



TU Clausthal

Clausthal University of Technology

Integration of an eLearning- concept at Clausthal University of Technology (CUT) as a chance for sustainable studies and apprenticeship

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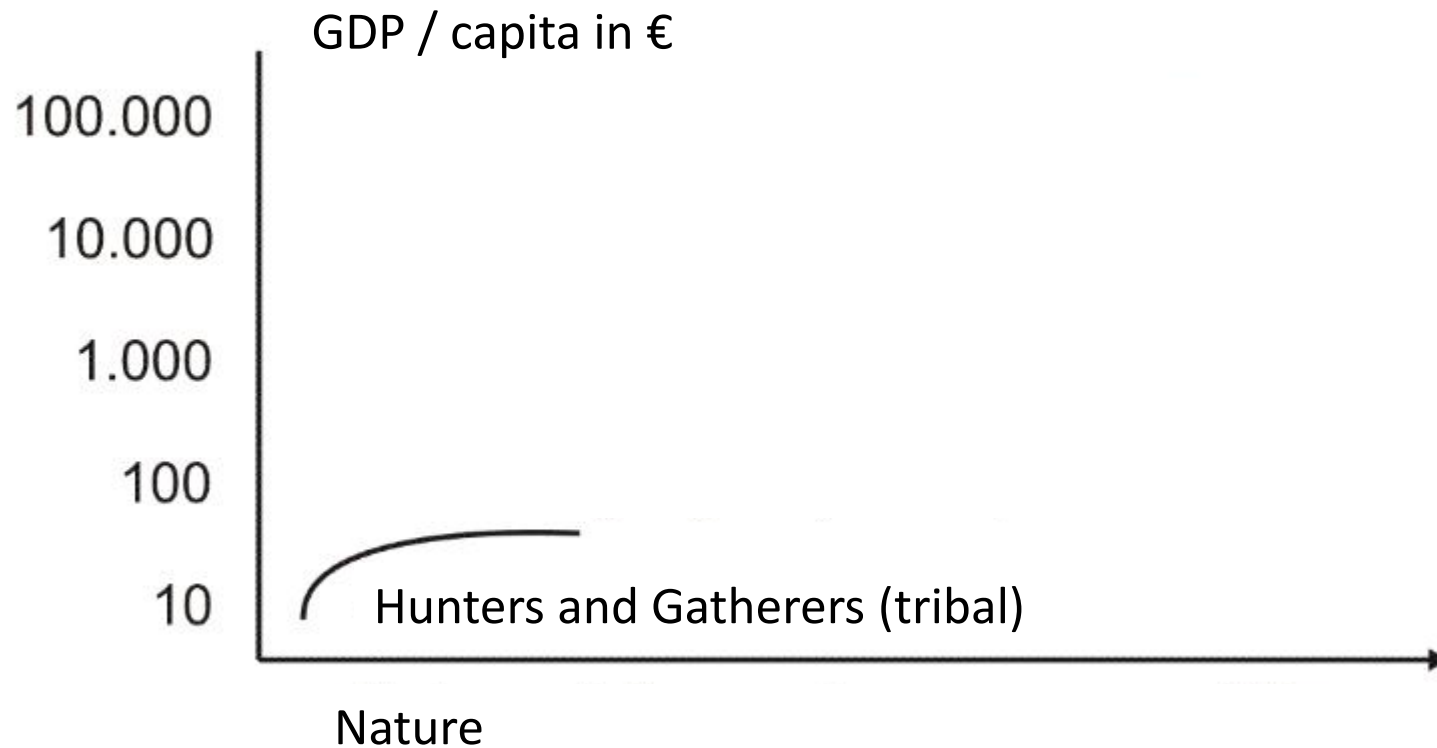
13. September 2011



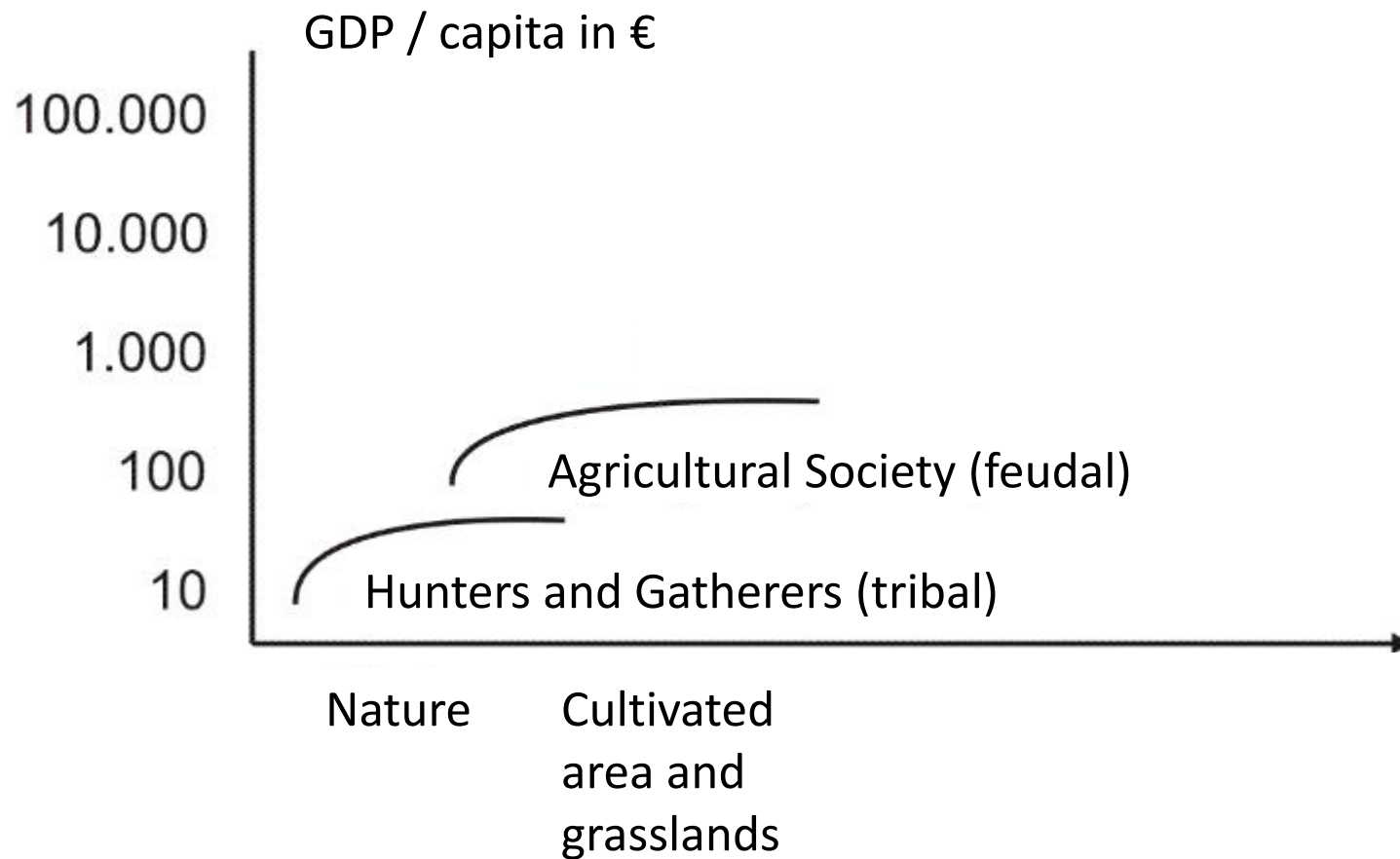
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- Introduction
- Definition and Dimensions of eLearning
- eLearning at Clausthal University of Technology (CUT)
- Review with regard to acceptability and the Bologna- Process
- Conclusion

