



TUNING Geography in European Higher Education

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The TUNING Project

- ‘Tuning Educational Structures in Europe’ project addresses several of the Bologna action lines.
- project **undertaken by universities, for universities.**
- Universities’ response to the challenge of the Bologna Declaration.
- The project motto is
“Tuning of educational structures and programmes on the basis of diversity and autonomy”



Tuning Objectives (1)

- implement the Bologna-Prague-Berlin process at university level
- find effective ways to **implement two cycles**
- identify **common reference points** from discipline and university perspectives
- develop **professional profiles** and comparable and compatible learning outcomes



Tuning Objectives (2)

- facilitate employability by promoting transparency in educational structures (easily readable and comparable degrees)
- develop a common language which is understood by all those involved (higher education, employers, professional bodies, students)



Tuning Aims

- identify points of reference for **generic** (general academic) and **subject-specific** (Geography) **competences**
- done for **curriculum design** and **evaluation** (allowing flexibility)
- competences provide a **common language** for describing what curricula are aiming at

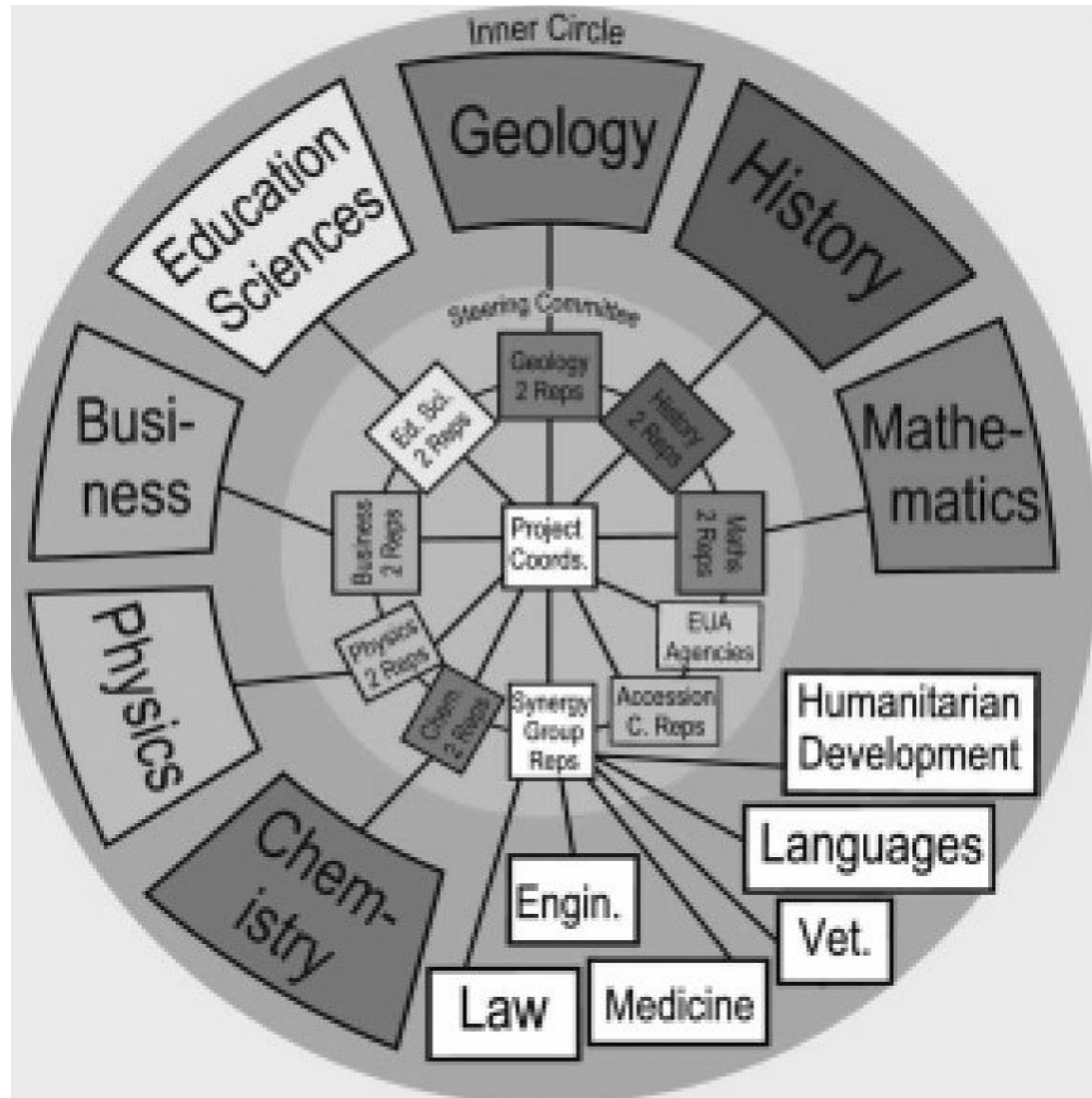


Tuning Methodology

- survey involved graduates, employers and academics
- considers
 - **importance of generic and subject-specific competences**
 - **evaluation of how well higher education institutions develop them**
- undertaken to develop academic and professional profiles for a degree programme and
- **identify important learning outcomes** expressed in generic and subject-specific competences



Subjects TUNED





Geography and TUNING

- HERODOT Thematic Network asked by the EC to undertake the survey for TUNING higher education Geography across Europe
- purpose of this presentation is to present some of the findings so far NOT to comment on the method or process
- to be followed up by publication of the full survey results in the “*State of Geography in Europe*” publication



Geography Tuning

- Geography TUNING survey adopted the standard approach undertaken by the EC Phase One survey (2000-2002) for comparability - though made some minor modifications.
- Our methodology was piloted in a small number of countries (2003-4) before the full survey was undertaken (2004-present)



Geography Tuning Methodology

Full Survey

- 15 countries (newer and older Europe) agreed to run the survey, this presents the results from 10 countries have received (to date)
