MARTIN-LUTHER-UNIVERSITÄT HALLE-WITTENBERG

ZENTRUM FÜR MULTIMEDIALES LEHREN UND LERNEN

Structure, Functions, Responsibilities & Cooperation within the Martin Luther University

Dr. Kathrin Jäger

Content

1. Conditions of the Project

2. Fields of Work

3. Structure @LLZ

4. Topical Working Groups

   - Learning Management System

   - E-Lecture

   - E-Assessment

5. Certificate "Multimedia Teaching"

6. Projects

Conditions Of The Project

Part of the innovation project "Study multimedia" (funded by the Federal Ministry of Education and Research)

The project should "...lay stable foundations for a sustainable further development and modernization of the teaching and learning forms at the Martin Luther University."

First period: 4/2012 – 12/2016
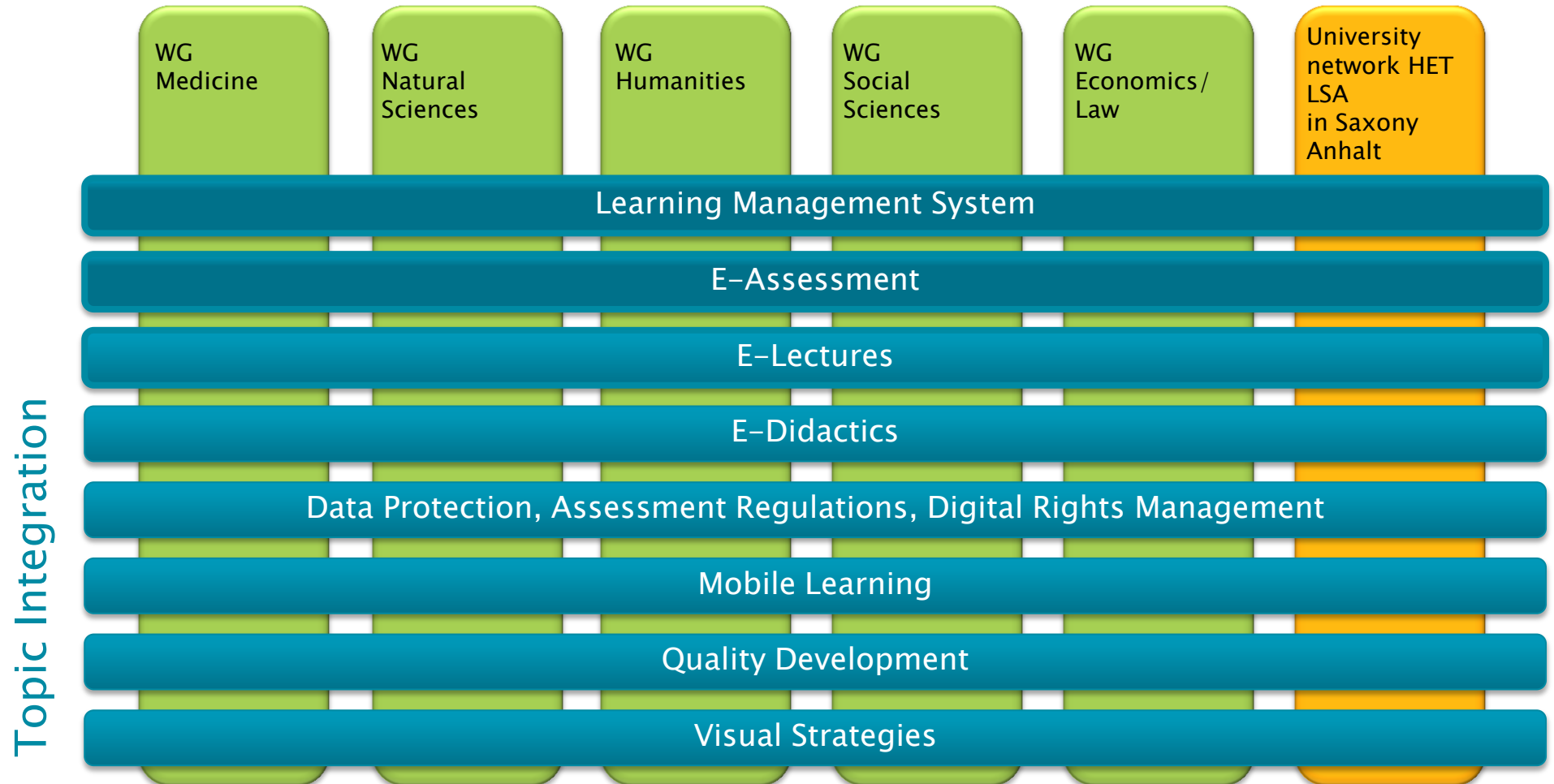Second period: 1/2017 – 12/2020

Focus

1. Provide technical, legal and structural conditions
2. Advice on all matters in the field of e-learning
3. Solutions for didactic implementation scenarios
4. Attendance and self-study courses, practical workshops, software manuals
5. Documentation of best-practice examples, publish, transfer
6. Coordination of cooperation projects similar to each other

Structure – Working Groups

Subject Integration

WG Medicine	WG Natural Sciences	WG Humanities	WG Social Sciences	WG Economics/ Law	University network HET LSA in Saxony Anhalt

Topic Integration

- Learning Management System
- E–Assessment
- E–Lectures
- E–Didactics
- Data Protection, Assessment Regulations, Digital Rights Management
- Mobile Learning
- Quality Development
- Visual Strategies