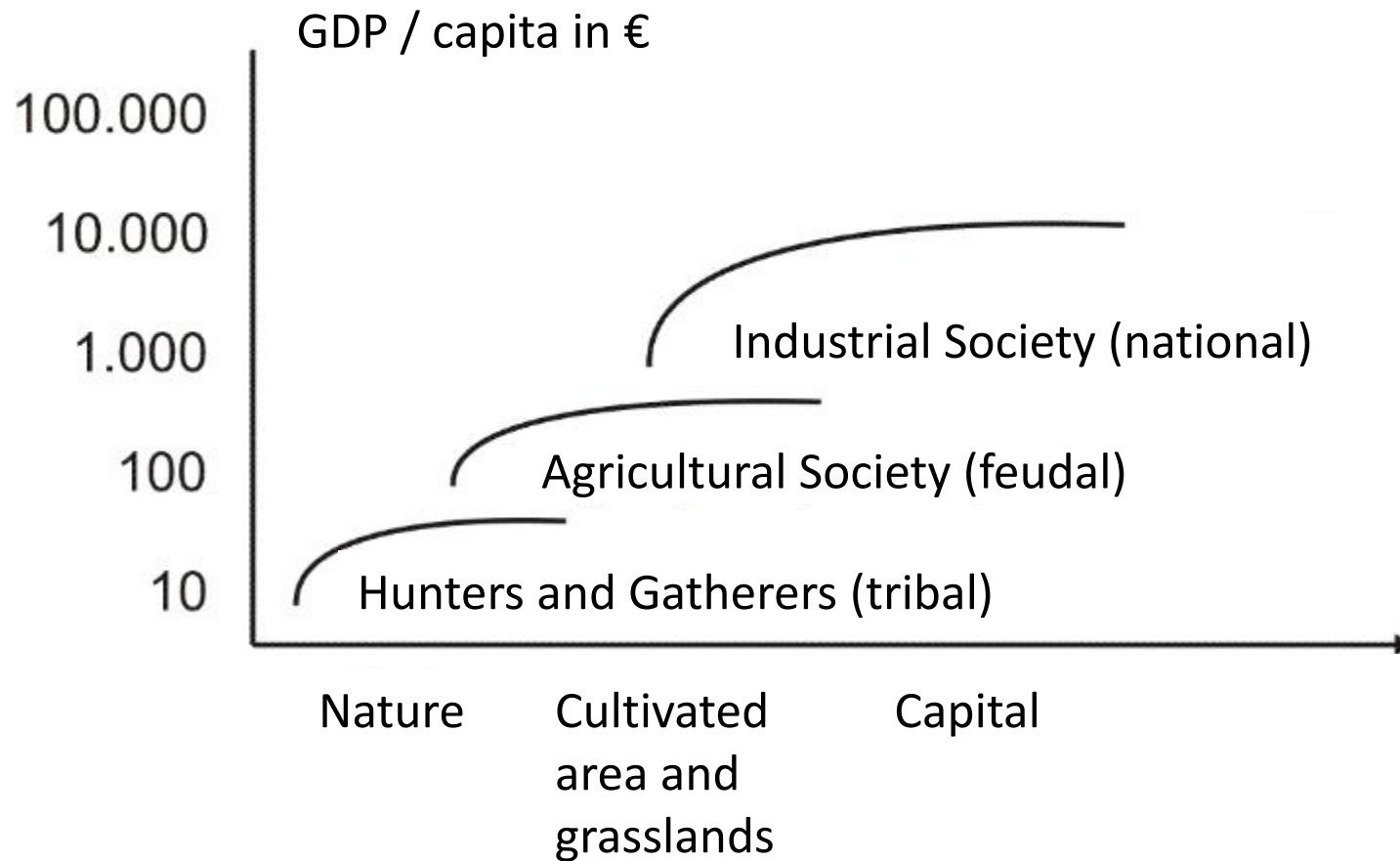
Technical Change as an impulse for changes in society



