



# New Culture at University

From input to output orientation

IMCL

Interactive Mobile & Computer Aided Learning



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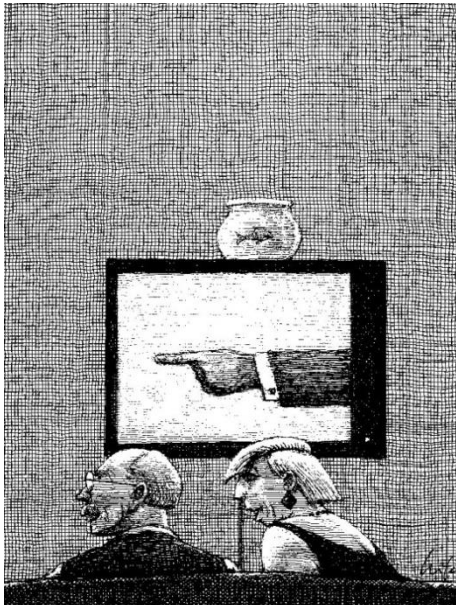
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- \* In recent decades, our world has become a global village.
- \* People's behaviour is becoming similar.
- \* The economy sets standards that are the same the world over.
- \* The same trend has now reached the system of education.
- \* In this age of
  - liberalism,
  - business and
  - economic thinking rule.
  
- \* Education ministers have coined the term 'employability'
  
- \* Universities measured on the basis of their output.
- \* Their graduates have to be quickly employable at job market.



# International Trends

- > **University systems all over the world are in a change process.**



# General Trends in the European Education System



# General Trends in the European Education System

- > Change to the Anglo-American System
- > Baccalaureate – Master – PhD
- > 3 years – 2 years – 3 years



# General Trends in the European Education System

- > University student without highschool diploma
- > International Exchange
- > European Credit Transfer Points



# General Trends in the European Education System

- > The first layer of this 3-tier system did not exist in Europe
- > Education Institutes, military academies, pedagogical academies, health and social academies become higher education institutions (with Baccalaureate level)



# General Trends in the European Education System

- > Universities and Universities of Applied Sciences
  
- > University
  - = Research
  - = Research Education
  - = PhD
  
- > University of Applied Sciences
  - = practically orientated
  - = employability
  - = no scientific career





# General Trends in the European Education System

- > Privatisation
- > Liberalisation
- > State owned and private Universities
- > Accreditation System
  - Courses
  - Institutions
- > Autonomy



## Privatisation and Liberalisation

- > Changing conditions = public subsidies are being redefined
- > New situation due to
  - > ● the change in the world economy,
  - > ● globalisation,
  - > ● European Union,
  - > ● increased affluence,
  - > ● demographic changes and
  - > ● budget cuts by the national government.



## **Privatisation and Liberalisation**

### **Globalisation is progressing fast:**

- **an individual nation state can no longer intervene and regulate by itself**
- **Countries of the European Union act together**
- **Political-economic competency has been transferred from the state to the EU.**



## Privatisation and Liberalisation

**A free market economy has been created by law in the tertiary sector of education**

**In reality the areas have different standards**

**Influence is exerted on the free rules of the market.**

**State universities are 'autonomous'**

**but have target agreements with Ministry**

**which defines the academic fields and their scope.**

**> Universities of applied sciences are run as private business**



# Internationalisation

- \* **Our economy is becoming internationalised, so are university studies**
- \* **National and international organisations promote the exchange of students and lecturers**
- \* **European Credit Transfer System rise in mobility**
- \* **Students study partly in other countries and at various universities.**
- \* **Exchange of teaching staff is increasing**
- \* **'Incoming students'**  
**makes our universities more international**
- \* **'outgoing students'**  
**gain international experience abroad**



# Input to Output Orientation

- \* **Economy is switching over from an input-orientation to an output-orientation**
- \* **Input-orientation work is based on time**
- \* **Employees were paid on their time at the workplace, not for their productivity.**
- \* **Output-oriented pay only actual**
- \* **Tasks are defined by target agreement**
- \* **It is not relevant how much time it takes**
- \* **Fast workers paid better than slow ones**
- \* **In intellectual jobs, smart and clever employees are paid better**  
**They spend less time on performing a specific task and reaching a specific goal.**



