DISTANCE EDUCATION IN THE CONTEXT OF MOBILITY, DIGITALIZATION AND TECHNOLOGY:"

Potential and Barriers to bridge the digital divide

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INTRODUCTION
INTRODUCTION

Academic Work/Research:

• B.A. Thesis Structural-genetic conditions for digital literacy
• M.A. Thesis Globally Networked Learning-Processes in Higher Education: Rethinking and Fusing Terminology and Theories in the Context of Digitalization and Technology

Articles/Papers:

• Mobile Knowledge-Management (2012)
• Connectivism and Interactionism Reloaded: Knowledge Networks in the Cloud (2014 Springer)
• Social Writing: Launch and Establishment of a Writing Lab at the Distance University in Hagen Learning (2015)
• Knowledge and Competence in Global Online Universities: How Terminology shapes Thinking (2015 Springer)
“DISTANCE EDUCATION IN THE CONTEXT OF MOBILITY, DIGITALIZATION AND TECHNOLOGY:”
Potential and Barriers to bridge the digital divide

- STUDENTS WITH DISABILITIES IN GERMANY – SOME NUMBERS
- THE DISTANCE UNIVERSITY IN GERMANY
- MOBILITY, DIGITALIZATION AND TECHNOLOGY: MEANS TO ENLARGE OR TO BRIDGE DIGITAL DIVIDE?
“DISTANCE EDUCATION IN THE CONTEXT OF MOBILITY, DIGITALIZATION AND TECHNOLOGY:”
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- STUDENTS WITH DISABILITIES IN GERMANY – SOME NUMBERS
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Universitys in Germany:
7 % of students* state being impaired, 1.8 % heavily impaired

Distance University in Hagen:
13 % (M.A. 8;9) have a health impairment
9 % choose the distance university because of having a health impairment
48 % (36) chronical/somatical
31 % (26) mentally/psychical disabled
13 % (22) physically handicapped/movement disorders
3 % (1) speech-impaired
3 % (7) visually impaired/blind
0 % (4) hearing impaired

40 % of the above feel impaired to successfully completing their studies, out of them 34 % heavily and 42 % moderate

* From the respondents to a study on student-contentment in the 4th and 5th term
The Distance University in Germany – Chance or Altered Barriers?
Projects and Approaches on heterogeneous learners at the Distance University in Hagen

Offers for blind and visually handicapped Students

HBS: Hagener Braille Software

• Course materials in different forms:
  • Embossed-Printed Study Courses
  • Studycourses in .txt or .doc or .rtf
  • Audioversions
  • Contracted Braille

A software - basing on already existing solutions and developed at the Distance University - that transforms scientific texts in embossed printing. It is running for Windows systems and enables also to transform Marginalia, Formula and charts.
HETEROGENEITY AT THE DISTANCE-UNIVERSITY IN HAGEN
82.3 % (90.6 MA) of the students work in a job with at least 50% of full-time
14.5 % (BA) got their qualification to study through vocational qualification
  (no university entrance diploma from school)
29.6 % (BA) have already successfully completed another university degree before

8.4 % (2.7) 18-24
30.5% (42.2) 25-31
28.4 % (30.4) 32-38
15.7 % (12.7) 39-45
11 % (7.4) 46-52
4.3 % (3.1) 53-59
1.7 % (1.5) 60+
Projects and Approaches on heterogeneous learners

- The Project “Social Writing” at the Distance University in Hagen
- A Global Online University: Research on changed learning processes in a new learning culture
THE DISTANCE UNIVERSITY IN GERMANY – CHANCE OR ALTERED BARRIERS?
Projects and Approaches on heterogeneous learners at the Distance University in Hagen

THE PROJECT SOCIAL WRITING:
LAUNCH AND ESTABLISHMENT OF A WRITING LAB
AT THE DISTANCE UNIVERSITY IN HAGEN LEARNING
EVALUATION OF THE ADDITIONAL BENEFIT THROUGH THE INTEGRATION OF THE VIRTUAL CLASSROOM IN MOODLE TUTORIALS

- Which aspects of such a combinations are regarded as most important additional benefits (Efficiency? The »social factor«? Motivation and Satisfaction?)

- which are regarded as barriers and inhibition thresholds (Technology? Time-Consum? Fear of embarrassing oneself by interaction synchronously and using Camera and Microphone?).

- 10 closed questions (offering the possibility to give additions) and one open question.
The closed questions were analyzed quantitatively using Excel, the open question and supplemental free answers qualitatively using MAXqda, a Qualitative Data Analysis Software.
Vorteilhafte Aspekte der Einbindung in Moodle Kurse:

- Soziale Aspekte: 60%
- Inhaltliche Aspekte: 40%

Effizienz und Motivation für Inhalte:
- Zusammengehörigkeit: 38%
- Vertrauen: 41%
- Sonstiges (direkter Austausch, Fragen persönlich stellen ...): 21%
RESULTS

Hemmschwellen

52% 48%

Zeit Selbstbewusstsein

64% 36%

100%

FernUniversität in Hagen
CONCLUSION AND PROSPECTS

➢ fostering media-competence is important but by far not sufficient to compensate a lack in social presence.