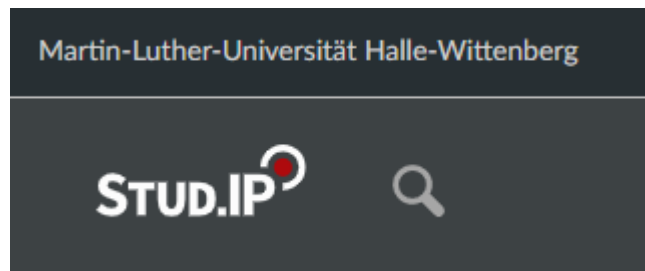# Learning Management System

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Stud.IP / ILIAS

Two systems Stud.IP and ILIAS are used for e-learning

Course- & student management system
- Organization
- Administration

Environment for learning and working online
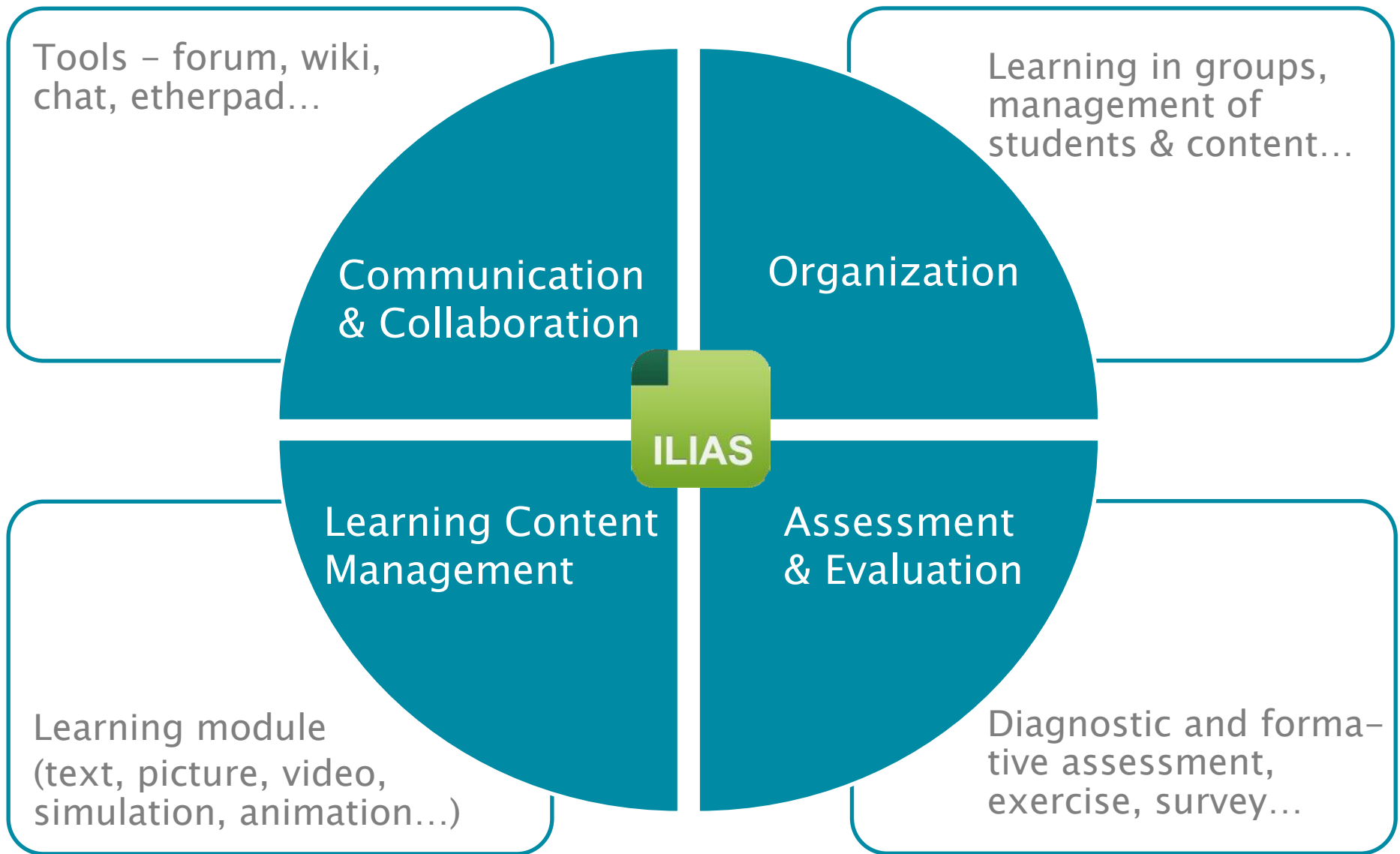- Integrated tools

ILIAS

Integrated Learning, Information and Work Cooperation System

- open-source web based *Learning Management System*

- it supports

    - learning content management

    - tools for collaboration & communication

    - organization

    - evaluation and assessment

- software is published under the GNU General Public License

- hosted at our university

ILIAS

Tools – forum, wiki, chat, etherpad…

Learning in groups, management of students & content…

Communication & Collaboration

Organization

ILIAS

Learning Content Management

Assessment & Evaluation

Learning module (text, picture, video, simulation, animation…)

Diagnostic and formative assessment, exercise, survey…

ILIAS–Module „Scientific Work"

Wissenschaftliches Denken & Arbeiten
- Wissenschaftliches Denken
- Wissenschaftliche Praxis (inkl. wissenschaftliche Textsorten)

Grundlagen des Urheberrechts
- Rechte des Urhebers und Grundregeln zur Verwendung fremder Werke
- Wissenschaftliches Zitieren und Schranken beim wissenschaftlichen Arbeiten

Orientierung, Verwaltung & Dokumentation
- Themenfindung und Orientierung
- Literaturrecherche
- Lesestrategien und -techniken
- Materialdokumentation und -verwaltung

Planung & Vorbereitung der wissenschaftlichen Arbeit
- Projektorganisation & Zeitmanagement
- Arbeitsumfeld (inkl. Typenfragen)
- Motivation und Umgang mit Prokrastination

Wissenschaftliche Forschungsmethoden
- Überblick über die Forschungsmethoden
- Qualitative Forschung
- Quantitative Forschung

Präsentation & Visualisierung
- Strukturierung und Gliederung einer wissenschaftlichen Präsentation
- Mittel der Visualisierung und Gestaltung
- Umgang mit Hemmungen beim Reden und Präsentieren

Schreibprozess & Texterstellung
- Formale Grundregeln & Struktur und Formatierung
- Inhaltliche Gesaltung oder Der rote Faden
- Sprachliche Gestaltung (Ausdruck und Rhetorik)
- Umgang mit Schreibblockaden

ZENTRUM FÜR MULTIMEDIALES LEHREN UND LERNEN

E–Lecture

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E-Lectures
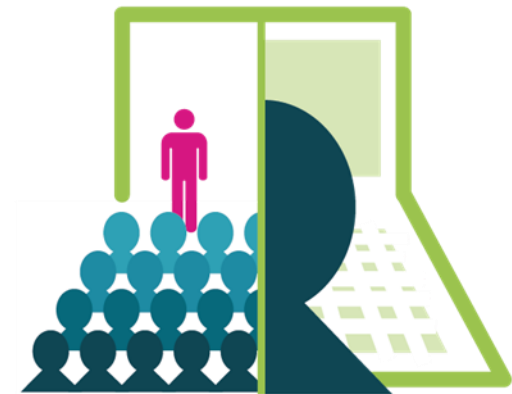

E-Lectures in total **(3215) 2012-2018**
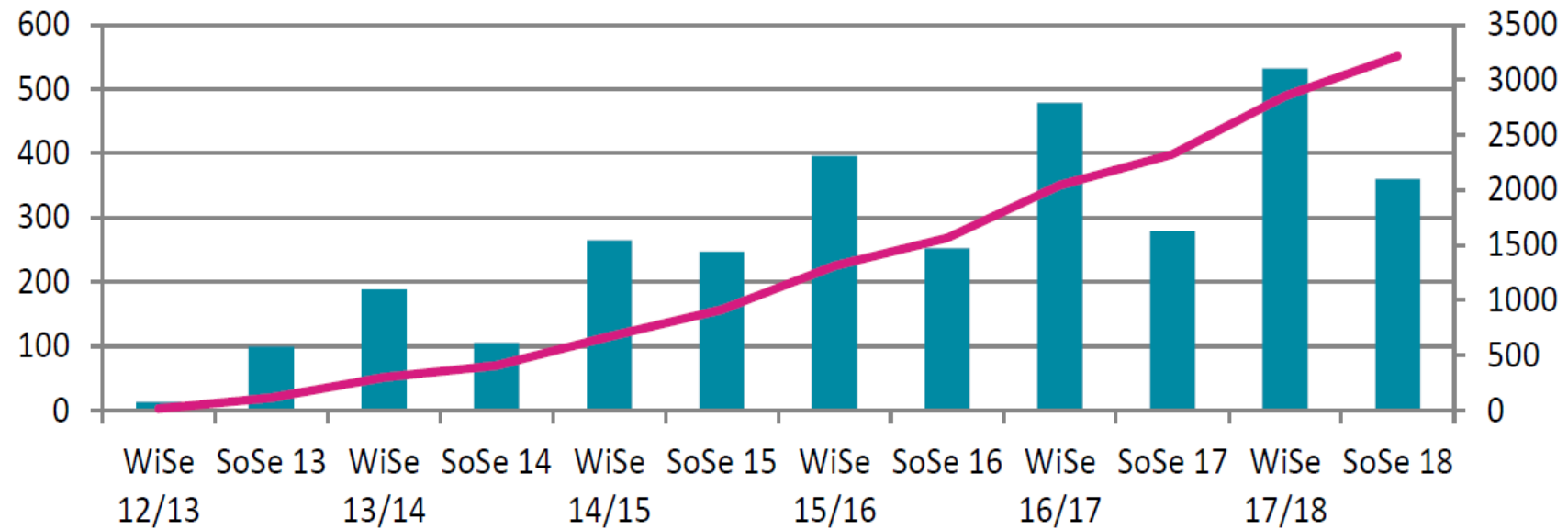
E-Lecture

Multimedia lecture material offers students the opportunities

- to prepare content with a view to a future course

- to rework knowledge already acquired

- to repeat content precisely for exams

Students can rework the lecture

- individual

- adapted to the own learning rate

- location- and time-independent

E-Lecture

The integration of e-lectures is complex and needs technical and legal infrastructures.