# Input to Output Orientation

- \* Teaching is measured in hours per week ('teaching units')
- \* Hours a lecturer teaches, 'reads' to the students.
- \* Teaching Hours are replaced by ECTS (European Credit Transfer System) points
- \* ECTS define programs international
- \* students can study in other countries/universities
- \* Teachers not defined by teaching time, but by the work involved for the student.
- \* ECTS point = time an average student needs to spend on acquiring a specific teaching unit (Including contact time with lecturer and self-study)



# Output Orientation (Examples)

- 4 ECTS points can consist of**
- 1 hour lecture plus
  - 3 hours of self-study

- 4 ECTS Points can consists of**
- 4 hours teaching and
  - no additional work

- 4 ECTS points can consists of**
- 0 teaching hours and
  - 4 hours e-Learning

**With ECTS points e-Learning and distance learning become measurable**





# Input to Output Orientation (Advantages)

- Internationalisation is easier;  
teaching units become transportable  
are recognised by all accredited institutions
- fast learners receive more ECTS points
- poor students must put in more time.
- Distance learning becomes measurable and  
is fully compatible with 'live' teaching.



# Output Orientation (Teaching)

- Payment of teacher linked with targets
  - For every semester it can be defined.
- 
- How many hours a teacher must be teaching?
  - Which targets should be reached?
  - Which projects are done?
  - Just some presence hours in the office

**Evaluation is more important !**



# New Organisation for Universities

- Universities more and more commercialized
- Universities became companies
- Rector or president is the general manager
- He is the only decision maker
- He has a management with distributed responsibility
- He is responsible for academic and economic issues
- Governments call this decentralisation and independency
- Risk: small units, and small scientific subjects get lost
- Concentration with main business fields, institutes with many students and low production costs
- One teacher for several thousand students brings more profitability than a small group of students



# New Organisation for Universities

- Owner of university sets targets to the management
- University as a company is controlled via a board
- Board sets targets and controls
- Public universities the government acts  
with a representative board as owner
- Often board-members are politically positioned
- Quality very often is put under pressure
- Quantity and profitability has for hand
- Quality assurance departments inside the university
- Quality assurance agencies from government



# Partnership Students : Teachers

## \* Hierarchy

- Input Orientation is hierarchy based
- Professor knows everything
- Students have to follow him and his instructions.

## \* Customer

- After demonstrations in the 60s 20<sup>th</sup> century, students changed to a status like “customer”

## \* Partner

- 21<sup>st</sup> century: students are partners
- Members of the university
- A cooperation between teachers and students



# Partnership and Drop Out

- \* Former time everybody was allowed to enter University
- \* Selection process was done via tests
- \* Drop out rate was very high
- \* Now: more entrance tests – or placement tests
  - \* Entry to a university is limited
- \* Teachers take responsibility
  - to bring students to a successful end
- \* Today **DROP OUR RATE** is a major factor –
  - If it is high, it is negative for the university



# Evaluation

**\* Evaluation of teachers and students**

**\* Special acts like:**

- charging of tuition fees**
- entrance examinations**
- no tenured officials and professors**
- professors hold four-year contracts**
- evaluation of lecturers by students**



# Evaluation

- \* Evaluation of students by teachers is not new
- \* Evaluation of teachers by students have impact:
  - on salary
  - carrier
- \* Student Evaluation automatized or manually