- the remainder expected soon **PLEASE** 😊
- looking for others to participate



Geography Tuning Results

- over 600 completed questionnaires have been received.
 - 360+ graduates
 - 180+ academics
 - almost 100 employers across 10 countries
- hope to have more than 1000 completed questionnaires!



Geography Tuning Results

- results reflect the opinions from a variety of countries
- large and small populations
- eastern and western Europe
- old and new Europe etc.

data from countries so far:

DE, EE, FR, GR, IE, IS, MT, PT, SK, UK



Generic competences

- ***Instrumental Competences*** – instrumental to learning, capacity to understand methods like time organisation, solving problems, technological and linguistic skills
- ***Interpersonal Competences*** - individual abilities, express feelings, critical abilities, social interaction skills like team-work or co-operation
- ***Systemic competences*** - skills and abilities concerning whole systems, for example to see how parts of a whole relate and come together, like the ability to plan changes to make improvements and design new systems.
- Systemic competences require as a base the prior acquisition of instrumental and interpersonal competences.





10 Instrumental competences

- Capacity for analysis and synthesis
- Capacity for applying knowledge in practice
- General knowledge in the field of study
- Knowledge of the profession in practice
- Oral and written communication in the national language (s)
- Knowledge of other languages
- Use of information and communications technology
- Information management skills (ability to retrieve and analyse information from different sources)
- Problem solving
- Decision-making



8 Interpersonal competences

- Critical and self-critical abilities
- Teamwork
- Interpersonal skills
- Ability to work in an interdisciplinary team
- Ability to communicate effectively with non-experts (in the field)
- Appreciation of diversity and multiculturalism
- Ability to work in an international context
- Commitment to work related ethics



12 Systemic competences

- Planning and time management
- Research skills
- Capacity to adapt to new situations
- Capacity for generating new ideas (creativity)
- Leadership
- Ability to work on their own
- Ability to work on own initiative
- Project design and management
- Concern for quality
- Responsibility An entrepreneurial spirit
- A systematic approach to accuracy and precision
- Dealing with uncertainty



12 Specific subject-related competences

- created and agreed by members of the HERODOT network following previous conferences
- What makes Geography special and unique?
- Information on the HERODOT Web site <http://www.herodot.net>



