

2.LIKE

RESEARCH PROJECT

ARTIFICIAL INTELLIGENCE FOR INDIVIDUALISED LEARNING PATH AND PROCESSES

AI-supported customised studying

DEVELOPING ADAPTIVE LEARNING SYSTEMS



universität
uulm

PROJECT IDEA

DURATION: 2021-2025

INITIAL PROBLEM

THE CORONA PANDEMIC AND THE
RESULTING ONLINE TEACHING
SHOWED ONCE AGAIN
THAT TRADITIONAL TEACHING
HAS ITS LIMITS



**LEARNING IS AN
INDIVIDUAL PROCESS**
THAT DEMANDS
PERSONALISATION

EXPLOIT **AI-BASED TECHNIQUES** TO TAILOR
LERANING CONTENT AND LERNING SUPPORT
TO THE INDIVIDUAL PERSON



DEVELOPMENT OF **INDIVIDUALISED LEARNING OPPORTUNITIES**,
THAT ARE **INDEPENDENT OF TIME AND PLACE**



GENERAL GOALS:
INDIVIDUAL **ACADEMIC SUCCESS &
REDUCTION OF THE DROPOUT RATE**

2LIKE

CHALLENGES

HETEROGENEITY OF INCOMING
MASTER'S STUDENTS - DIFFERENT
BACKGROUNDS:



E.G. PREVIOUS KNOWLEDGE, STUDIES SUBJECT,
UNIVERSITY, COUNTRY OF ORIGIN

REUSABILITY:

THE FINDINGS ARE AIMED TO BE
TRANSFERRED TO THE SCHOOL
OF ADVANCED PROFESSIONAL
STUDIES AND BEYOND.

TRANSFER

MICRO AND MACRO LEVEL OF ADAPTIVITY



DEVELOPMENT OF INDIVIDUALISED LEARNING OPPORTUNITIES
TWO ADAPTIVE APPROACHES



MACRO LEVEL

ADAPTIVE LEARNING PATHS
ADAPTING DIGITAL LEARNING
CONTENTS ACCORDING TO
INDIVIDUALS NEEDS

MICRO LEVEL

PERSONALISED FEEDBACK
SUPPORTING INDIVIDUAL LEARNING
PROCESSES INDIVIDUALLY



BOTH LEVELS USE AI-SUPPORTED METHODS &
BEST PRACTICES OF AUTOMATISED
TEACHING AND LEARNING SYSTEMS

NEXT STEPS



STARTING WINTER SEMESTER 2022/23:

INTEGRATION OF INITIAL PROJECT RESULTS INTO
TEACHING AT THE UNIVERSITY OF ULM:

USE OF NEW METHODS & LEARNING ACTIVITIES
(SUCH AS APPLICATION TASKS OR QUIZZES) IN THE
MASTER'S DEGREE PROGRAMMES
*ARTIFICIAL INTELLIGENCE AND
COGNITIVE SYSTEMS*



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PROVISION OF THE FIRST **PROTOTYPES OF
THE TEACHING-LEARNING SYSTEM**

THE FINDINGS ARE AIMED TO BE
TRANSFERRED TO THE *SCHOOL
OF ADVANCED PROFESSIONAL
STUDIES (SAPS)* AND BEYOND.

CONTRIBUTION TO THE
SUSTAINABLE FINANCING
OF THE DEVELOPED
METHODS



RESPONSIBILITY

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PROJECT MANAGEMENT

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OTHER APPLICANTS

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Bundesministerium
für Bildung
und Forschung



Baden-Württemberg

MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST

WITHIN THE FRAMEWORK OF
THE "ARTIFICIAL
INTELLIGENCE IN HIGHER
EDUCATION" FUNDING LINE