# Networks

**Democratic systems have changed**

**People are not any more members of societies**

**They are members of networks**

**The same with universities**

**A university cannot be a standalone organisation**

**A university cannot be isolated and work just with own staff.**

**A university must be member of a network.**

**To exchange results and experiences**

**to reach faster targets.**

**Bologna process would not be possible without networks**

**International frameworks in research bring together, what**

**was clearly separated for a generation before.**



# New Technologies changes Education

**Student and Teachers changed due to new Technologies  
Technology and the Human Being**

**Will human beings be replaced  
by technology?**

**Will technology be an aid or a yoke?**

**Tools should make life easier**

**If it is not a tool, then technology is a toy and useless for  
daily life**





# The Factor „Media Technology“

**Technology enters all aspects of life**

**It is present in economics, in education and the arts.**

**Communication and media technology have become important in education**

**more than in other areas of work**

**Education = multipliers and determine the next generation**

**The questions are:**

**Does technology influence the human being?**

**or**

**Does the human being use technology as a tool?**



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# New Types of Students

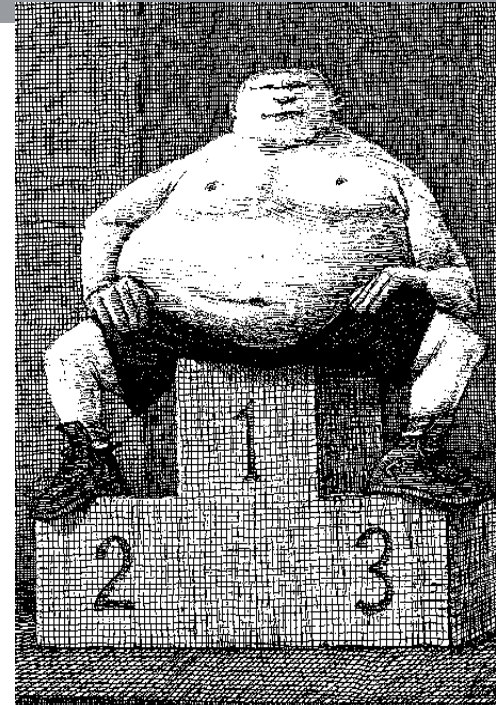


## Our lifestyle changed

- We are networked Egoists
- We want everything

- **HERE** (where ever it is)
- **NOW** (nobody wants to wait)
- **JUST FOR ME** (not sharing with someone)

**The networked egoist always wants to be first.**





- **Egoisme: today it is negative**
- **Egoisme: is necessary to be alive**



## The Single

- **2000: negative momentum of prosperity**
- **2,06 children per women (necessary)**
- **2002: Europe 1,5 children/women**
- **women became later mother  
(last 20 years 4 years)**
  
- **Europe is shrinking**





## Overaged Society

- \* In 2010 Japan will be oldest nation
- \* Italy 2015
- \* USA: average age lower
- \* Austrias development:

	<b>2000</b>	<b>2050</b>
<b>inhabitants</b>	<b>8,1</b>	<b>8,2</b>
<b>3. generation (older 60 years)</b>	<b>1,7</b>	<b>2,9</b>
<b>2. generation (up to 60 years)</b>	<b>5,0</b>	<b>4,2</b>
<b>1. Generation (up to 15 years)</b>	<b>1,4</b>	<b>1,1</b>
<b>people in working process</b>	<b>3,7</b>	<b>3,1</b>
<b>missing link</b>		<b>1,4</b>