12 Specific subject-related competences (1)

- **Comprehend the reciprocal relationships between physical and human environments**
- **Comprehend the significance of spatial relationships at various scales**
- **Appropriately use geographical terminology**
- **Collect, compare, analyse and present geographical information**
- **Understand and explain the diversity and interdependence of regions, places and locations**
- **Apply an understanding to geographical concepts**



12 Specific subject-related competences (2)

- **Communicate geographical ideas, principles and theories effectively and fluently by written, oral and visual means**
- **Interpret landscapes**
- **Comprehend the nature of change**
- **Draw knowledge, understanding and diversity of approaches from other disciplines and apply them in a geographical context**
- **Appreciate representation of geographical space and different geographical representations**
- **Use diverse, specialised techniques and approaches in Geography**



Relative importance of 30 generic competences

Spearman Correlation	Academics	Graduates	Employers
Academics	1		
Graduates	0.796 (*)	1	
Employers	0.646 (*)	0.778 (*)	1

* Correlation is significant at the 0.01 level (2-tailed).



Level to which generic competence is developed by the degree

Spearman Correlation	Academics	Graduates	Employers
Academics	1		
Graduates	0.913 (*)	1	
Employers	0.825 (*)	0.832 (*)	1

* Correlation is significant at the 0.01 level (2-tailed).



Compare Academics with Employers

Instrumental competences developed by Geography degree courses	Diff.		% diff	Emp Rel. imp.
Information management skills (ability to retrieve and analyse information from different sources)	-0.15	Academics rated more developed than employers	-5%	5
Capacity for applying knowledge in practice	-0.12		-5%	6
Capacity for analysis and synthesis	-0.06		-2%	1



Compare Academics with Employers

Instrumental competences developed by Geography degree courses	Diff.		% diff	Emp Rel. imp.
Problem solving	0.12	Employers rated more developed than academics	-5%	11
Knowledge of other languages	0.29		-5%	28
Use of information and communications technology	0.33		-2%	10