Media backpack	Installed systems in 24 lecture halls	Screencasts
recording with a camera, coupled with screen recording	video capture, management and distribution system	video screen capture for pre-production of lectures

System Construction – Overview

NCast – recorder

Opencast–Server

distribution

ILIAS

OPEN**LECTURE**

H.264/MP4

optional streaming server

memory
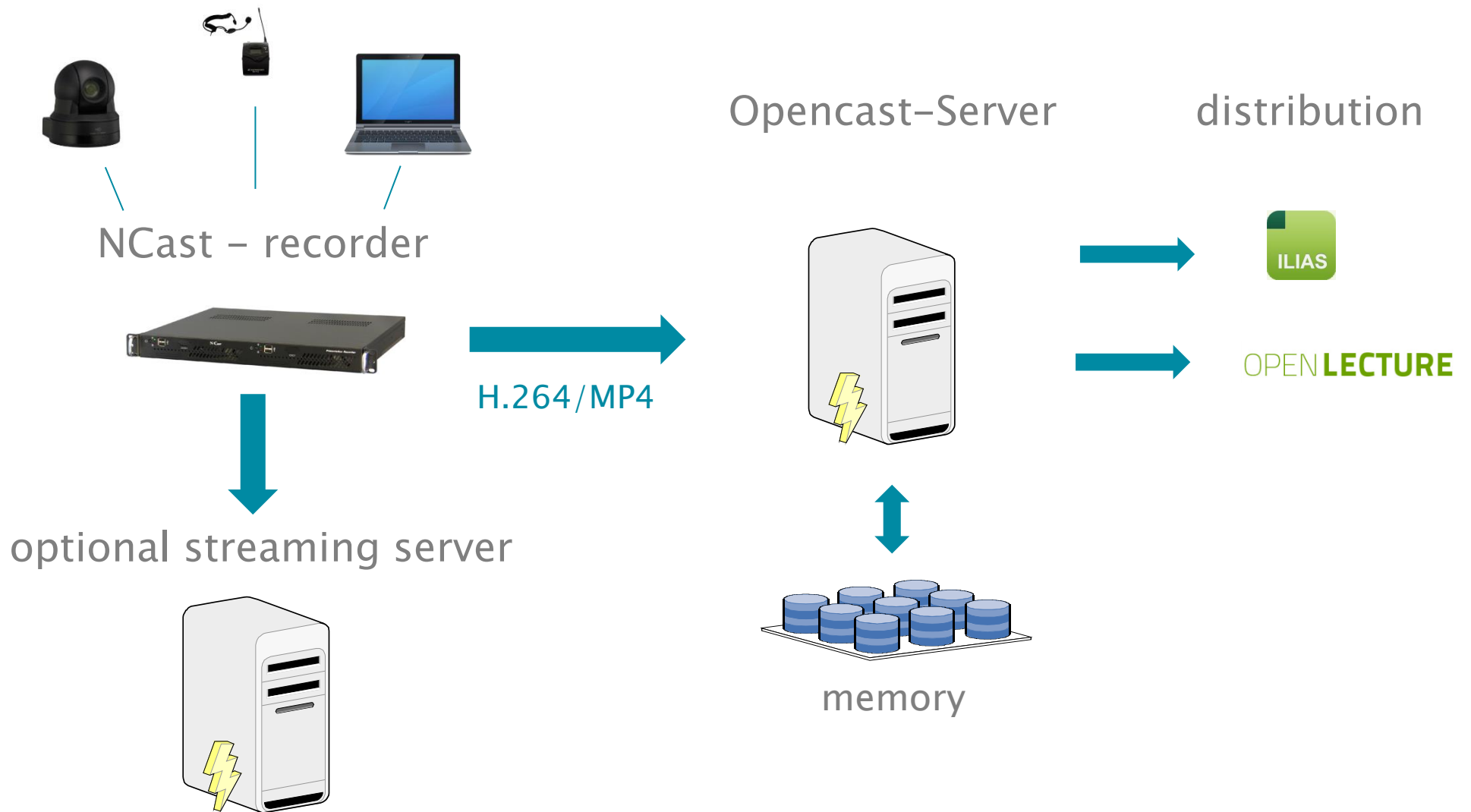
Technical implementation

- Opencast – open source software for video capture and processing

- International Community (Harvard, Stanford, ETH Zurich...)

- fully automatic operation system

- hosted at our university

E-Lecture

E–Assessment

E-Assessment

- …classical exams on site at the university

- …created and supervised by lecturers

- …stored on computers under the same conditions as a classic "written" exam and

- …predominantly automatically evaluated

E–Assessment

Requirements for online exams

- legally binding

- existing infrastructure | technical stability

- compatible system to the technical infrastructure of the university

- maximum protection against cheating

- Legally binding
- Organization
- Technical support
- Question methodology

E-Assessment

Learning and Assessment System of our University

Processing of

- Question pools
- Tests

implementation of seminar-accompanying tests

ILIAS

Learning System

Question pools

import/ export

ILIAS

Assessment System
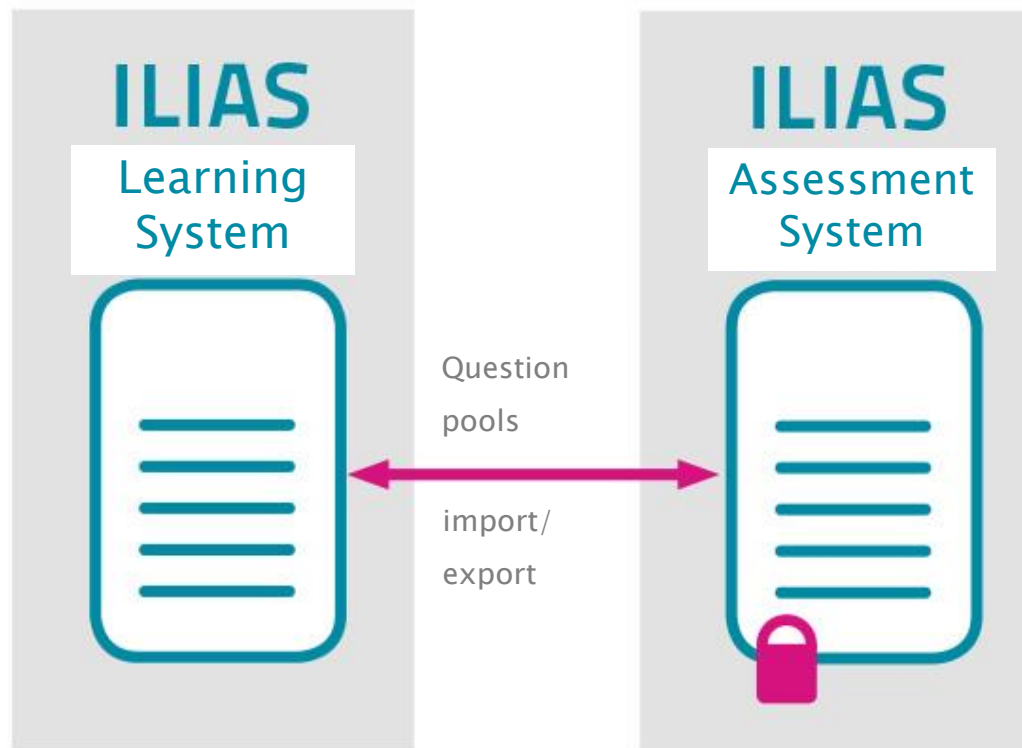
Processing of

- Question pools
- Tests

implementation of E-exams

Question Types

automatically evaluable question types	individually evaluable question types
• Single choice • Multiple choice • Arrangement question • Kprim question • Fill in the blank • Numerical question • Error text • Image Map • Structural chemical formula • Stack (algebra/statistic)	• Free text • Drawing task

E-Assessment
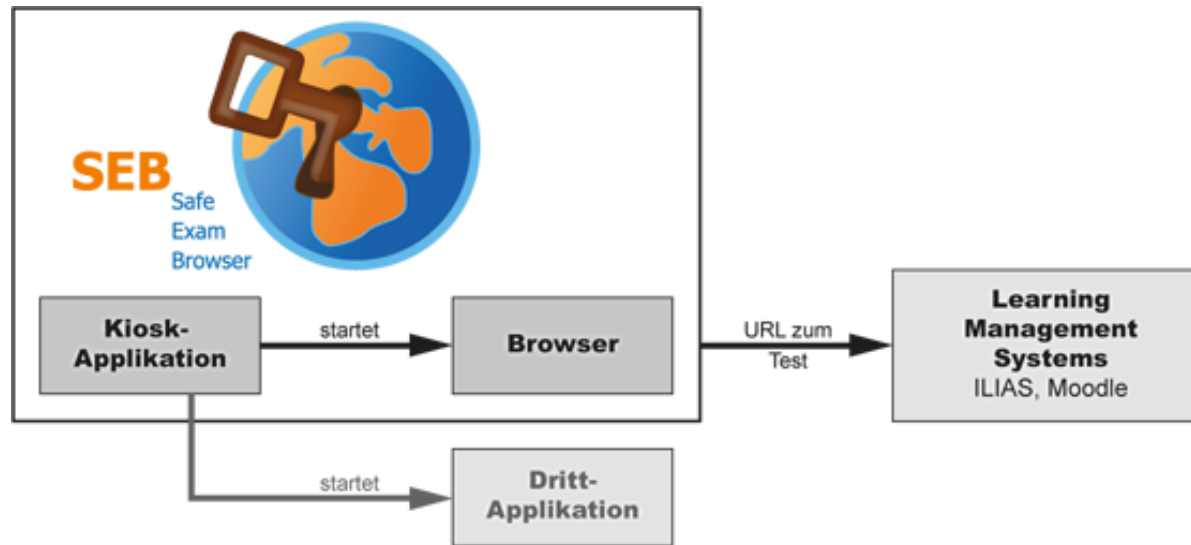
- webbrowser-environment to carry out online-exams safely

- changes any computer into a secure workstation

- regulates the access to any utilities and prevents students from using unauthorised resources

https://www.safeexambrowser.org/

E-Assessment

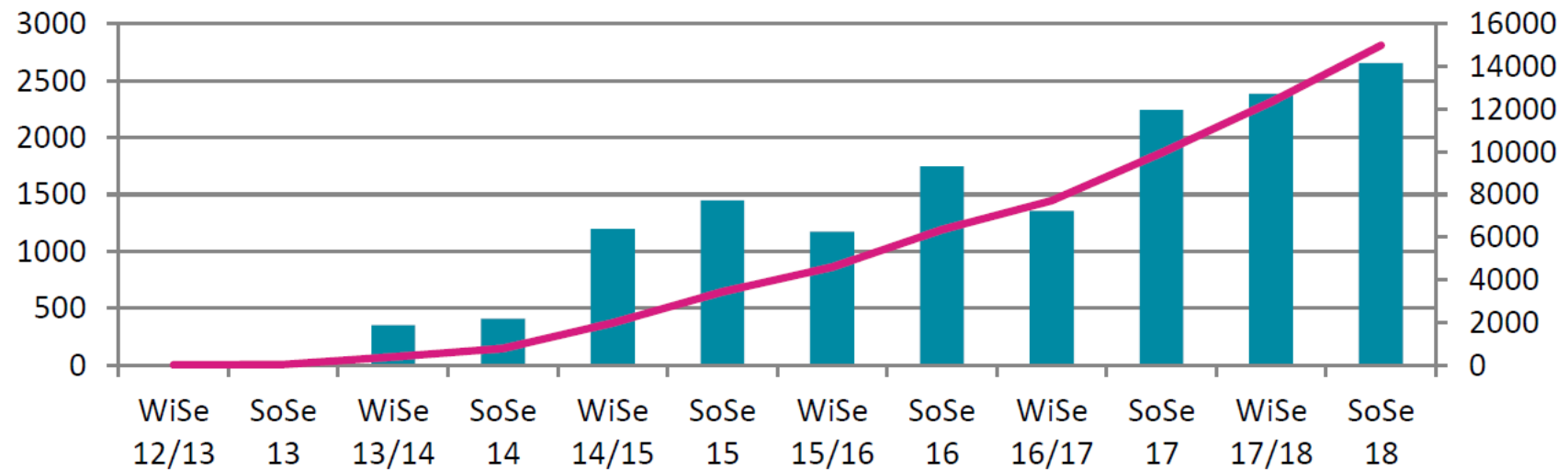set up: 200 laptops for a flexible assessment center

