# The Impact of Student Numbers on the Quality of Teachers – The Situation in Vienna and a Possible Way Out

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#### **Outline**

- Introduction
- Impact of tight budgets
- Impact of student numbers
- Student numbers in Vienna
- How to increase the student numbers
- Conclusions



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# Introduction (1)

Quality of education influenced by

- Quality of curriculum
- Quality of the equipment
- Access to recent publications
- Quality and motivation of teachers

Improvement of curriculum may be useless if other influences are ignored

## Introduction (2)

Focus here: Quality of Teachers in Vienna

#### Questions

- How does the budget influence the quality?
- How does the number of students influence the quality?
- What can be done to improve the situation?



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# Impact of Tight Budgets

#### Costs for teachers are

- Salary
- Training for teachers
- Excursions/field trips with students
- Library, equipment, etc.

#### Bad conditions mean

- Difficult to attract internationally renowned experts
- Possible effect on motivation of available teachers



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# Impact of Student Numbers

#### 2 different aspects:

- Small communities have a lower influence than large ones (e.g., surveying vs. computer science)
- From which group do possible teachers come from? Graduates!
  Small number of graduates mall group to select from

We must keep the student numbers high!



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## Do Projects Help?

- Positive effects
  - Projects improve knowledge
  - Projects allow to hire additional staff
- Negative effects
  - Projects cause administrative costs
  - Project acquisition requires time of high quality teachers



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## Student Numbers in Vienna

How to assess the number of students?

Beginners?

How to eliminate ERASMUS-students?

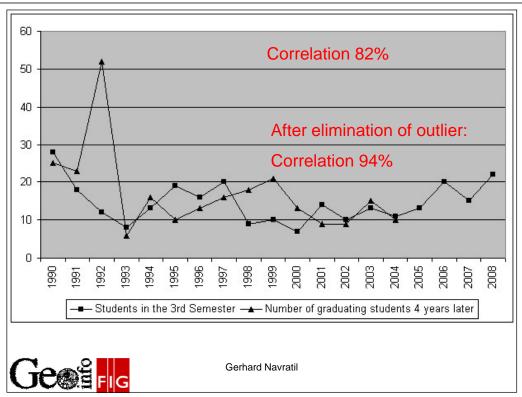


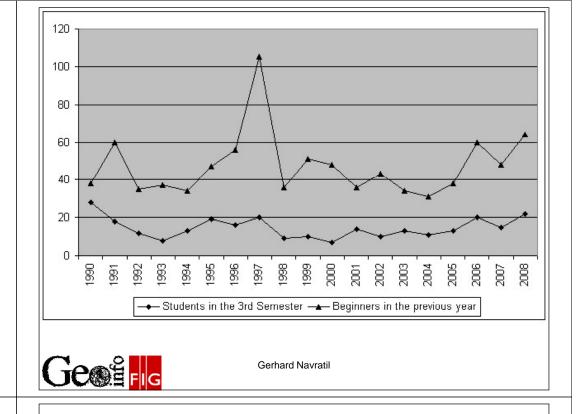
# **Important Questions**

- How many graduates will be available?
- How many graduates are necessary?



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# Necessary Number of Graduates at Universities?

Number of researchers at

Vienna University of Technology 74

30

11

- Graz University of Technology
- University of Applied Life Sciences
- Innsbruck University <u>6</u>

3 graduates per year are necessary



#### Problem 1

10 -15 graduates available1/4 required for university staff plus:

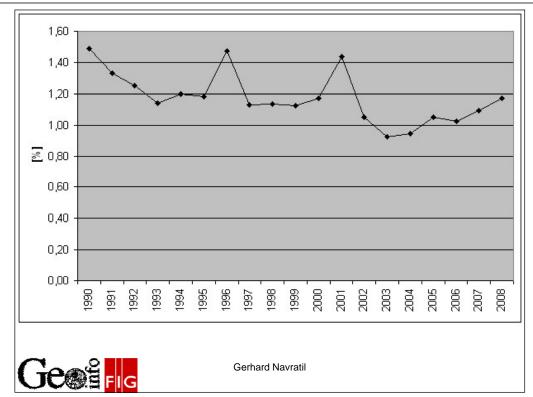
- Industry needs graduates
- Public administration needs graduates

**Currently**: All positions can be filled (1-2) applicants per position

But: Not much selection possible → quality will drop in the long run



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#### Problem 2

Organizational decisions within the university based on student numbers

Low relative numbers of students in Vienna (1,5% in 1990 to 0,9% in 2003, positive trend since 2003)

Graduates are easy to count!

**Danger**: Closing curriculum (as in Innsbruck, Delft, Berlin)



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### How to increase Student Numbers?

- Children of surveyors already here
- Contact with surveying (summer work, presentations at schools, promotion material) – may be attracted
- Promote other interests? Cartography, geography, geoinformation, geophysics, etc. Attracts different students!



#### Conclusions

- We need more students to keep the quality of education
- We should aim at students with different interests
- We need to advertise additional fields of work



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#### Thank You for Your Attention

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