# Enhancing Learner & Staff Experience with Course-Specific AI

**Evidence base: Independent empirical study by bidt — Bayerisches Forschungsinstitut für Digitale Transformation. Summer Semester 2025.**
**84 active courses · 10 Bavarian universities · 31 lecturers · 1,500+ student responses.**

# Context & Problem Statement

## The Problem

While 88% of students already use generative AI for their studies , standard LLMs lack specific course context.

This leads to generic answers academic "hallucinations", or misinformation that does not match the specific curriculum.

## The Demand

Students explicitly request more AI integration within their specific courses.

Educational institutions must provide secure, course-scoped environments to ensure academic integrity.

## Key Statistics

Scale of Study: Empirical evaluation across 10 universities and 84 active courses

Database: A foundation of over 1,500 student responses

# Research Framework

Does course-specific AI support exam preparation?

Does it contribute to student learning outcomes?

How do instructors perceive the use of AI tutors in HE?

# Solution Architecture

### 1. Lecturer uploads material

PDFs, videos, texts → any format. Indexed as the AI's only knowledge source.

### 2.Student asks a question

The AI searches the upload materials for relevant passage.

### 3.Answer is generated

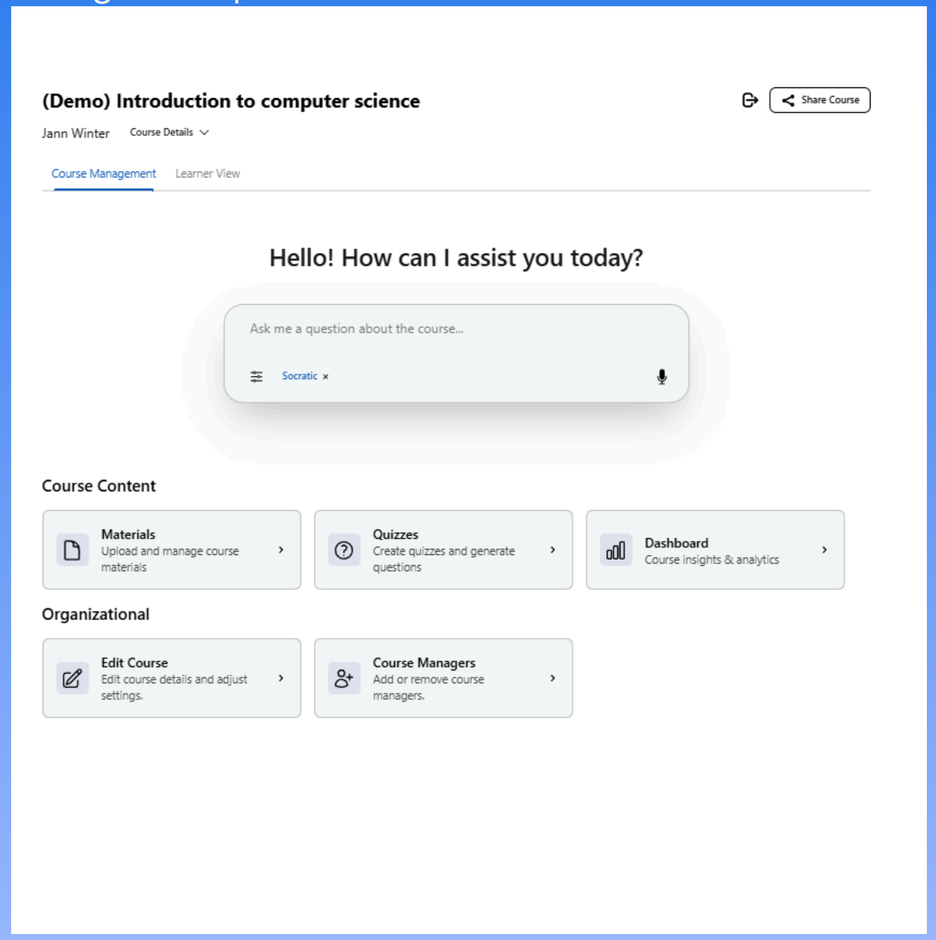
Grounded in course content only → source citation included in every response.