E–Assessment

E–Exam – in total (298) 2014–2018
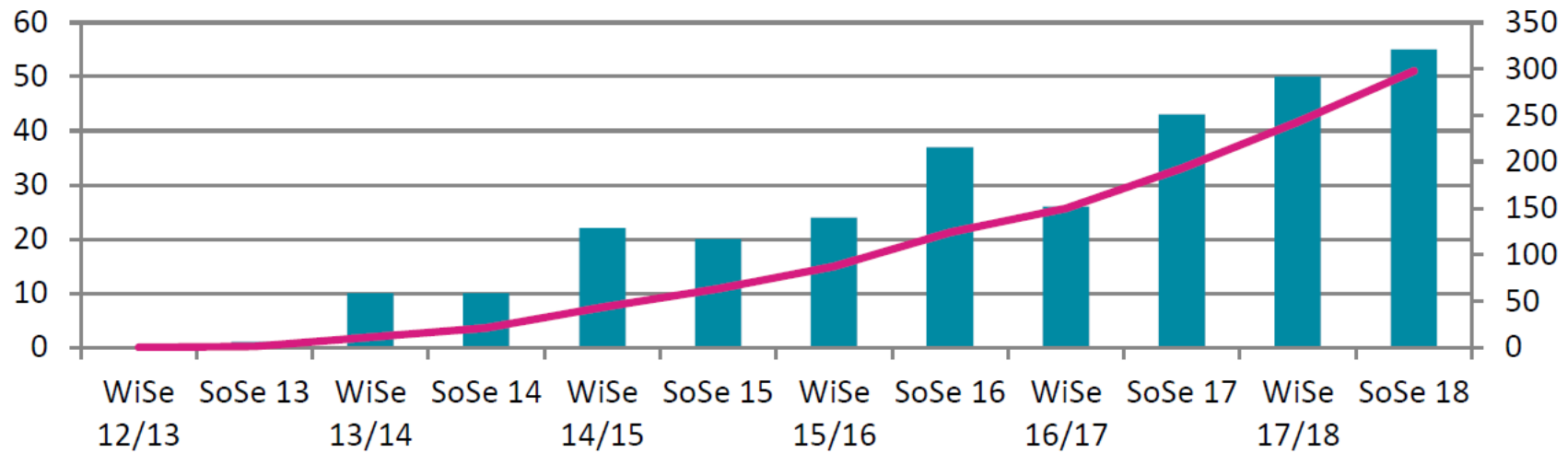
E-Assessment

E-Exam – Students (14996) 2014–2018

Overview:
Certificate "Multimedia Teaching"

Certificate "Multimedia Teaching"

Goal:

teachers can develop and implement their own ideas for the integration of multimedia and e-learning in teaching

- 85 working units (on site and online)

