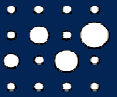


Wilhelm Krull / Axel Horstmann

Modernizing Universities in Europe.

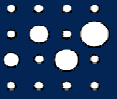
Challenges and Initiatives from a German Perspective.

Modernizing Universities in Europe  
A High Level Meeting organized bei the Portuguese Presidency  
of the European Union  
Lisbon, 6 November 2007

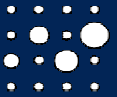


## Overview

- I. Changes and Challenges**
- II. Approaches and Initiatives**
- III. Opportunities and Perspectives**

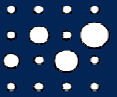


# I. Changes and Challenges



## Global Trends

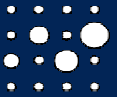
- ▶ electronic impact on the creation, distribution, and absorption of new knowledge
- ▶ increased emphasis on transdisciplinary approaches
- ▶ move from bi-, or trilateral internationalization towards network approaches and strategic alliances in higher education and research
- ▶ changing public private interface and its consequences for the division of labour in RTD systems
- ▶ need to integrate evaluation, foresight and priority-setting, and to increase public involvement
- ▶ growing public concern about recent scientific developments
- ▶ **Universities are needed as driving forces of innovation**



## Bottlenecks of European Universities

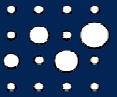
- ▶ uniformity and lack of international attractiveness
- ▶ insularity and lack of communication and cooperation
- ▶ over-regulation and lack of efficient governance
- ▶ under-funding and lack of self-sufficiency

= **lack of international competitiveness**

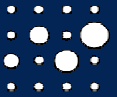


## Three Imperatives for Universities

- 1. Improve structures and governance**
- 2. Increase and secure resources**
- 3. Enhance and maintain attractiveness**



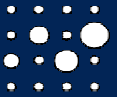
## **II. Approaches and Initiatives**



## Imperative 1: Improve structures and governance

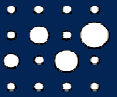
- ▶ “new public management” in universities has made a difference
- ▶ programs of funding agencies like the **VolkswagenStiftung** (“Efficiency through Autonomy”) and the **Stifterverband für die Deutsche Wissenschaft** substantially contributed to the structural improvement of German universities
- ▶ the ongoing process is being impeded and slowed down by manifold obstacles and difficulties – and do not forget:
- ▶ improving structures and governance is not an end in itself but a means to improve and enhance the performance of the university in research, teaching and knowledge transfer





## **Imperative 2: Increase and secure resources**

- ▶ since about 15 years the situation in Germany is changing
- ▶ contracts between governments and universities as a new instrument
- ▶ performance-and-perspective oriented funding
- ▶ shift from input- to output-orientation
  
- ▶ most recent initiative with strong impact:  
“Exzellenzinitiative” launched in 2005 in order to ...



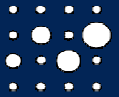
## **Imperative 3: Enhance and maintain attractiveness**

### **main tasks**

- ▶ to identify the most promising topics
- ▶ to attract and retain the best researchers and teachers
- ▶ to conceive higher education and research policy as innovation policy

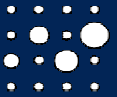
### **central issues and fields of action**

- ▶ interdisciplinarity in research and teaching
- ▶ internationalization and mobility of students and researchers
- ▶ Bologna process needs a serious attempt at curriculum reform
- ▶ internal and external cooperation and networking
- ▶ public private interface
- ▶ communication between science, the public, and society



## Challenge and Response: The „Exzellenzinitiative“

- ▶ program launched by DFG and Wissenschaftsrat
- ▶ duration: 2006 - 2011
- ▶ total funding: 1,9 Billion EUR
- ▶ organisation: two selection rounds
  
- ▶ **results:**
  - Graduate Schools: 39
  - Clusters of Excellence: 37
  - Zukunftskonzepte („Elite-Universitäten“): 9
  - total number of funded universities: 37



## **„Exzellenzinitiative“**

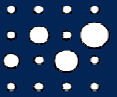
### **Two Examples of Excellence**

#### **University of Göttingen**

- ▶ full subject university
- ▶ legal status: Public Law Foundation
- ▶ 24,000 students
- ▶ total budget 2006: 570 Mio EUR

#### **University of Konstanz**

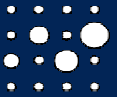
- ▶ mid-size, research-focused university
- ▶ legal status: university under public law
- ▶ 10,100 students
- ▶ total budget 2006: 105 Mio EUR



## **University of Göttingen: Tradition – Innovation - Autonomy**

### **Strategy**

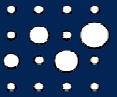
- ▶ developing and strengthening a joint Göttingen Research Campus that fully integrates the non-university research institutions
- ▶ devising and implementing strategies to identify, recruit, and support outstanding young researchers, both in established and in new fields of excellence, and providing greater freedom to its leading researchers



## University of Göttingen: Tradition – Innovation - Autonomy

### Implementation

- ▶ **Brain Gain**  
career track for young researchers based on individual merits in research, in combination with the development of new fields of excellence
- ▶ **Brain Sustain**  
special measures to foster and retain excellent researchers
- ▶ **Lichtenbergkolleg**  
Institute for Advanced Study supporting in particular the humanities and social sciences
- ▶ **Göttingen International**  
systematic recruitment of highly talented young scientists and scholars from abroad to the Göttingen Research Campus