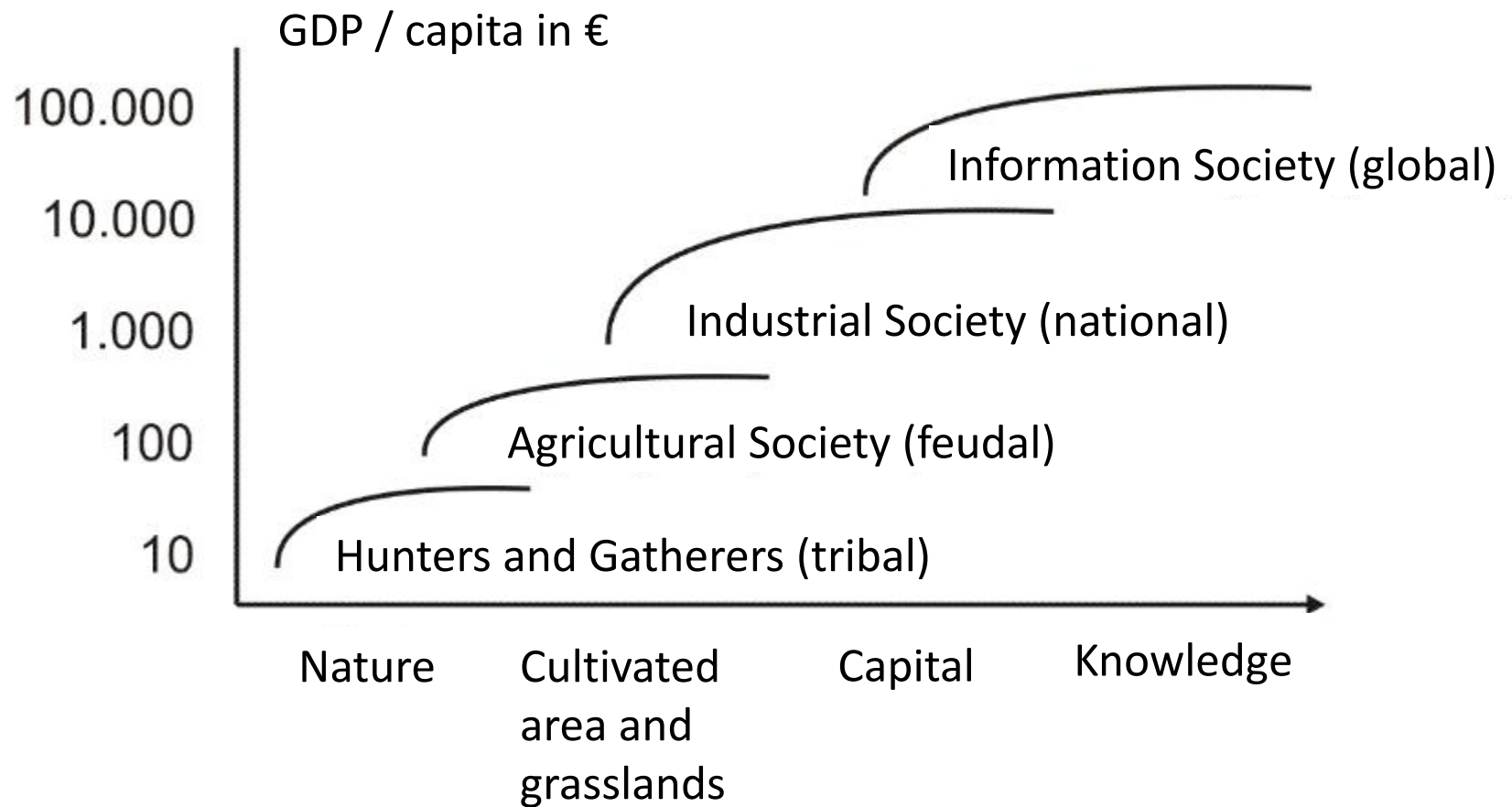
Technical Change as an impulse for changes in society



Technical Change as an impulse for changes in society



Technical Change as an impulse for changes in society





**“if there is such a thing as
growing human knowledge, then
we cannot anticipate today what
we shall know only tomorrow”**

Sir Karl Raimund Popper – Austrian-British-Philosopher
(* 28. Juli 1902 in Wien † 17. September 1994 in London)

Introduction

- Society's evolution / paradigm shift

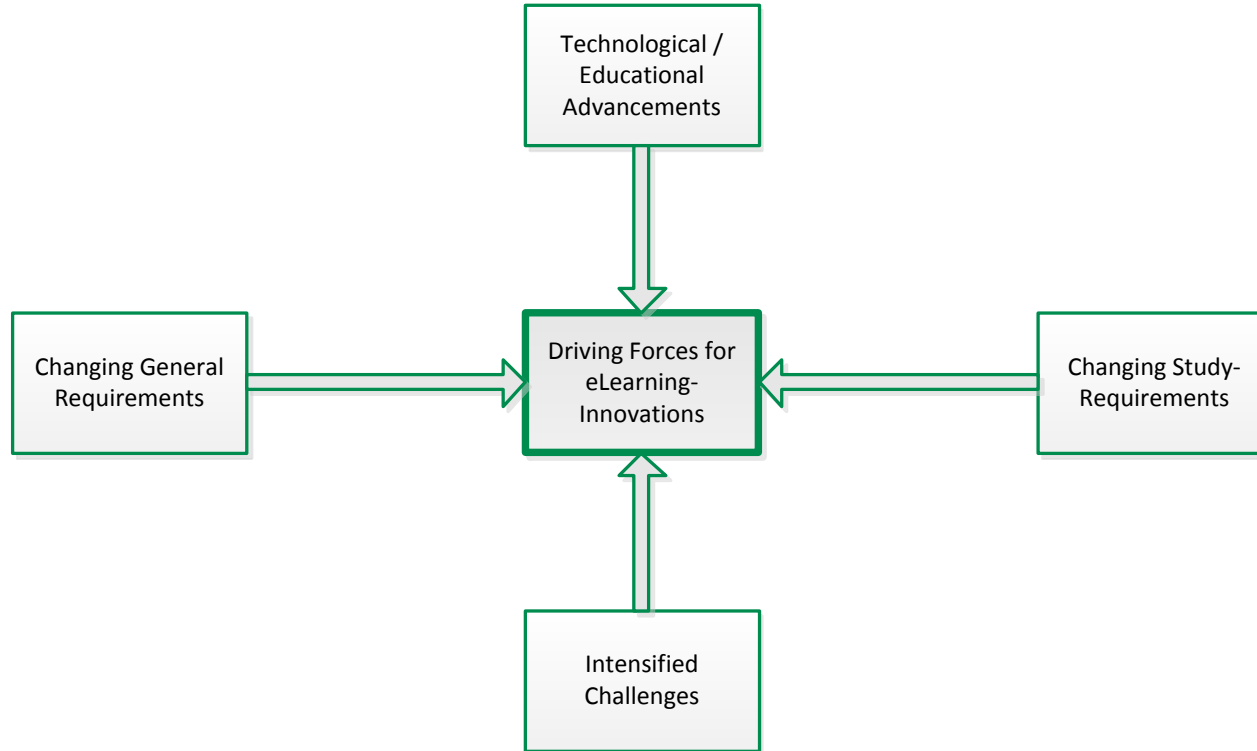
Industrialised Society  **Information Society / Knowledge-based Society**