### Why this is different

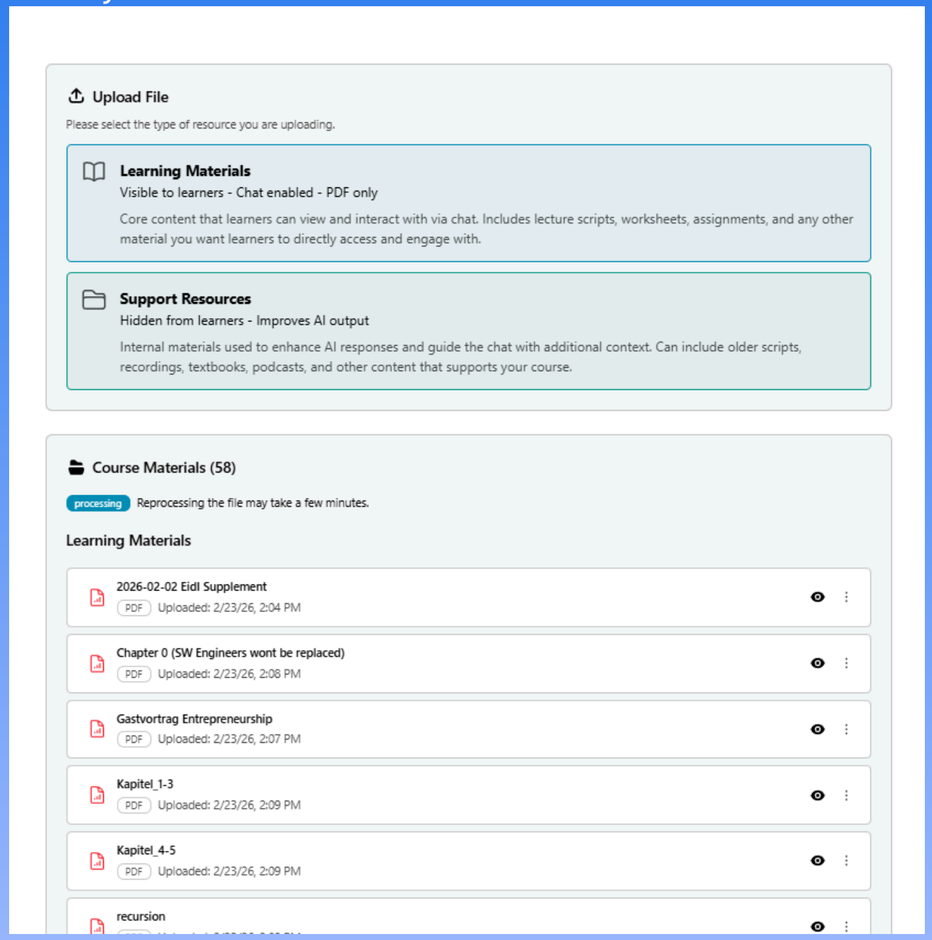
Most AI tools like ChatGPT generate answers **from billions of internet sources** → no guarantee the answer is relevant to your course or even accurate.
Instead, RAG (Retrieval Augmented Generation) searches only the course materials uploaded by the lecturer and cites the source in every response.

# Lecturer View

Course overview → Lecturers manage materials, quizzes, and settings in one place.