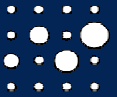


## **University of Göttingen: Tradition – Innovation - Autonomy**

### **Göttingen Research Campus**

supervised by the Göttingen Research Council (GRC)

- ▶ Göttinger Zentrum für Molekulare Biowissenschaften
- ▶ European Neuroscience Institute
- ▶ Göttinger Zentrum für Biodiversitätsforschung
- ▶ Centre for Systems Neuroscience
- ▶ DFG Research Centre Molecular Physiology of the Brain
- ▶ Bernstein Centre for Computational Neuroscience
- ▶ Centrum Orbis Orientalis CORO – Zentrum für semitische und verwandte Studien
- ▶ Akademie der Wissenschaften zu Göttingen
- ▶ Five Max Planck Institutes
- ▶ Deutsches Primatenzentrum
- ▶ DLR Deutsches Zentrum für Luft- und Raumfahrt
- ▶ Laser-Laboratorium Göttingen

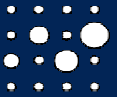


## University of Konstanz: Towards a Culture of Creativity

### Strategy

- ▶ further increase in research output through creativity enhancement by establishing “cells of creativity”
- ▶ encouragement of young talents by establishing a “Zukunftskolleg”
- ▶ achievement of new dimensions in the internationalization strategy
- ▶ support of working conditions needed for a culture of creativity
- ▶ promotion of equal communication between levels and members of the University across ages and qualification levels, genders (pursuing gender equality), across disciplines, and institutions (e.g. through extensive dialogue between science, business, politics, and the public)





## University of Konstanz: Towards a Culture of Creativity

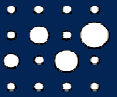
### Implementation [ 1 ]

#### Cells of creativity

- ▶ defined as the space and freedom for creative research through optimal working conditions; realized through **research centers**, research training groups, graduate schools, Zukunftskolleg, cultural sciences (Kulturwissenschaftliches Kolleg), and **free spaces for creativity for individual senior scientists**

#### Encouragement of young talents

- ▶ defined as the attraction, selection, training, and promotion of the best junior scientists, realized from the student level to the postgraduate level



## **University of Konstanz: Towards a Culture of Creativity**

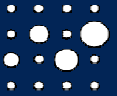
### **Implementation [ II ]**

#### **Internationalization**

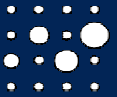
- ▶ improvement of the internal requirements and structures to increase the number of outgoing students and incoming graduates, post-graduates and senior researchers as well as an increase in international networking and a new offensive strategy to increase the visibility of the university

#### **Working conditions, governing structures, and communication**

- ▶ regular evaluations of the “Modell Konstanz” and continuous quality management of institutional creativity



## **III. Opportunities and Perspectives**



## **LESSONS (TO BE) LEARNT**

### **Major Issue for all of Europe**

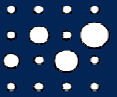
- ▶ Establish a “culture of creativity” in research, teaching and knowledge transfer

### **Adressees**

- ▶ Universities, public authorities, (private) foundations, and research councils

### **Preconditions**

- ▶ Competence, Courage, Communication, Diversity, Innovativeness, Persistence and Perseverance, Serendipity



### **1. Competence**

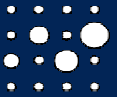
The first precondition is to provide the best training for the future generation of academics and to enable researchers in general to develop their skills as freely as possible.

### **2. Courage**

Researchers and funders must be both courageous and adventurous. Only if you are prepared to share the risks, you can encourage people to enter new fields and leave the beaten track.

### **3. Communication**

Thought-provoking discussions are essential for achieving progress in research, in particular cross-disciplinary and trans-cultural exchanges, but also interaction with the outside world.



#### **4. Diversity**

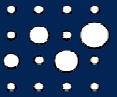
Also in academia, monocultures do not provide an adequate breeding ground for exceptional thoughts. New knowledge is usually formed at the boundaries of established fields, so the interfaces between these areas of expertise must be activated.

#### **5. Innovativeness**

In order to achieve breakthroughs we have to make sure that we identify and encourage those researchers who are prepared to take a risk with unconventional approaches.

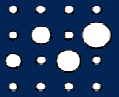
#### **6. Persistence and perseverance**

To take new pathways in a barely known territory requires much longer timescales than the usual patterns of two to three years of project funding. It is also important to allow that mistakes can be made, and pursuing other directions than originally planned is possible.



## **7. Serendipity**

Definitely, the decisive moment when a radically new idea emerges, or a major scientific discovery is made cannot be planned for. But there are numerous examples in the history of research which prove that it is possible to establish a particularly stimulating environment for generating new knowledge.

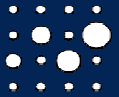


“It’s not enough that we do our best; sometimes we have to do what’s required.”

Sir Winston Churchill

**Thank you very much for your attention !**





## VolkswagenStiftung

Dr. Wilhelm Krull, Secretary General  
Prof. Dr. Axel Horstmann,  
Executive Management Humanities and Social Sciences

**Kastanienallee 35  
30519 Hannover  
Germany**

**POB 81 05 09  
30505 Hannover**

Phone **+49 (0)511 / 83 81-0**

Fax **+49 (0)511 / 83 81-344**

**[mail@volkswagenstiftung.de](mailto:mail@volkswagenstiftung.de)**

**[www.volkswagenstiftung.de](http://www.volkswagenstiftung.de)**