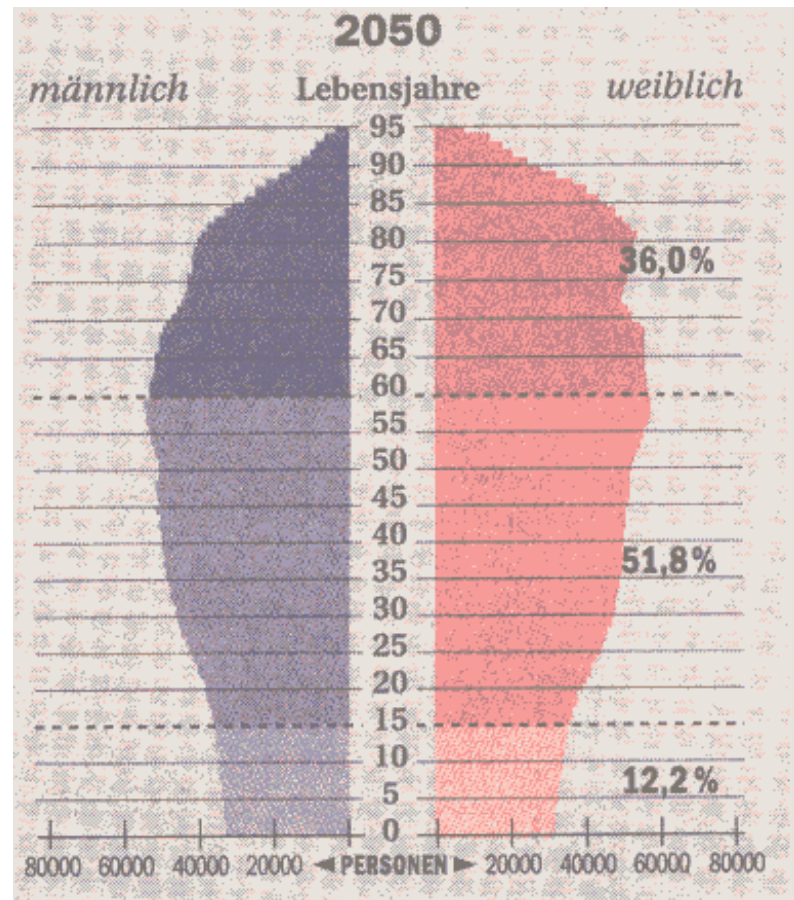
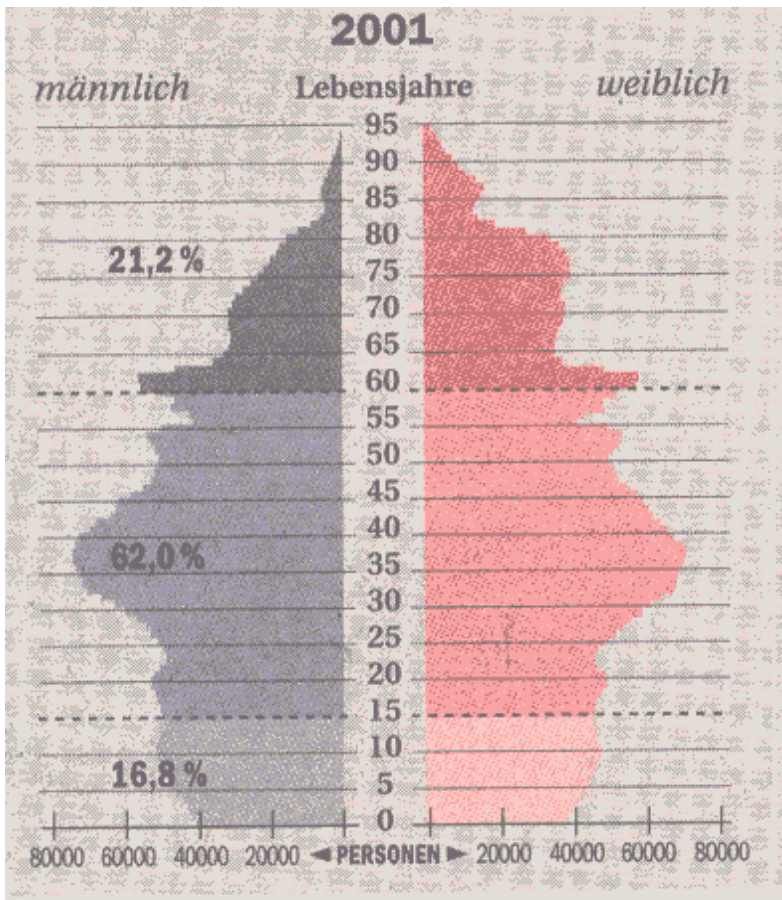
Source: Statistik Österreich  
Austrian Inhabitants in Millions



## Europe is stagnating

**in 50 years  
25% fewer inhabitants in Europe  
than today**

*(INED, Paris)*



**2001**

(Statistik Austria)

**2050**



## New phases in life

- **childhood**
  - **being adult**
  - **age**
- 
- **In the 18<sup>th</sup> century “youth” was added.  
Youth is now shifted to the age of 35, 40.**
  - **age is increasingly starting later**