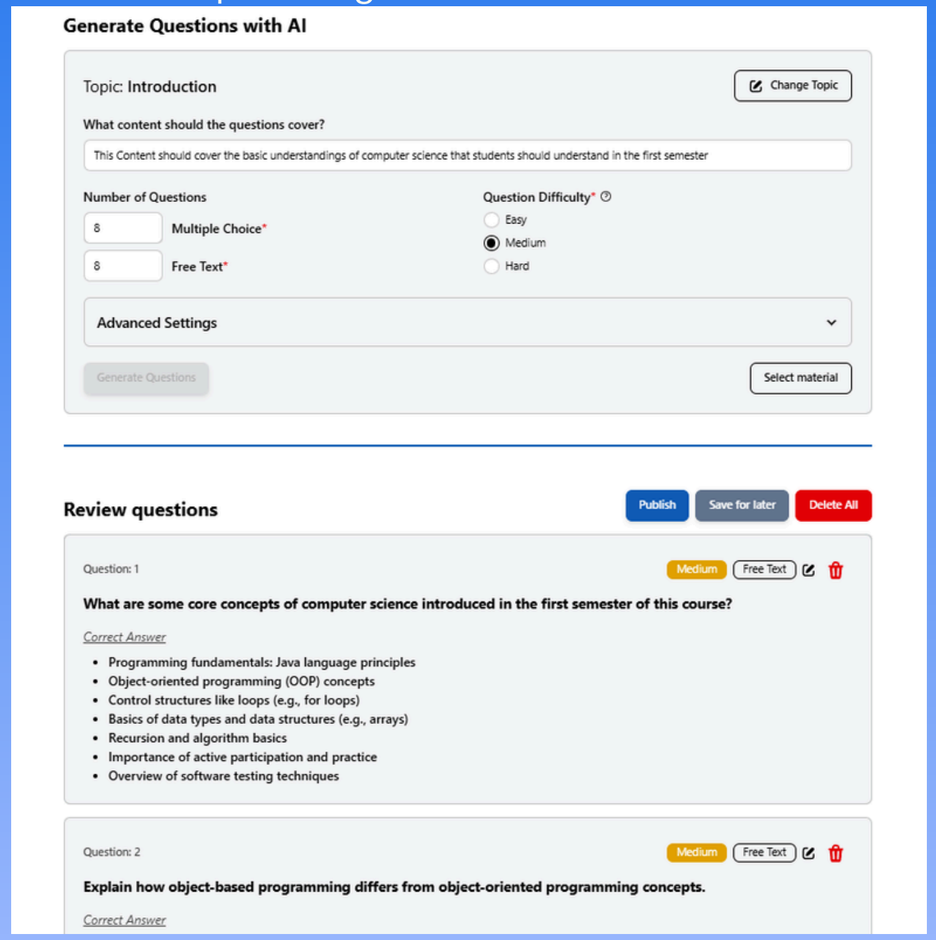



Material upload → PDFs and support resources uploaded directly into the course.