➢ Social skills that enable to cooperative and collaborative learning, to give and accept peer account, are equally important.

➢ learners have to be enabled to communicate and interact in a way
  ➢ that makes them become conscious of the potential
  ➢ of using different and various tools and approaches to generate and manage learning.
CONCLUSION AND PROSPECTS

- Social aspects, and the question of needs like self-confidence and experiencing peers as "real persons" are important.

- Communication in such courses is of highest importance.

- Approaches like
  - the use of peer-tutoring or buddy-concepts
  - a scaffolding of interventions of course-instructors,
  - changed roles of learning and teaching
  - Metacommunication about different understandings and expectations

... will become more important than questions on how to design a didactically and technologically perfect course.
MOBILITY, DIGITALIZATION AND TECHNOLOGY: MEANS TO ENLARGE OR TO BRIDGE DIGITAL DIVIDE?

A Global Online University: Research on changed learning processes in a new learning culture

A New Learning Culture for Academic Learning : Global, networked, heterogeneous
ONLINE LEARNING AND THE DIGITAL DIVIDE

FOUR ILLUSIONS IN FORMAL EDUCATION

(George Siemens, 2009)

- Learning Needs can be defined
- Learning (success) can be controlled
- Learning communities (students) are similar (age, grade, knowledge base ...)
- Learning processes are coherent and structured
"All perception […], all behaviour […] all classes of learning […] must be regarded as communicational in nature" (Gregory Bateson)

- From "Learning how to learn" (Gregory Bateson's Learning II) to Learning how to learn to learn":
  - Including Contexts and Sets of Contexts into Learning Experiences:
    - "Throws unexamined premises open to question and change" (Gregory Bateson)
- From Communication to Meta-Communication
- From Key-Competences to Enhancement-Competence
- From MOOCs (as forerunners) to GOAL (Global Online Academic Learning)

"Learning is a network phenomenon […] enhanced by socialisation, technology, diversity, strength of ties, and context of occurrence" (Siemens)
ONLINE LEARNING AND THE DIGITAL DIVIDE

Context-Markers

Learning III
Enhancement Competence (see section 3.4) and intercultural competence
Correction of errors through a change in the system of sets of alternatives

Learning II
Specific (context-dependent) key-competences such as media competence, social competence...
Correction of errors through a change in/of the set of alternatives (context) or in punctuation of experience

Learning I
Specific Competences, Skills
Change in specificity of response corrections of errors within one set of alternatives (context)

Learning Zero
Same Stimulus
→ Same Response
Not subject to correction

Sets of Contexts
LEARNING, KNOWLEDGE AND COMPETENCE – A SPIRAL PROCESS…

Learning

Knowledge

Competence

Generating Knowledge

Learning is necessary to gain

Knowledge is generated through

Competence includes

Generating Knowledge

Learning is defined as

to exhibit confidence and trust

to act in various contexts

lead to
THE QUESTION OF COMPETENCE …
META-COMMUNICATION …

… a mighty tool to transform Heterogenity from Challenge to Chance

Metacommunication can serve as Framework/Scaffolding to each Learning Scenario:

- **Before** dealing with any content, deal with premises
- **Before** adopting knowledge, discuss different understandings
- **While** discussing content, discuss experiences and foreknowledge
- **After** casting doubt on fixed knowledge, create cooperative new knowledge
A NEW LEARNING CULTURE NEEDS CHANGED DEFINITIONS

“We cannot sustain ourselves as learning/knowing beings in the current climate with our current approaches. Networked (social, technological) approaches scale in line with changes, but require a redesign of how we teach, learn (and see learning), and come to know.” (Siemens, 2007)

Looking at learning-processes and knowledge

- requires views from different angles,
- needs to include contexts (individual, cultural, linguistic, social)
- and first and fore-most there has to be an awareness of these different contexts and their influence on definitions and expectations.
A CHANGED LEARNING CULTURE

is influenced through and influences …

- (Educational)Science (research and discourses),
- Educational Praxis (didactics, settings, environments),
- and (Educational)Politics (social and cultural aspects of society)

and therefore will have to imply questions like

- ... do traditional methods of evaluation and research still fit?
- ... does one need new criteria to define objectives, goals, success?
- ... can one even „measure“ those changed and enhanced learning-processes?
FROM THEORY TO PRAXIS …
WHAT A MOOC COULD BE BUT NOT NECESSARILY IS:

A place to transform learning

A place where roles merge and interaction enables new ways of thinking

A place that “takes a live of its own” (G. Siemens)

A place to share your ongoing thoughts and efforts related to it (B. Bull)
Prior to considerations about didactics, methods and contents there have to be ideas and concepts of how to enable and allow individuals and learning communities to reflect their way of thinking; to recognize different premises about what learning and knowledge is,

and to set new, commonly found and shared context markers as a pre-condition to reach a level of what Bateson defines as Learning III

Such new context markers could become passable bridges over – not only the digital – divide between heterogeneous learners
LITERATURE

From the slides


Recommmendation in the themes context:


