?



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STR1 - Sustainable Tourism and the Region



Course year: 2013-2014

Group description:

The goal of this case study is to analyze the current situation in one or more selected regions (including tourism policies, developments, products, tourist behaviour and activities in a tourism region), and to make concrete recommendations on how to implement and develop sustainable tourism.

Tutor: Mario Diethart Expert: Mario Diethart

How can tourism in a specific region be made more sustainable?



STR2 - Sustainable Tourism and the Region



Course year: 2013-2014

Group description:

The goal of this case study is to analyze the current situation in one or more selected regions (including tourism policies, developments, products, tourist behaviour and activities in a tourism region), and to make concrete recommendations on how to implement and develop sustainable tourism.

Tutor: losif Botetzagias

Expert: Mario Diethart

How can tourism in a specific region be made more sustainable?

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URB1 - Urban Waste Management



Owner: Ana Paula Martinho Group members: 7 Course year: 2013-2014

Group description:

The goal of this case study is to determine whether the long-term goal of the European Waste Directive is being achieved, and, if relevant, to propose new solutions, based on a comparison of the application of the Directive in different European countries.

Tutor: Ana Paula Martinho

Expert: Ana Paula Martinho

How can urban waste management in the EU be made more sustainable?



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URB2 - Urban Waste Management



Owner: Antje Disterheft Group members: 8

Course year: 2013-2014

Group description:

The goal of this case study is to determine whether the long-term goal of the European Waste Directive is being achieved, and, if relevant, to propose new solutions, based on a comparison of the application of the Directive in different European countries.

Tutor: Antje Disterheft

Expert: Ana Paula Martinho

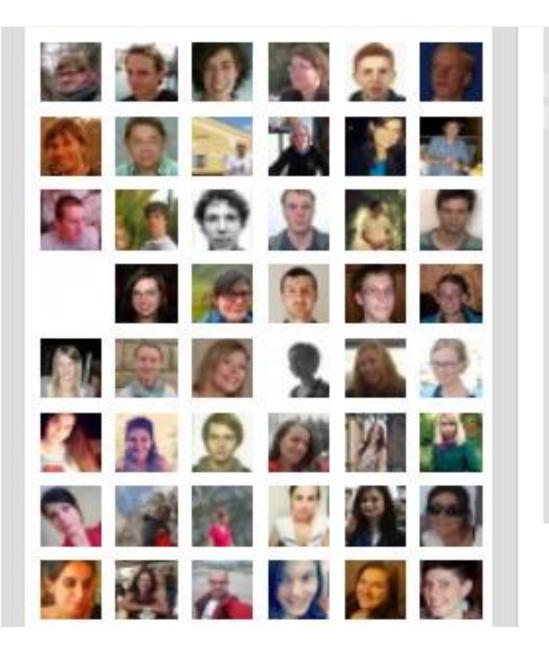
How can urban waste management in the EU be made more sustainable?

EVS students



Owner: Joop de Kraker Group members: 64

> "The collaboration in EVS is a small example of the collaboration which is needed in Europe." -



Thank You!