- completion over several semesters possible

- all workshops can also be attended independently of the acquisition of the complete certificate
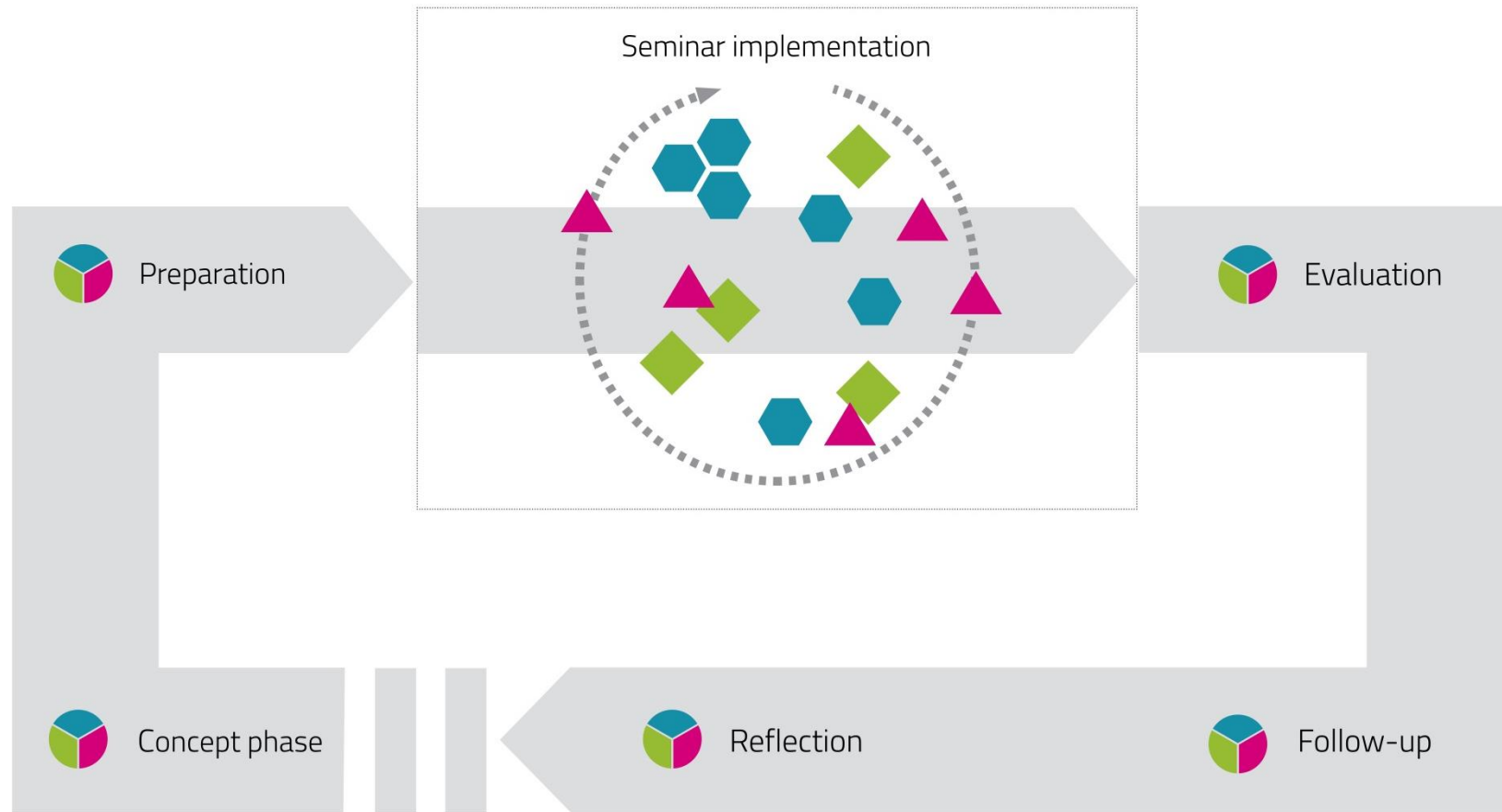
Certificate "Multimedia Teaching"

Four topics focussing on

- Media production and use

- Application of multimedia tools

- E-Assessment

- Cooperative learning

Designing a seminar

Seminar implementation

Preparation

Evaluation

Concept phase

Reflection

Follow-up

Multimedia arrangements

Online learning resources

Assessment element

Activity / feedback / support / communication
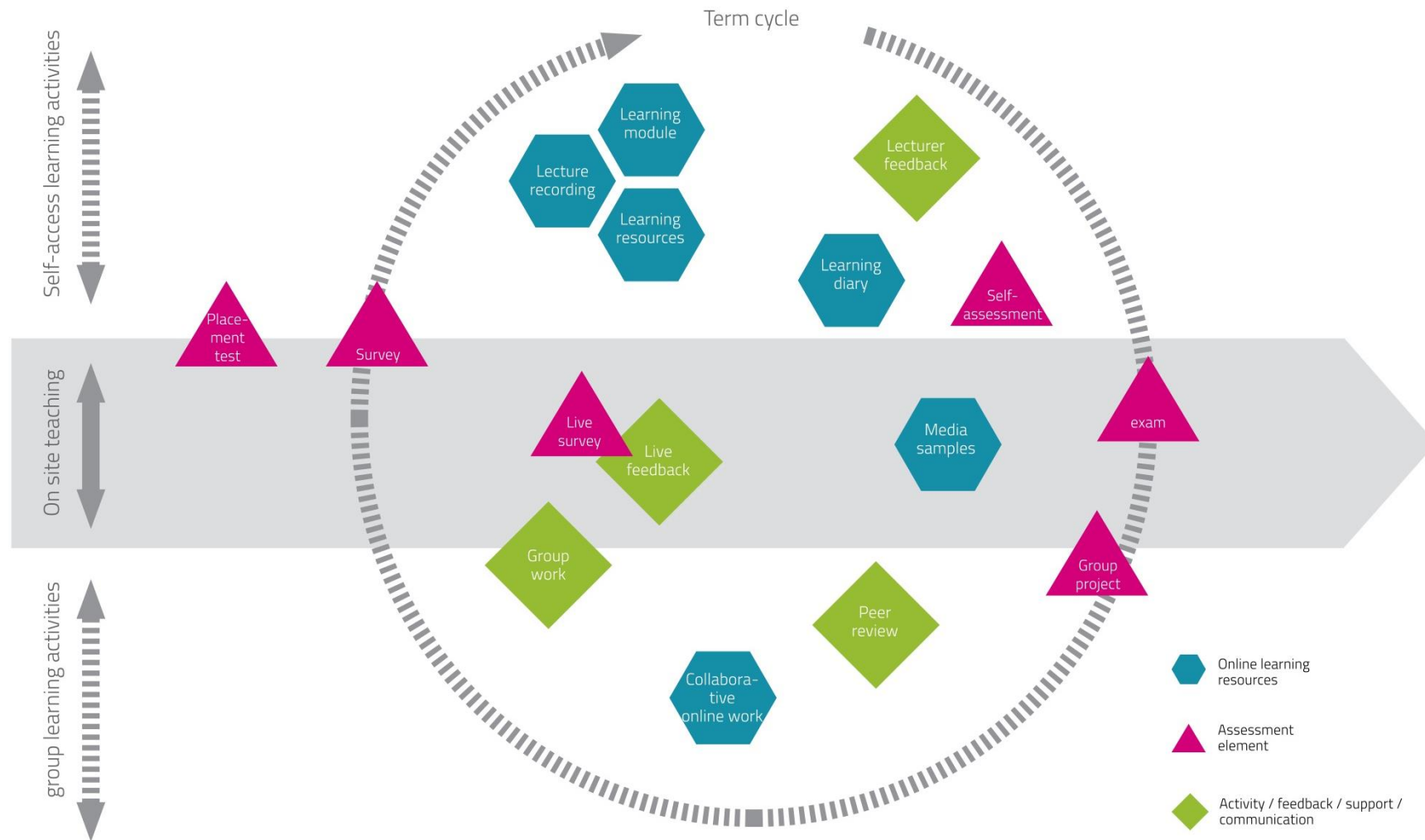
Term progression

