

Case study

ACADEMIC RESEARCH AND WRITING

Implementation of the Inverted Classroom Model (ICM) at the University of Applied Sciences (UAS) Hamburg



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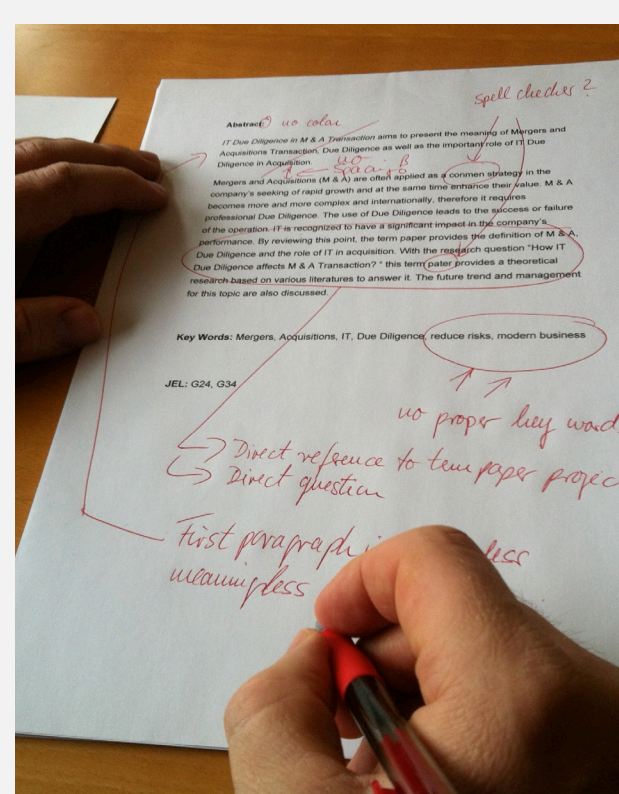
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Observations from previous courses



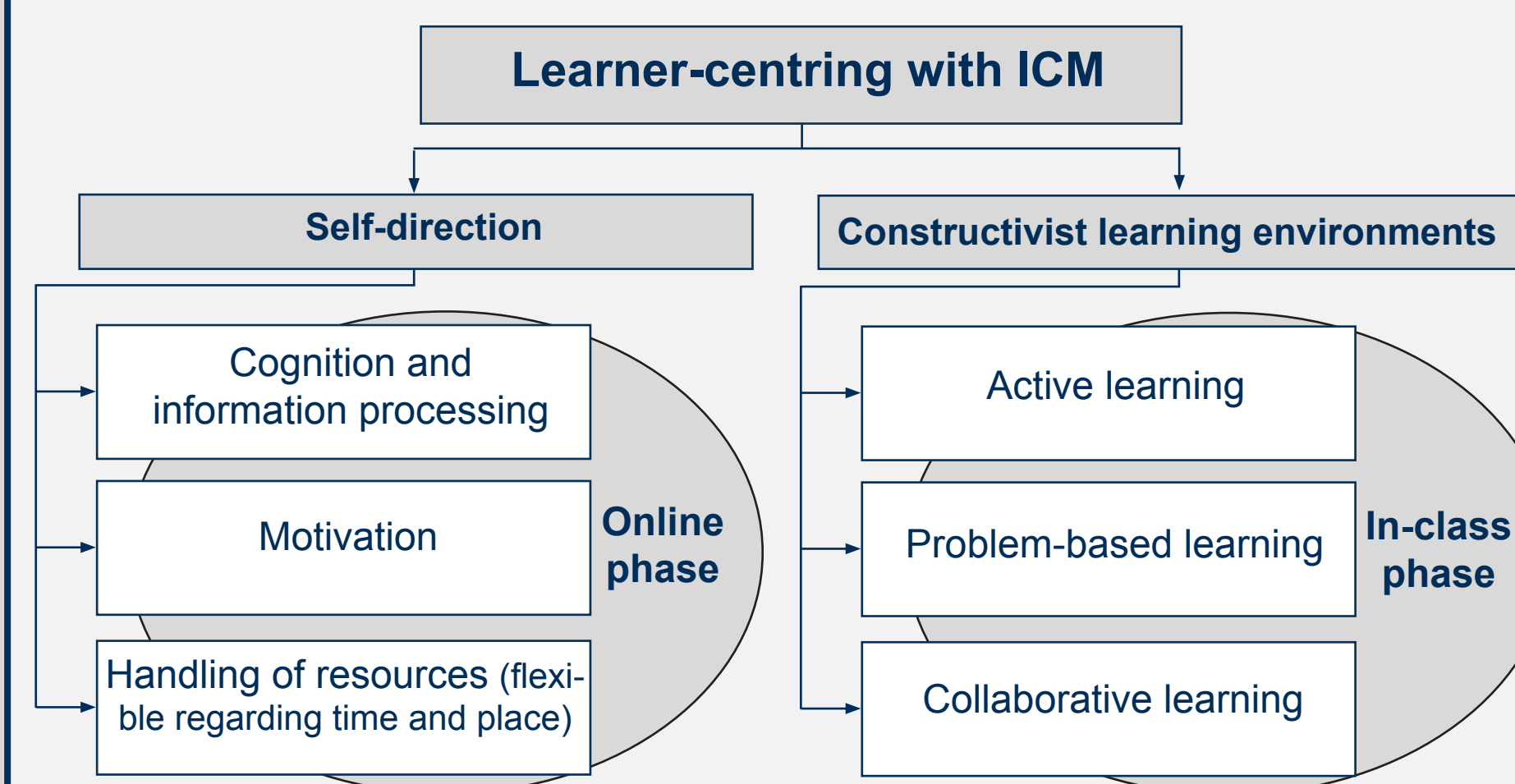
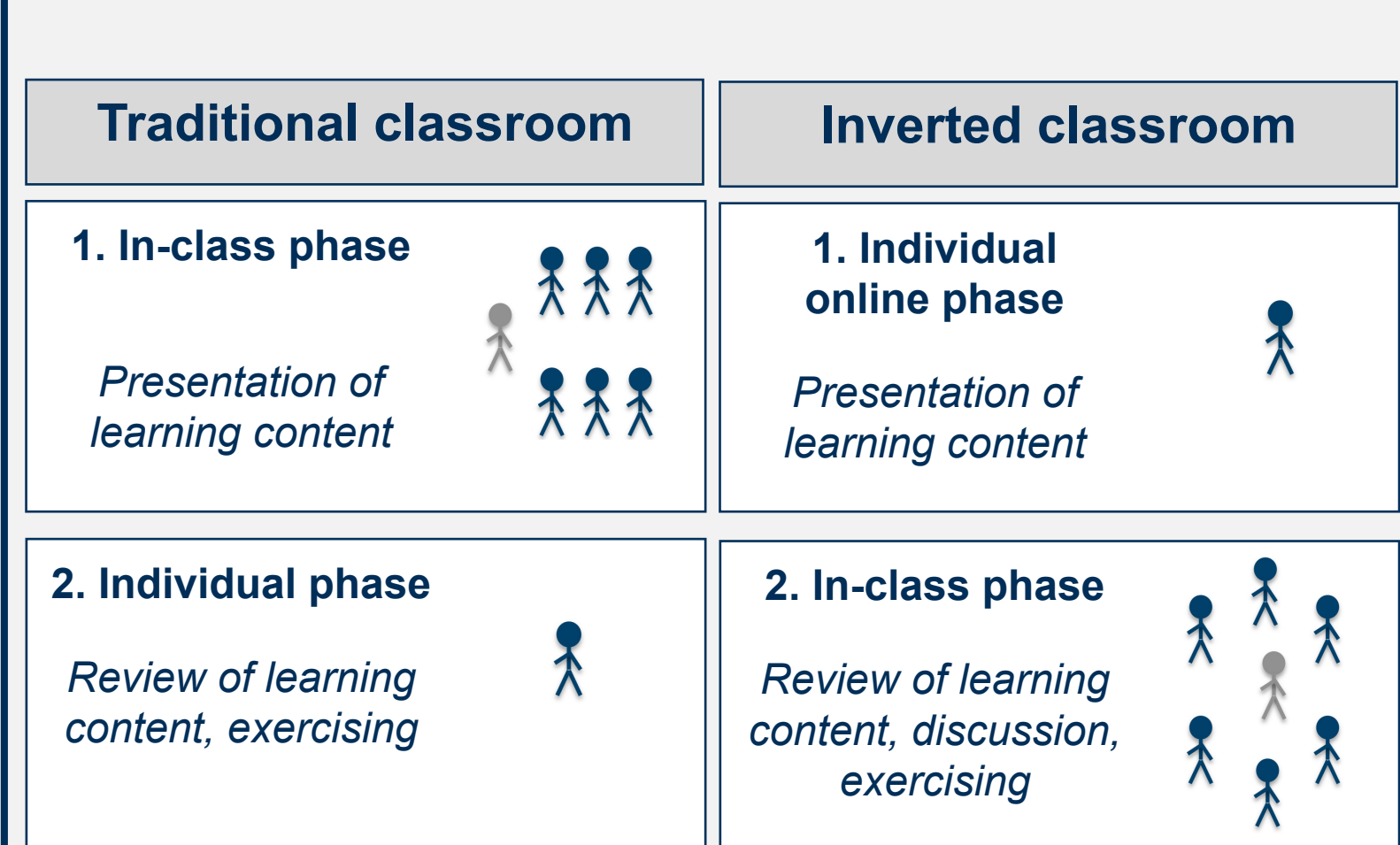
- Lack of awareness of relevance of academic research and writing skills
- Lack of compliance with formal rules
- Lack of awareness of plagiarism and collusion
- Lack of intrinsic motivation
- Poor performance
- Procrastination

English course language increases problems for non-native participants!

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Observations were used for the redevelopment of the module ACADEMIC RESEARCH AND WRITING.

Theoretical framework for implementation of the ICM



New syllabus

1. Academic research in theory and practice
2. Research principles
3. Research logic
4. Research process
5. Identification of a topic
6. Sourcing of information
7. Elements of a research paper
8. Interpretation of a topic
9. Structuring technique
10. Referencing
11. Academic language and writing style
12. Project management
13. Technical aspects
14. Academic presentation

New structure

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Part A Academic research Decker	Kick-off	Blended learning & exercises Preparation of term paper project			Deadline	Distribution of topics		Written examination							
Part B Applied literature research Dannenberg								E-Learning & literature research	Mid-term protocol	2 nd research phase	Final protocol				
Part C Academic writing Decker Beier								Term paper	Term paper	Walk-in writing lab	Walk-in writing lab	Deadline	Term paper presentation training	Student presentations	Student presentations
Term paper project (5 weeks)											Presentations				

Competencies

- Students are able to give examples of generally accepted academic principles and to identify academic misbehaviour (comprehension, knowledge).
- Students are able to distinguish academic research processes from random approaches of problem solving (comprehension).
- Students are able to identify a topic/title and to develop a corresponding research aim (synthesis).
- Students are able to conduct a literature research and to evaluate the quality of sources of information (evaluation).
- Students are able to deduce an interpretation of a topic from a theoretical perspective and/or against the background of a given problem setting (analysis).
- Students are able to develop a structure of a research paper that corresponds with the interpretation (synthesis).
- Students are able to paraphrase literature and to apply rules of referencing and citation in a consistent way (comprehension, application).
- Students are able to apply the principles of academic language and writing (application).
- Students are able to organise their research project and to present and to debate their findings with other students and the instructor (application).

Conceptual elements of redesigned course

Academic research

E-learning (online phase)

- Learning videos
- Available on LMS (Moodle)

Section 1 • Structuring technique in the context of the course

Section 3 • From title to research question

Section 3 • Aligning the triangle of synchronisation

Topics

- Research logic
- Elements of a research paper
- Interpretation of a topic
- Structuring technique
- Referencing
- Academic language and writing style

In-class phase

Recapitulation of selected topics from e-learning mixed with ...

... in-class exercises (group work, think-pair-share etc.).

Photo: © Stephan Beier, 2013

Literature research

Detlev Dannenberg

Activities

- Students watch e-learning videos and receive research exercises
- Students submit a mid-term research protocol and receive individual suggestions from instructor (librarian)
- Students submit a final research protocol that will be graded (weighting 5% of final grade)

Field trip and guided tour

Deutsche Zentralbibliothek für Wirtschaftswissenschaften Leibniz-Informationszentrum Wirtschaft, Hamburg

Objective: Familiarising students with a professional library

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Academic writing

Main topic summer term 2014 Entrepreneurship

- 40 topics addressing a diverse set of aspects related to entrepreneurship
- Academic level of topics adjusted to 2nd semester students
- Individual topic for every student (randomly distributed)
- Topics with potential for intrinsic motivation

Illustration: CC0 1.0 Openclipart

Term paper project

Walk-in writing lab

- Every student has the option to register in Moodle for up to two one-on-one sessions with the course instructor
- Objective session 1: Clarifying research design (research question, outline etc.)
- Objective session 2: Clarifying individual questions

Presentation-lab and poster-lab

- Design of academic presentations and posters with PowerPoint
- Small groups of approx. 20 students in PC lab
- Two instructors support students

Students are provided with master files

Term paper projects form basis for lab work

Photos: © Christian Decker, 2014

Academic presentation

In-class presentation

Settings

- Academic presentation, "freestyle" in terms of personal presentation style
- Small groups of 6-8 students plus instructor
- Medium: PowerPoint® plus beamer
- No grading of presentation

Objectives

- Gaining confidence and overcoming possible anxieties
- Receiving individual feedback from peers and instructor

Poster conference

Preliminary findings

- Winter term 2012/2013**
- 64 students registered for the course
 - 46 students handed in term papers (72%)
- Summer term 2013**
- 70 students registered for the course
 - 58 students handed in term papers (83%)
- Winter term 2013/2014**
- 61 students registered for the course
 - 46 students handed in term papers (75%)
- Summer term 2014**
- 40 students registered for the course
 - 40 students took the written examination (100%)
 - 38 students handed in term papers (95%)
 - One student had to postpone her term paper due to illness
 - One student was not able to finish her term paper on time
 - 38 students handed in presentations
 - 36 students presented their presentations in-class
 - Two students had to postpone their presentations due to illness
 - 38 students handed in posters

Next steps

- Additional e-learning videos
- Formative assessments (electronic quizzes and tests)
- Exercises linked to individual student research projects
- Mobile versions
- Videos of student presentations