- Development of a new culture of teaching and learning

 **Organisational Learning**

 **Lifelong Learning**

Driving Forces for eLearning



→ Proving and testing of new, media-based teaching and learning formats



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Definition of eLearning


eLearning


Application of information and communication technology in education, teaching and learning

Technology affected



Didactical affected

What ?  Content (Information) & Instructions (Techniques, Methods).

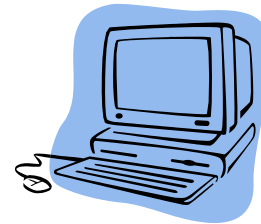
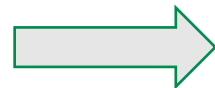
How ?  Access to learning contents.

Why ?  Individual personal access to learning contents.

Dimensions of eLearning



Instructional
goals, content and tools



Media & Studymenvironment
Time & Place



Student
Motivation



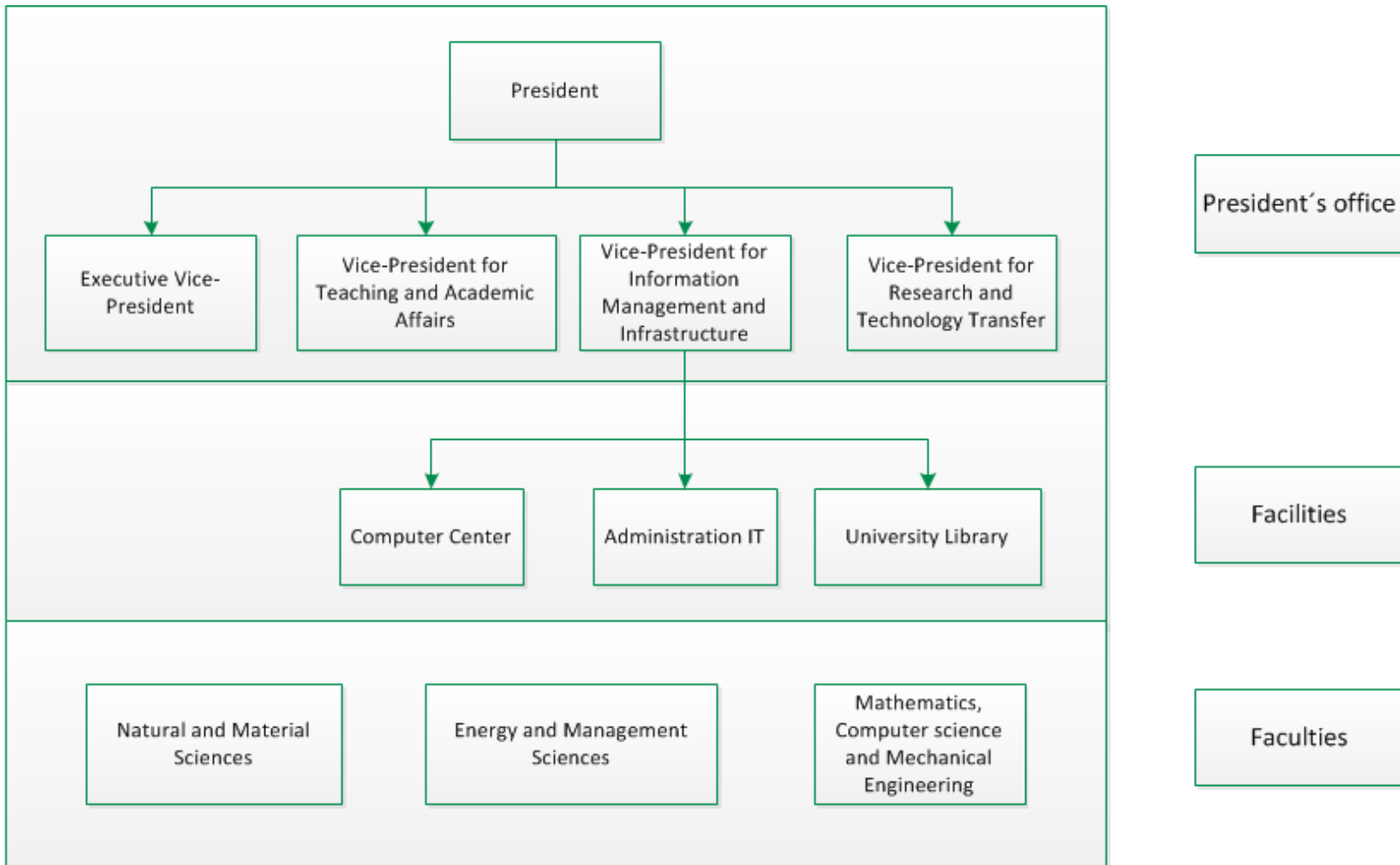
Teaching- & Learning methods
Instructors



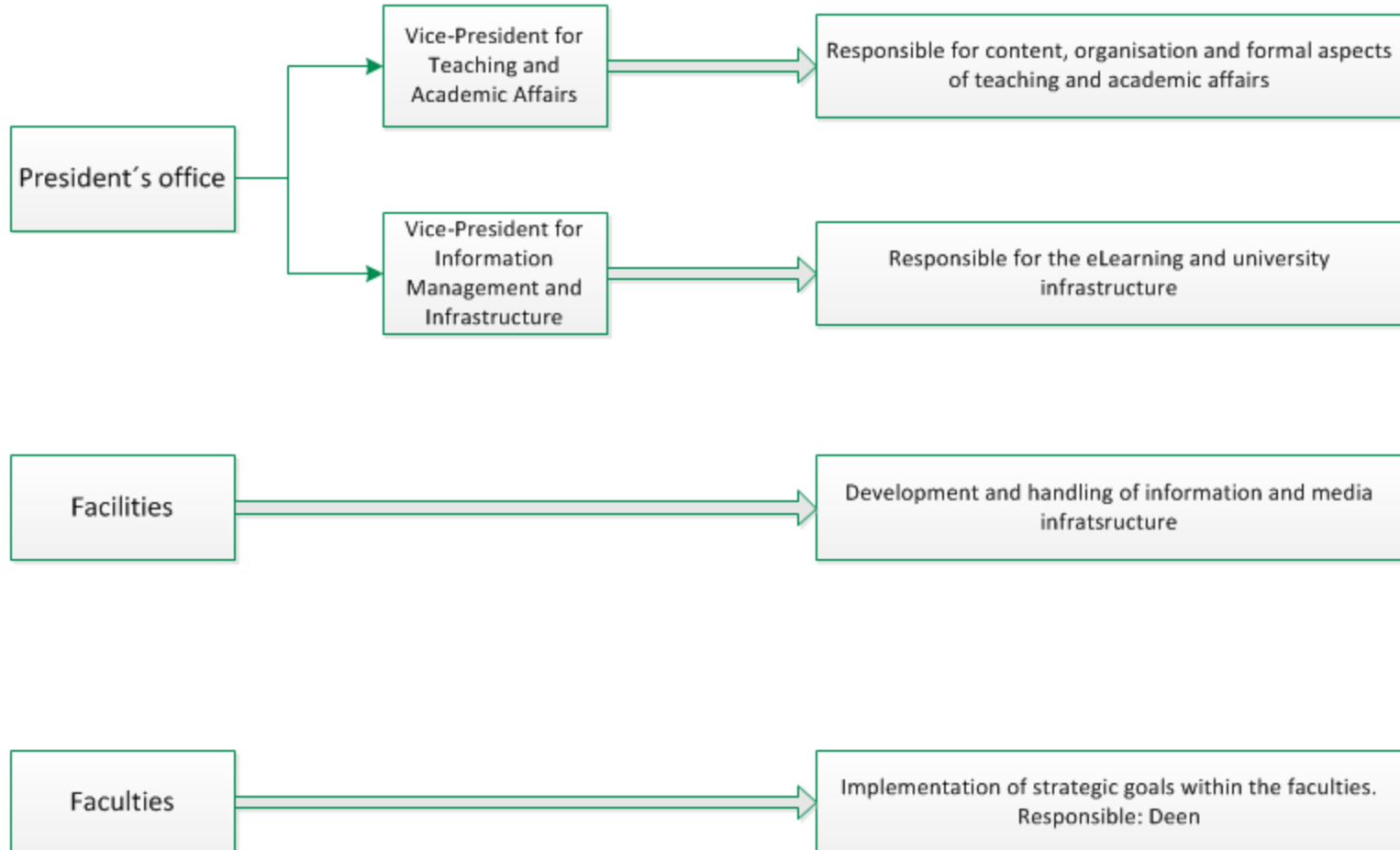
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Strategical Integration inside University



Strategical Integration inside University



Strategical Integration in external eLearning- networks

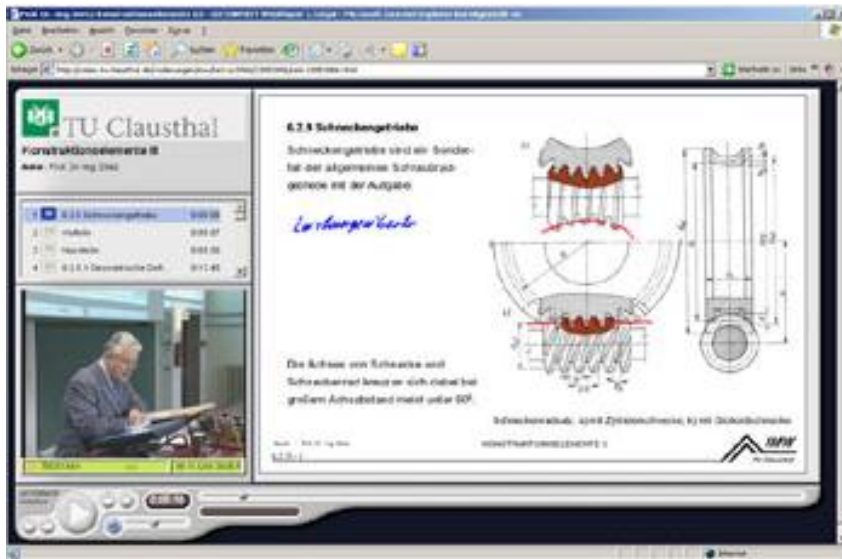
- Since 2001: Elearning Academic Network Niedersachsen (ELAN).
- Since 2010: Niedersächsisches Network for E-Assessments and E-Tests (N2E2).
- Since 2011: eCULT: eCompetence and Utilities for Learners and Teachers.



Actual eLearning arrangements

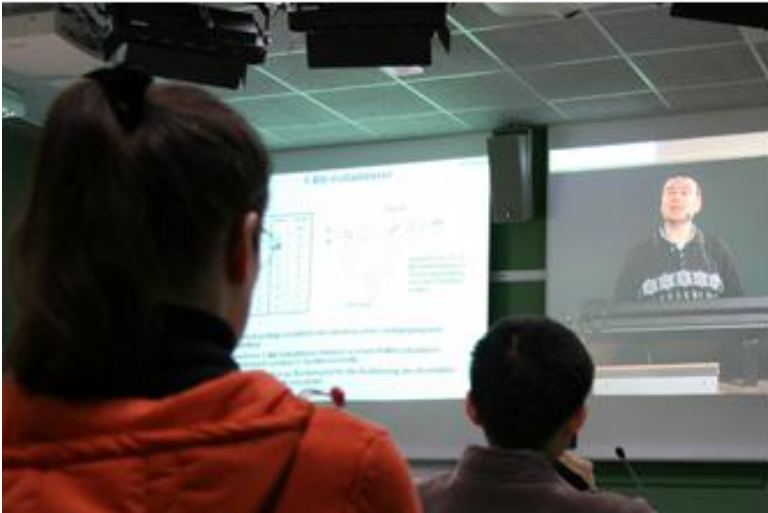
- Lecture Recording / Teleteaching.
- Study- Management- System.
- Interactive Voting System.