Additional Projects With The Institute of Geosciences and Geography

Multimedia Project–Seminar

Project–Seminar
Analysis Of Remote Sensing Data

Multimedia Project–Seminar

Interactive Whiteboard „Smartboard 800" (Smart)

Surface – Table „Samsung SUR40 Pixelsense"

- Smartboard and Multitouch–Surface support collaborative work
- tested the combined use
- content can not only be presented statically, but also developed dynamically step by step

Multimedia Project–Seminar

Students were more active than usual

the students' point of view

"...the seminar was visually even more appealing and descriptive"

„… the collaboration is helpful for understanding…"

„… the cooperation in the student group was improved…"

Mobile Learning
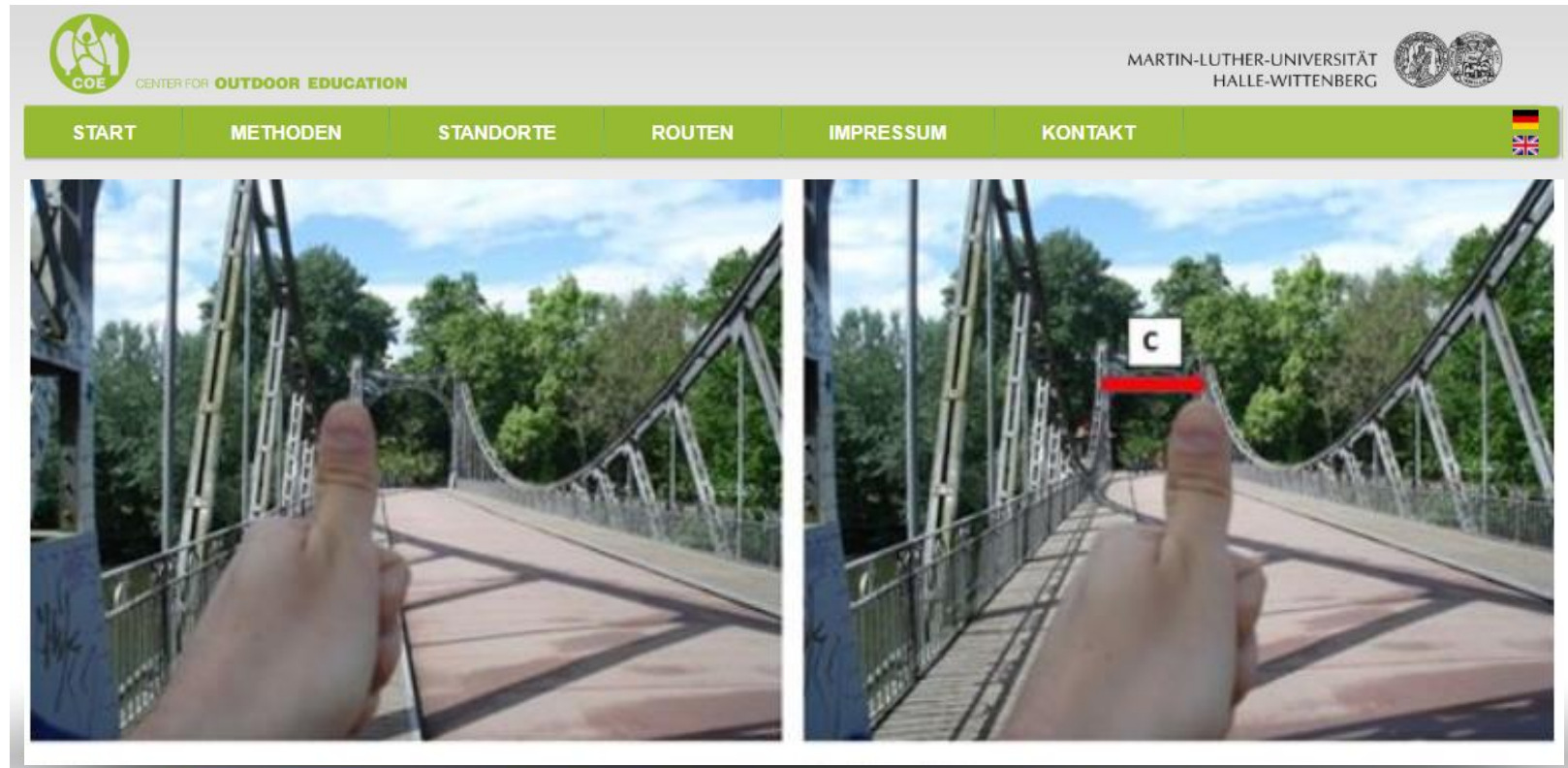

Outdoor–Education–Database

Collection and documentation of field methods on the level of school knowledge

Mobile Learning

Students prepared an internet-based database offering a comprehensive selection of instructions and teaching materials for use inside and outside the classroom

https://paradigmaps.geo.uni-halle.de/outdooreducation/

Innovationsprojekt „Studium multimedial"

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The author is responsible for the content of this publication.

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