Compare Academics with Employers

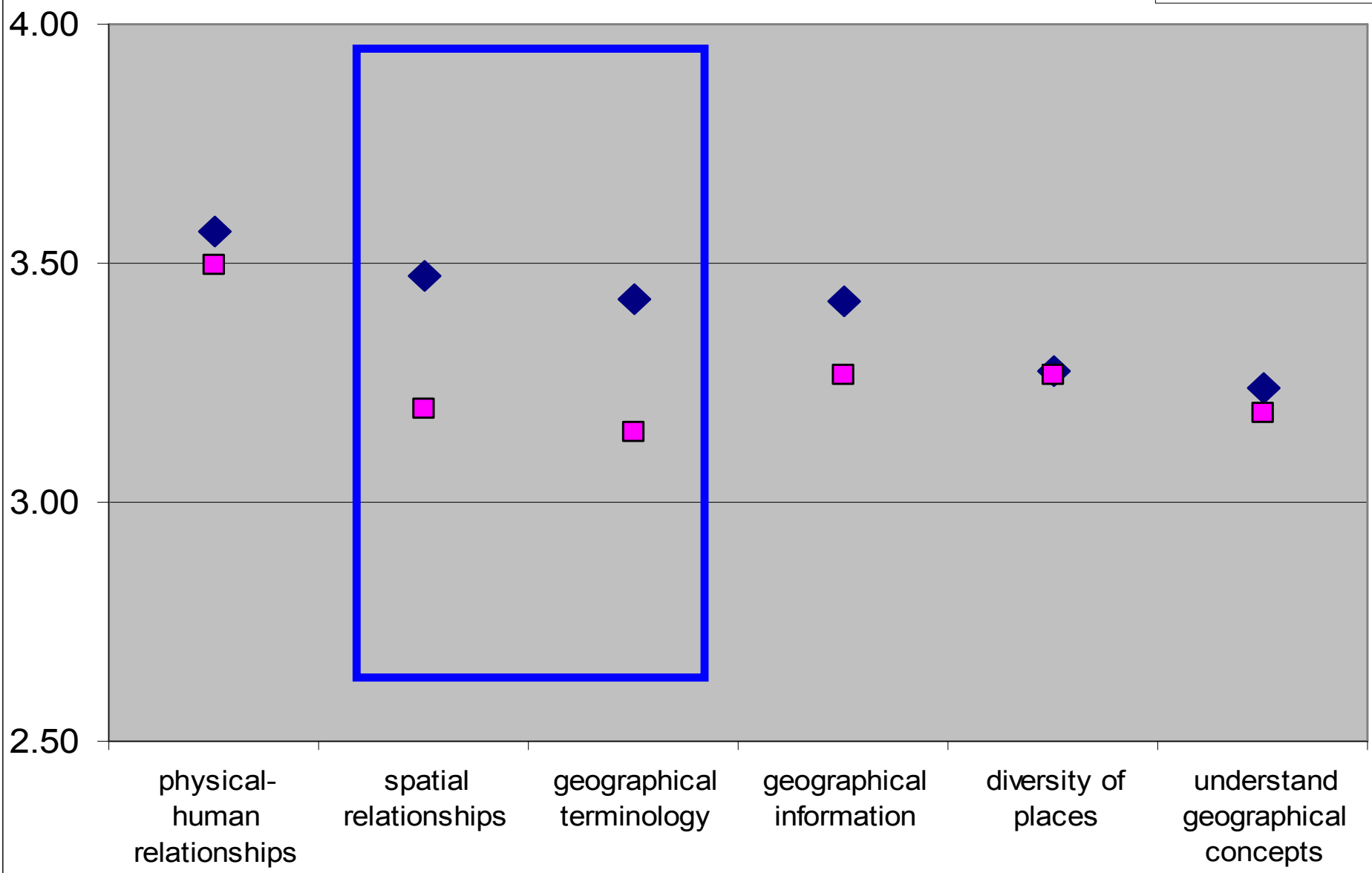
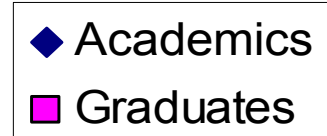
interpersonal competences developed by Geography degree courses	Diff.		% diff	Emp Rel. imp.
Critical and self-critical abilities	-0.22	Academics rated more developed than employers	-9%	25
Teamwork	-0.18		-7%	2
Appreciation of diversity and multi-culturality	-0.18		-7%	26
Interpersonal skills	-0.15		-6%	4
Ability to communicate effectively with non-experts (in the field)	-0.15		-6%	7
Ability to work in an international context	0.09	Employers	4%	30