Actual eLearning arrangements – Lecture Recording



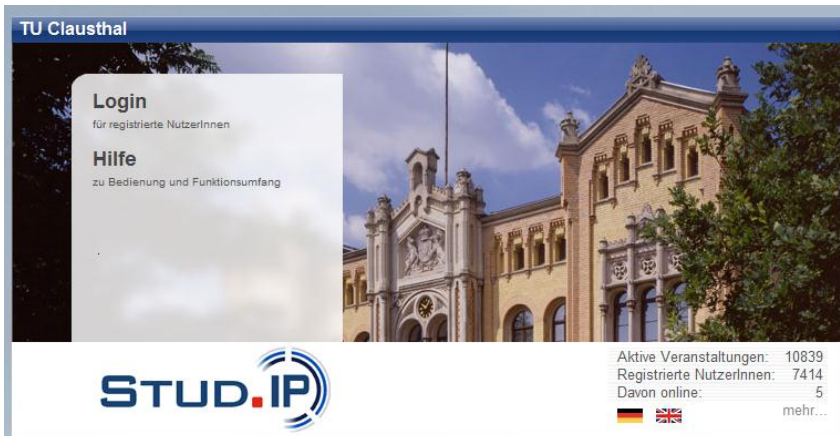
- Presentation and video recording make a complete teaching package.
- Permanently available teaching / learning resource.
- Intensive follow-up work.
- Flexible configuration of class schedule free of overlapping.

Actual eLearning arrangements – Teleteaching



- Live transmissions and lectures.
- Interaction with questions.
- Mutual exchange of lectures.

Actual eLearning arrangements – Study-Management System (Stud.IP)



- Organization of in-person lectures.
- Internet-based working environment for teaching and studying.
- Personalized class scheduling.
- Communication with instructors / Class-mates.
- Online- Evaluation.

Actual eLearning arrangements – Interactive Televoting

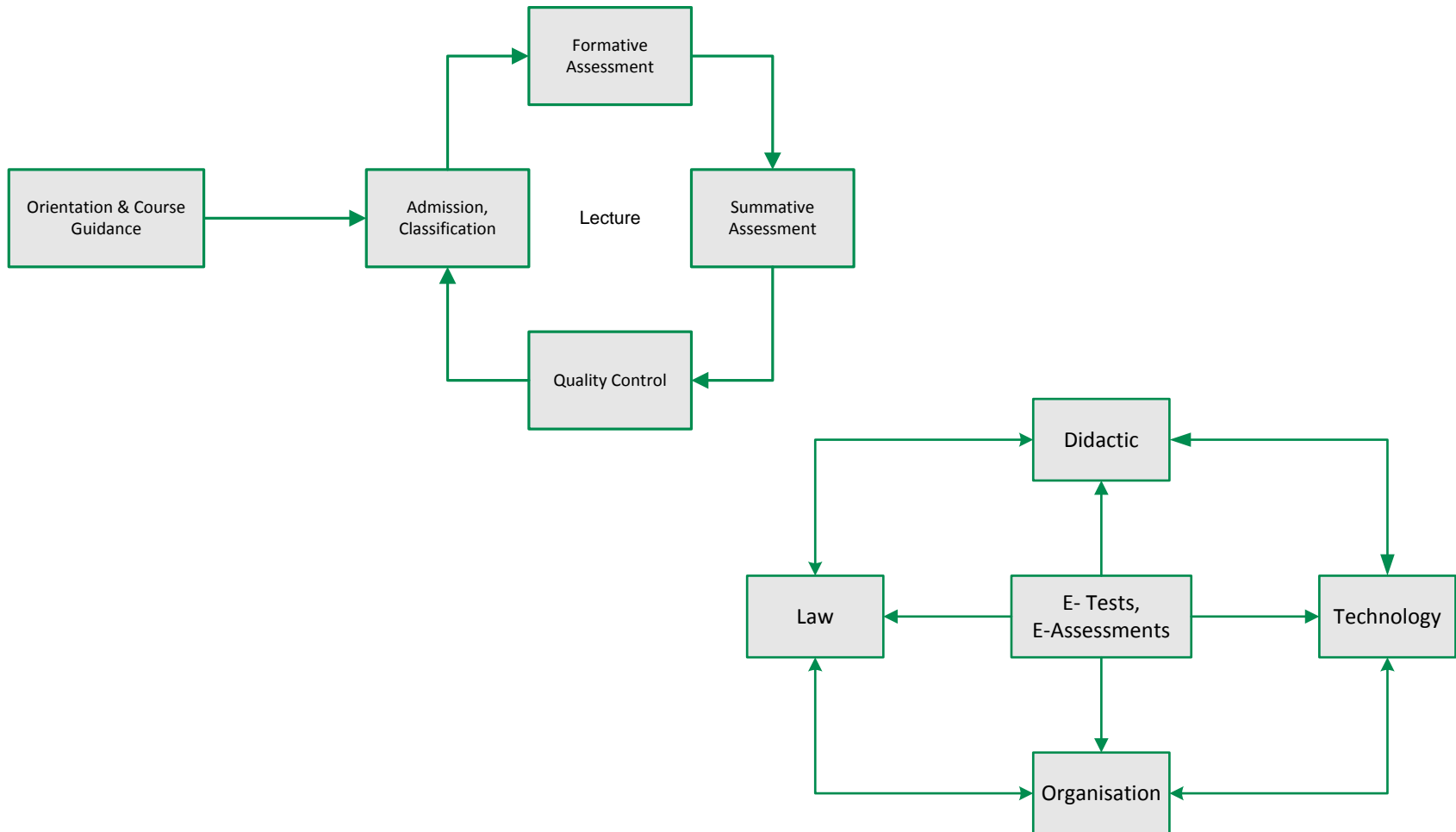


- Interactive Presentation.
- Checkup of study goals.
- Adapted to individual and group-oriented lecture development.

