SPIRIT: Gender and Diversity at the University of Stuttgart

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What's Special about Stuttgart?

- Stuttgart:
  - ~ 595,000 inhabitants
  - ~ Town of Porsche, Mercedes, Bosch, IBM …
  - ~ Town of Vineyards and Mineral Spas
  - ~ Research University with high Third-party funding per professor - 1st place in Germany
  - ~ 20,000 Students at the University of Stuttgart in 10 Faculties
One of Europe’s Strongest Economic Regions …
Stuttgart: A Research University with a focus on Engineering and Natural Sciences

Astronautics Centre

High-Performance Computing Centre

Research Centre for Simulation Technology

VISUS

SOFIA

Europe's largest driving simulator
Women at University of Stuttgart

Female Students 33 %
- Humanities 68 %
- Social Sciences 44 %
- Natural Sciences 30 %
- Engineering 21 %
- Females with Doctoral Thesis 19 %
- Female Professors 5.9 %

Women are still highly underrepresented in the fields of Natural Sciences and Engineering.

The higher the hierarchy level the less Women.
Gender Gap & rising need of Engineers

About ASEE

For Immediate Release

ASEE: U.S. is graduating fewer engineers despite rising need

Washington DC – 06/18/08 – Despite a growing national demand for their skills, the number of engineers graduating from American colleges is going down, according to a survey to be released June 20 by the American Society for Engineering Education.

Engineering bachelor's degrees declined in 2007 for the first time since the 1990s, ending seven years of previous year—the trend may continue for several years. That's because undergraduate enrollment dropped.

"We are in a time of fluctuating degree and enrollment trends where the post-1990's recovery in engineering, led by Gibbons, ASEE's director of data research, who compiled the comprehensive, 495-page survey, Profiles of Engineering and Engineering Technology Colleges.

The fall in the number of engineering graduates comes at a time of growing technological competition for the environment and infrastructure that require engineering solutions.

The U.S. Bureau of Labor Statistics has projected a need for 160,000 more engineering positions over the next decade, which does not include the replacement of many retiring engineers.

Engineering master's degrees show an even sharper drop than bachelor's degrees, having declined 8.8% on average of 11 percent since 2004.

Within the field, aerospace and biomedical engineering have shot up in popularity while electrical and computer engineering have declined. The 2007 edition of the Profiles of Engineering and Engineering Technology Colleges details the state of engineering education in the U.S.

source: Spiegel Online, June 22 2008
Companies are facing serious manpower problems but .....
Implications of Female Underrepresentation in Science

- The low representation of women in scientific and technological areas has implications on technology itself.

- The relative absence of women from certain areas of technology poses an additional, hard challenge for industry and economy.

- Scientifically and technologically trained university graduates are filling important and leading positions throughout all layers of society.

- "200 female professors" – a federal Program of the Ministry for Research (BMBF)
200 female Professors Program

- Initiative of the german Federal Ministry for Education and Research (BMBF) together with the State Governments

- It is an effort to get high qualified female scientists into the top science positions.

- Appointments of women to professorships will create “Leitbilder” and role models for young female researchers and scientists

- Gives universities the chance to re-evaluate their gender activities
Gender Master Plan University of Stuttgart

- The objective of University of Stuttgart is to concentrate and coordinate existing and successful measures

- All arrangements come from one coordinated gender master plan
  - full life-cycle from kindergarten to professorship with leadership function,
  - seamless and coordinated transition between different measures possible,
  - all areas of education, research and organization
  - comprehensive concept of family-friendly policies for all members of the university.

- The Gender Master Plan
  - is based on a life cycle model
  - fits the profile of a technologically oriented university
  - implements a new Gender Culture at the university of Stuttgart
The Philosophy of SPIRIT

- Development of a „Gender Culture“ at the University of Stuttgart
  - It is essential to further anchor the measures in research and teaching at the University of Stuttgart.

- Life Cycle Model
  - Broad Measure Packages going from Kindergarten to Professorship
  - Close Integration of all Individual measures, consistency and continuity

- Measure Packages applying the following principles
  - Taking up of existing best practices
  - Expansion and development of the existing
  - New conception and implementation of a variety of innovative ideas

- Realisation:
  - Development of a concrete roadmap for the operative Realisation
  - Formative and summative quality assurance
  - Gender is a matter for the highest level – It's a matter for the boss.
SPIRIT LifeCycle Model

Structure:

I. Acquisition of female students in the natural sciences and technological disciplines
   Measures 1-14, 25-30

II. Career and personal development for young female scientists
    Measures 15-30

III. Increase the percentage of women in top scientific positions
     Measures 22-30
Examples of Measures

- Gender Sensitivity Training Courses for Educators
- “ETUS” – Exhibition Team University of Stuttgart
- Rent-a-Scientist & SchoolgirlUni
- Gender Sensitivity Training for Teachers
- Technology Camps
- Chair for Diversity Studies in Technology Management
- Brain Storming SPIRIT

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Structural Implementation and Sustainability - 1

- **Pervasive Implementation throughout the University**
  - Intensified *integration* of all key personels, existing institutions, Centers and Chairs all over the campus
  - Funding of measures through internal projects
  - Agree on a set of target agreements with faculties

- **Collaboration with Existing Equal Opportunity Programs**
  - Based on a detailed analysis, plans for equal opportunity have been developed

- **Collaboration with the Female Professors Program**
  - Chairs to be involved are identified
Structural Implementation and Sustainability - 2

- **Strengthening the Scientific Gender Competency**
  - The Chair “gender in the engineering sciences” is an integral component of SPIRIT

- **Development of a three three pillar Financing Model**
  - Budget with a shift to success-oriented funding and target agreements with the institutes
  - Third Party funding through projects
  - SPIRIT Foundation to raise additional funds for the gender concept of the University of Stuttgart

- **Responsibility: – It's a matter for the boss!**
  - Koordination of the Program, Development and long-term quality assurance by the rectorat’s office
Questions?
Thank you!