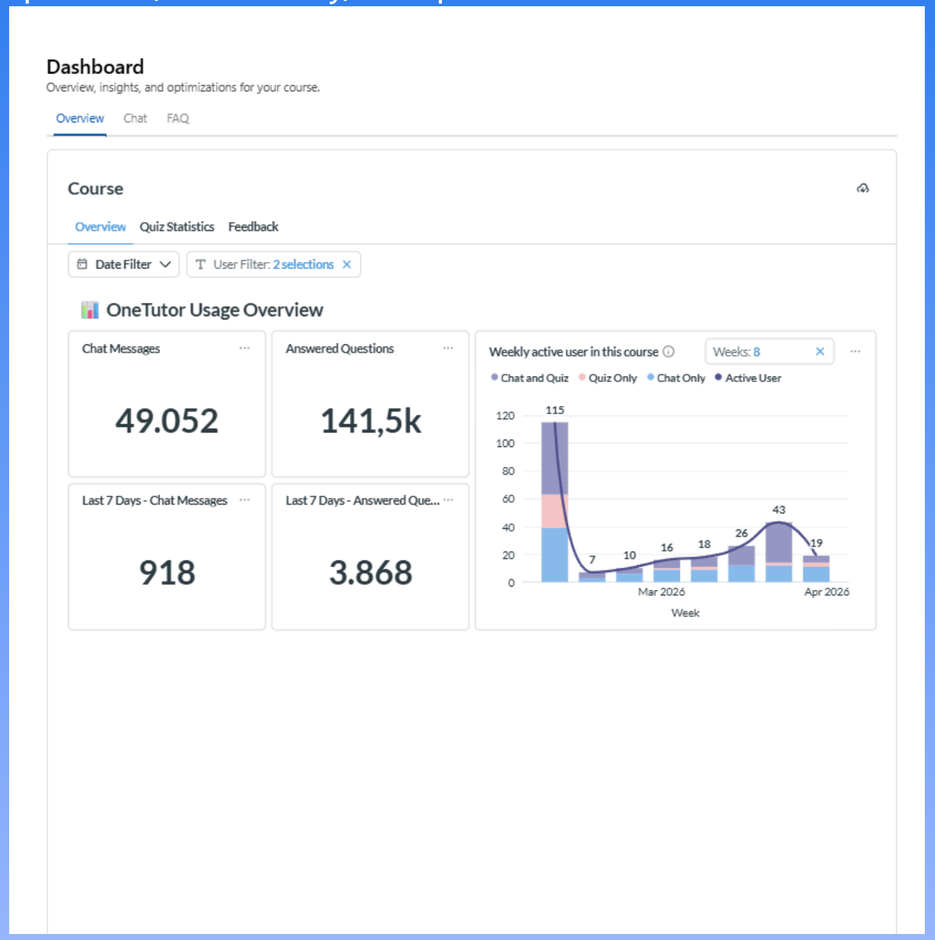


# Lecturer View

AI quiz generation → Quizzes created from course content, edited before publishing.