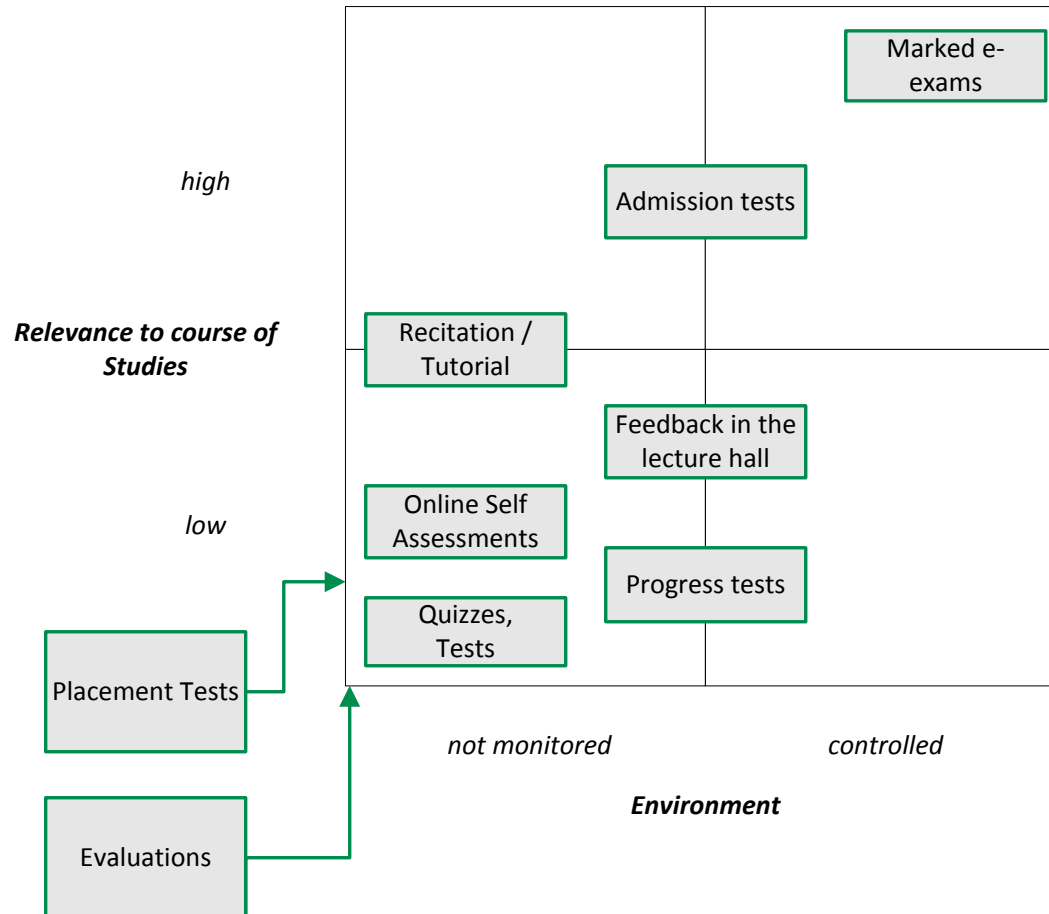
Intended eLearning arrangements and developments

- Continued development of E-Assessment.
- Integration of a system for online recitations and electronic scoring.
- Didactic supervision of eLearning activities through a newly created position for university didactics.
- Establish an eLearning assistant for each faculty.

Intended eLearning arrangements and developments



Intended eLearning arrangements and developments







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Realisation Bologna - process

- **Conversion of the organisation.**
 - **Inout to an output orientated organisation.**
 - **Credit-point system.**
- 
- **Credit- point system:
administrative tasks will be
simplified by means of the
eLearning Management Systems.**

Realisation Bologna - process

- **Curriculum:**
 - **Modular layout.**
 - **Change of the curriculum planning to interrelated modules to provide greater flexibility.**
- 
- **eLearning to assist with mobility.**
 - **Global campus.**

Realisation Bologna - process

- **Emphasis on self- study.**
- **Self- directed learning.**
- **Individualised learning.**



- **Increased flexibility through eLearning.**
- **Instrument for administration and coordination of the modules.**
- **Instrument for increased quality.**
- **Methodic support of self- directed learning potential.**



Acceptability

- Subjective assessment of usefulness.
- Influence of subjective standards on the assessment of usefulness.
- User friendliness.
- Estimation of system use (social pressure).

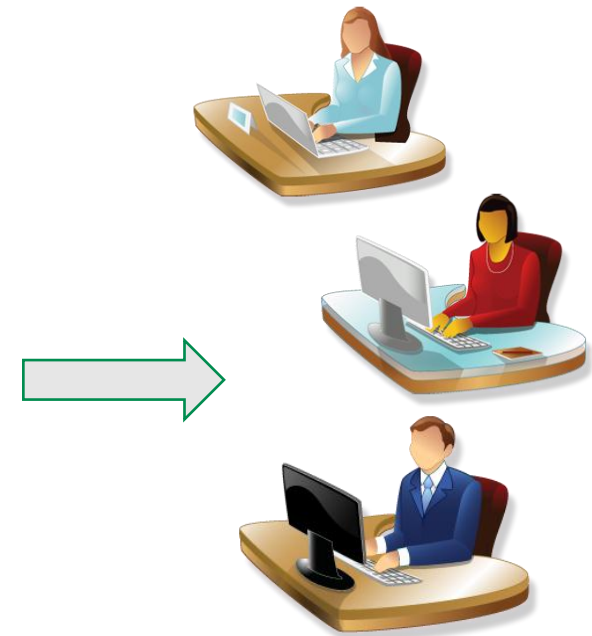


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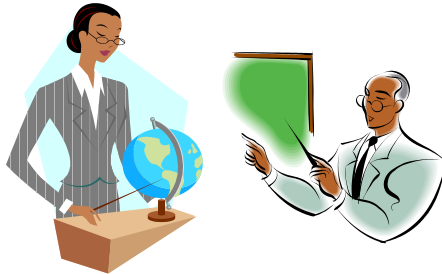
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Advantages of eLearning – Users perspective

- Flexibel organization of learning processes with regards to location, times, length, method and content.
- Learning motivation through attractive multimedia presentations or playful learning scenarios.
- Cognitive „obvious“ depiction of complicated learning subjects.