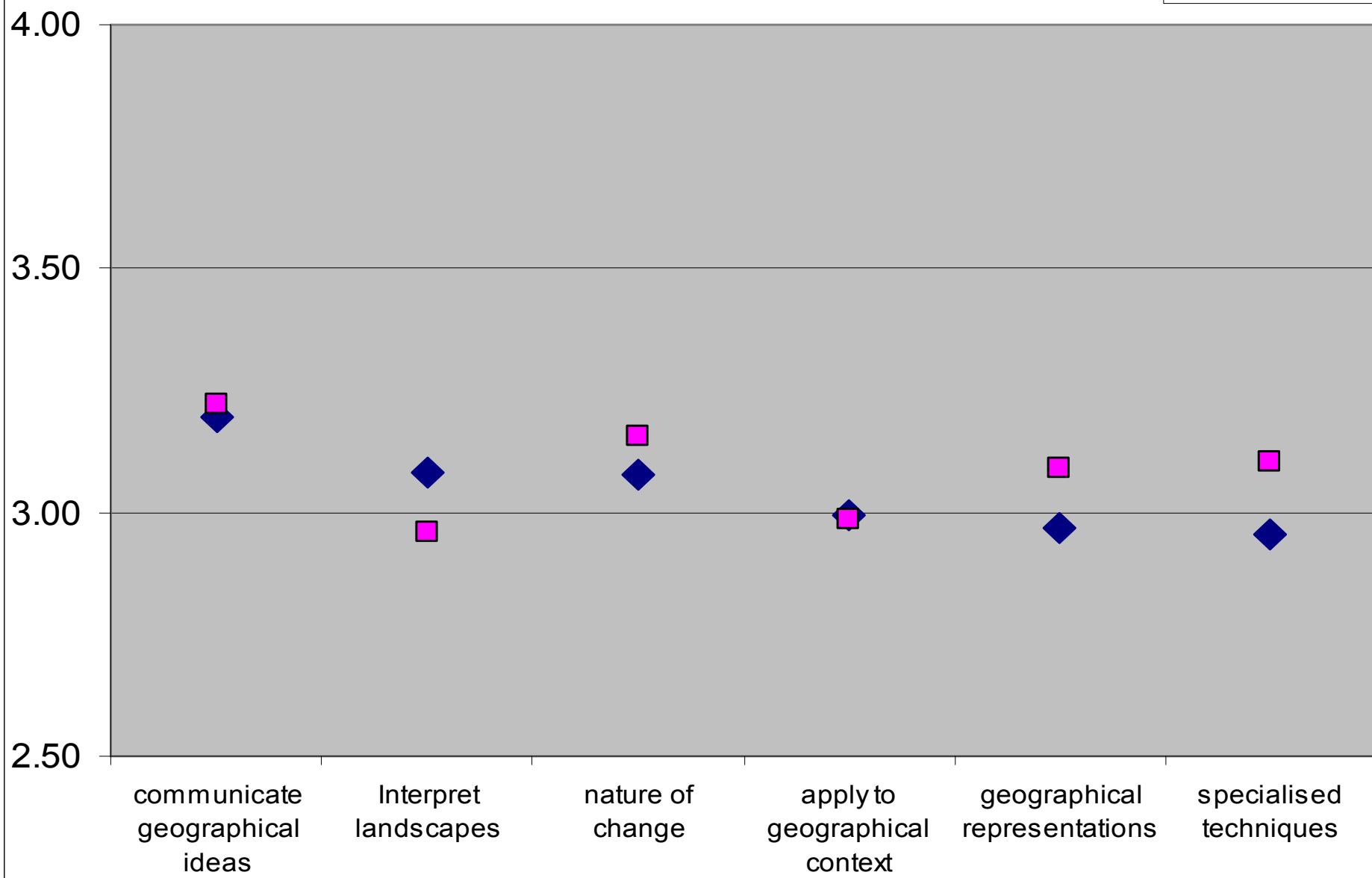
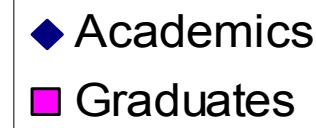
Compare Academics with Employers

Systemic competences developed by Geography degree courses	Diff.		% diff	Emp Rel. imp.
Concern for quality	-0.26	Academics rated more developed than employers	-10%	12
Responsibility	-0.22		-9%	3
An entrepreneurial spirit	-0.21		-11%	31
Research skills	-0.19		-7%	29
Capacity for generating new ideas (creativity)	-0.19		-8%	14
Systematic approach to accuracy + precision	-0.17		-7%	13
Ability to work on own initiative	-0.13		-5%	15
Dealing with uncertainty	-0.13		-6%	24
Planning and time management	-0.12		-5%	8

Subject specific competences: top 6 (academic)



Subject specific competences: bottom 6 (academic)





Country effects

- not yet dealt with in the Geography data
- main TUNING survey showed strong effects in:
 - Knowledge of a second language
 - Ability to work autonomously
 - Will to succeed
 - Capacity for applying knowledge in practice
 - Concern for quality
 - Initiative and entrepreneurial spirit
 - Ability to work in an interdisciplinary team
- explained by cultural + inter-cultural differences



What does this mean we can now do?

- **identify strengths** and what to keep in courses
- **spot weaknesses** and **gaps** in courses
- help in **planning** new courses and curriculum
- establish **milestones** – students **must, should, could** do
- create **professional profile** of what Geography graduates can do
- useful for employers – promotes our subject and our students
- can and should use the methodology to assess the impacts of new courses



Conclusions – what next?

Want your contributions

- **More data** – please ☺ it's simple and needed
- **Publication** of “State of Geography” in Europe
- Interested in writing on a theme ... please contact me

Can look at other aspects of TUNING/Bologna

- Credit Transfer – ECTS – Quality Assurance etc.
- Learning and teaching approaches – **doing this**
- European dimension – **doing this**