## Food prices are decreasing

<b>costs</b>	<b>1950</b>	<b>1985</b>	<b>1998</b>	<b>2011</b>
Food	51 %	27 %	26 %	19%
clothing, furniture	17 %	16 %	14 %	12%
living, heating	9 %	18 %	32 %	34%
others	23 %	39 %	28 %	35%

( 20% telecommunications and traffic)

*average spending of a working person*





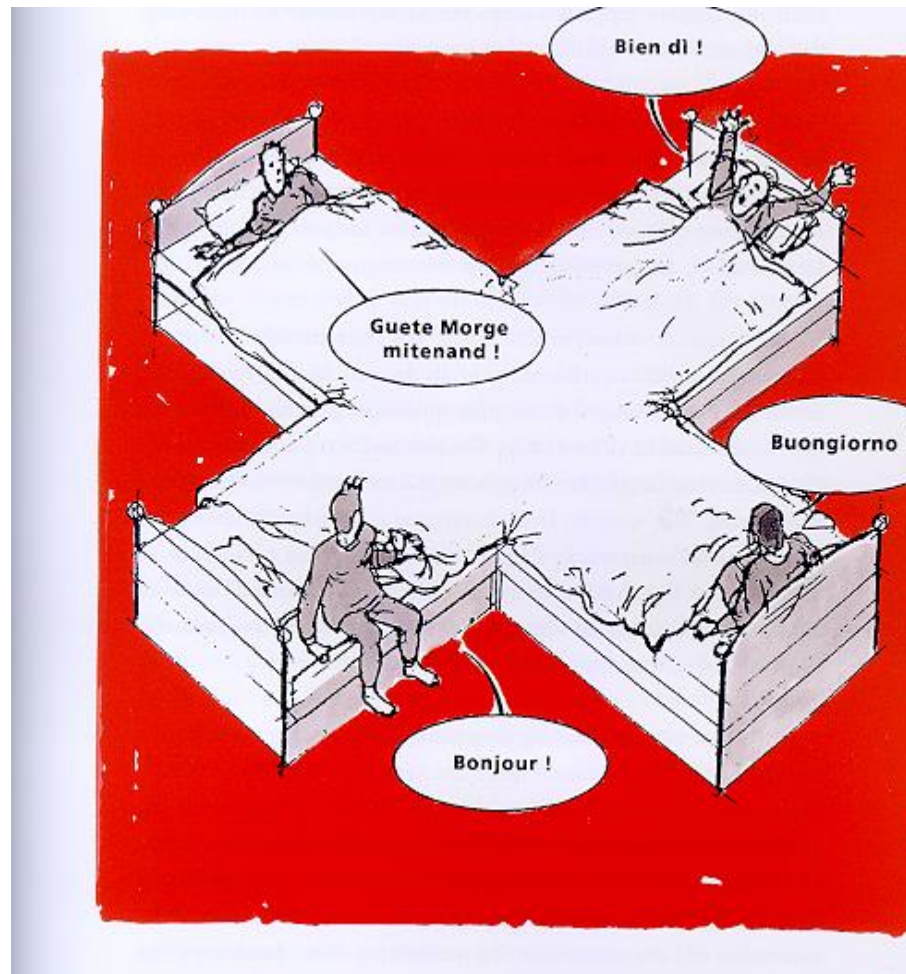


Language is  
no obstacle

WORLDI

and

Local language





## More and more intensive communication

time	media consumption in hours/day	confrontation advertisements/day
1942-1964	4,4	76
1987-2000	9,0	150

*consumption in USA:*

*(Quell: Advertising Research Foundation)*

people with high TV-consumption also have high Internet-consumption:

On-Line minutes

180

100

TV-minutes

197

156





# Digital Natives & Digital Immigrants

**Today – 2 different generations:**

- **Digital Natives**
- **Digital Immigrants**

**Natives = grown up with Internet**

**Internet = tool, instrument**

**it is part of live**

**Immigrants = older people**

**Internet came during their live**

**had to learn it**



# Difference Digital Natives & Immigrants

## Problem in Education!

- **Teachers are Digital Immigrants**
- **Students are Digital Natives**

**Change in teaching and learning**  
**Coaching of teachers**