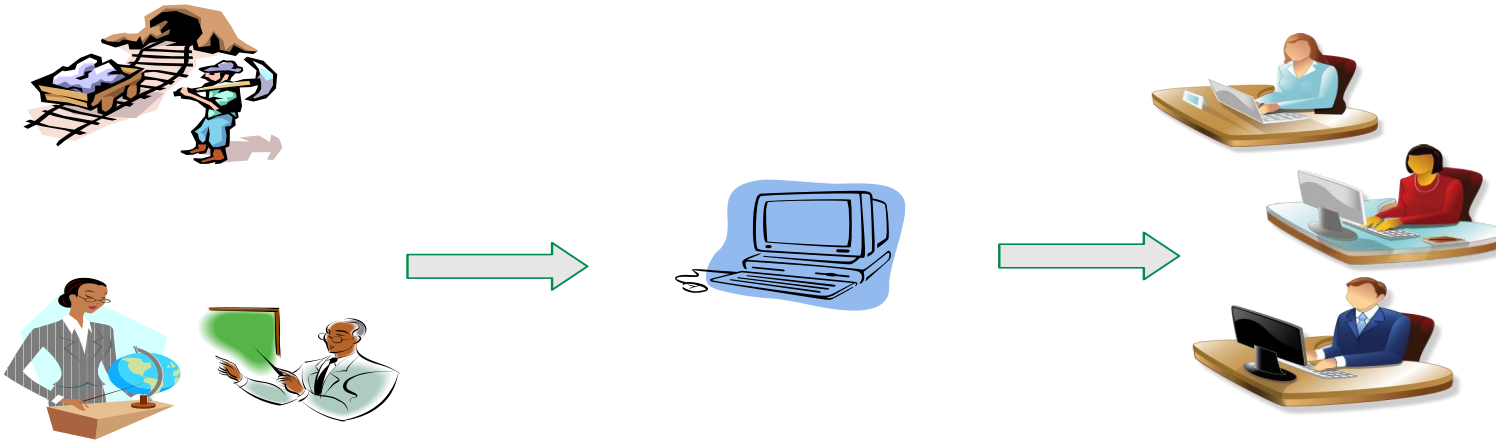


Advantages of eLearning – Academic perspective



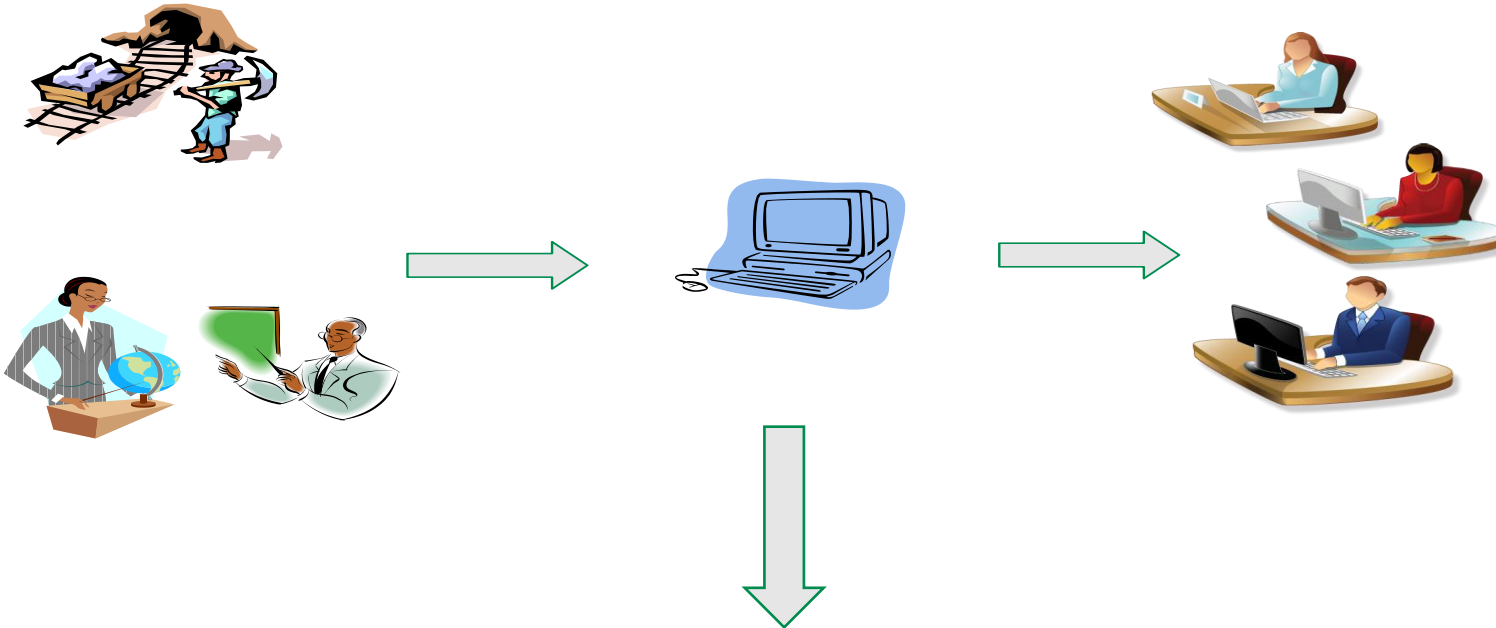
- Allow for eLearning- Scenarios.
- Quick distribution of course offerings independant of location.
- Quick and inexpensive updating of content.
- Efficient fabrication of new content.
- Further utilisation of individual contents.
- Significant saving with regards to travel expenses and work outages for on-the-job training

Disadvantages of eLearning



- Absence of important, intersubjective well-established cognitional and communicational routines.
- Loss of important tools to assess and influence behaviour of the student or study group.
- The possibility to receive motivational and comprehension boosting attention and affirmation from teachers and fellow students.

Conclusion



For a broad social / corporate acceptance and utilization of network-based learning scenarios, new techniques and routines for network-based communication, must be developed, arranged and practiced for the interaction between technology and person.



Glückauf