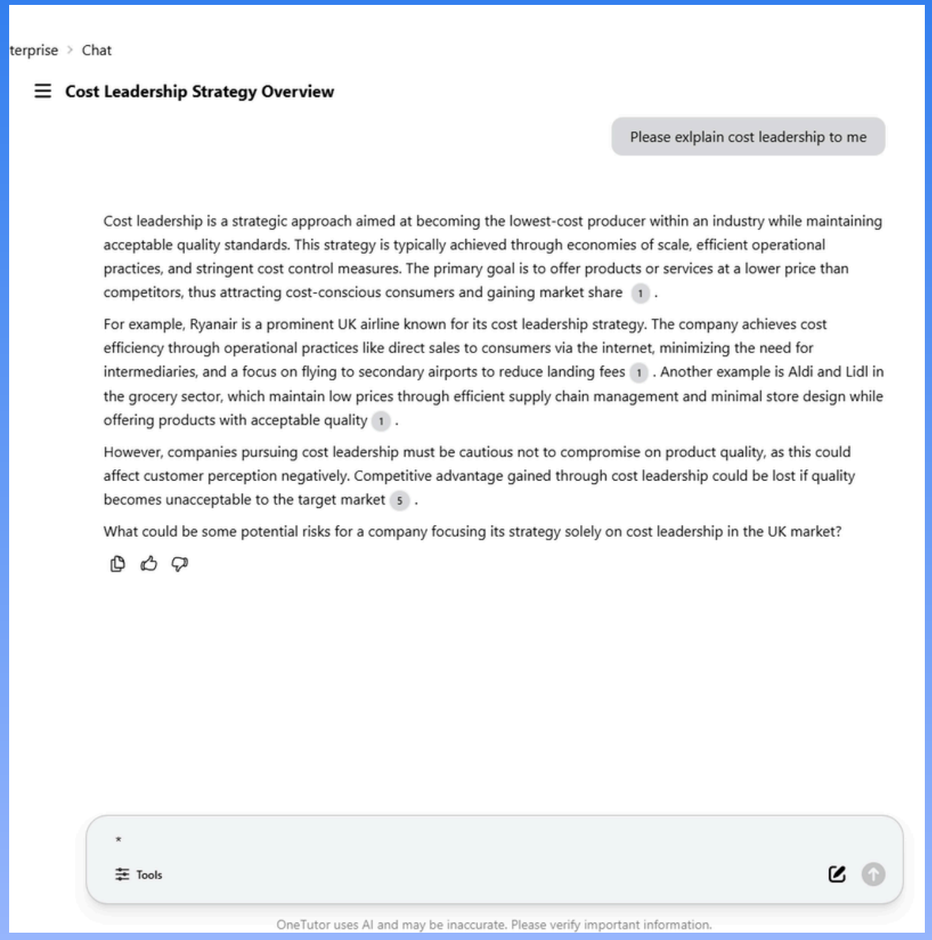

Analytics dashboard → Aggregated view of student questions, chat activity, and quiz results.



# Student View

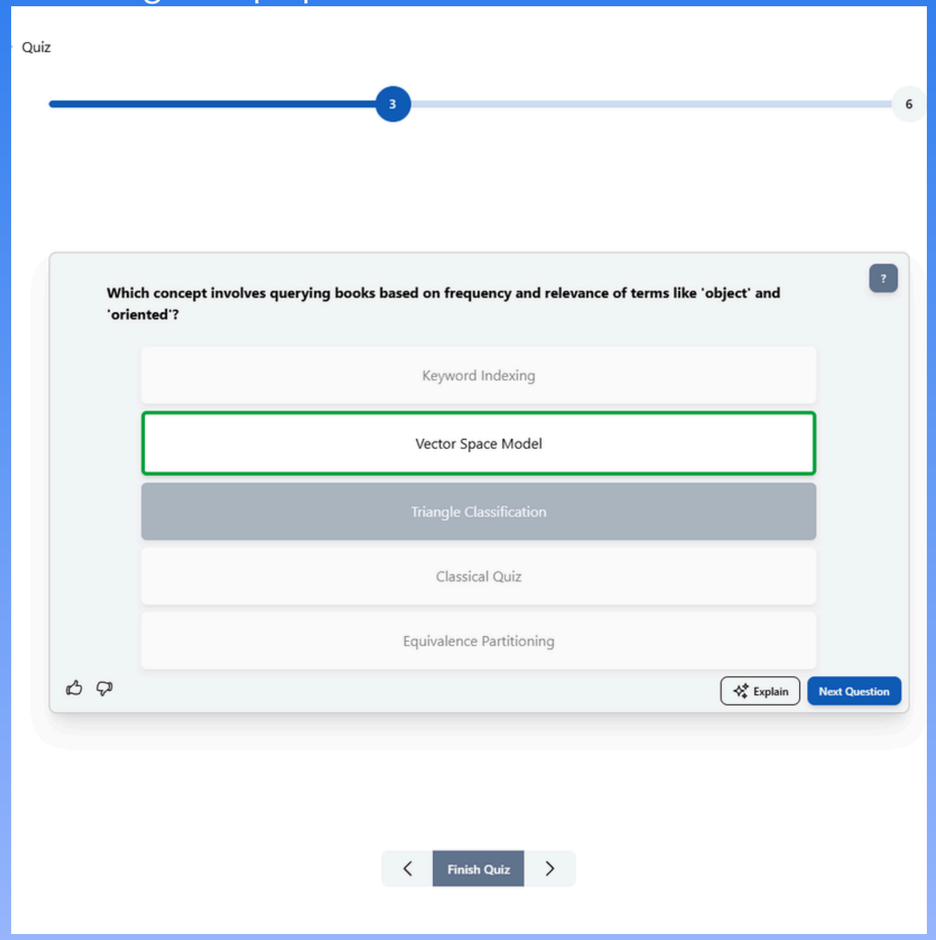
Student dashboard → Course materials, quiz topics, and chat interface in one place.


AI chat with citations → Answers grounded in course content, with source references included.

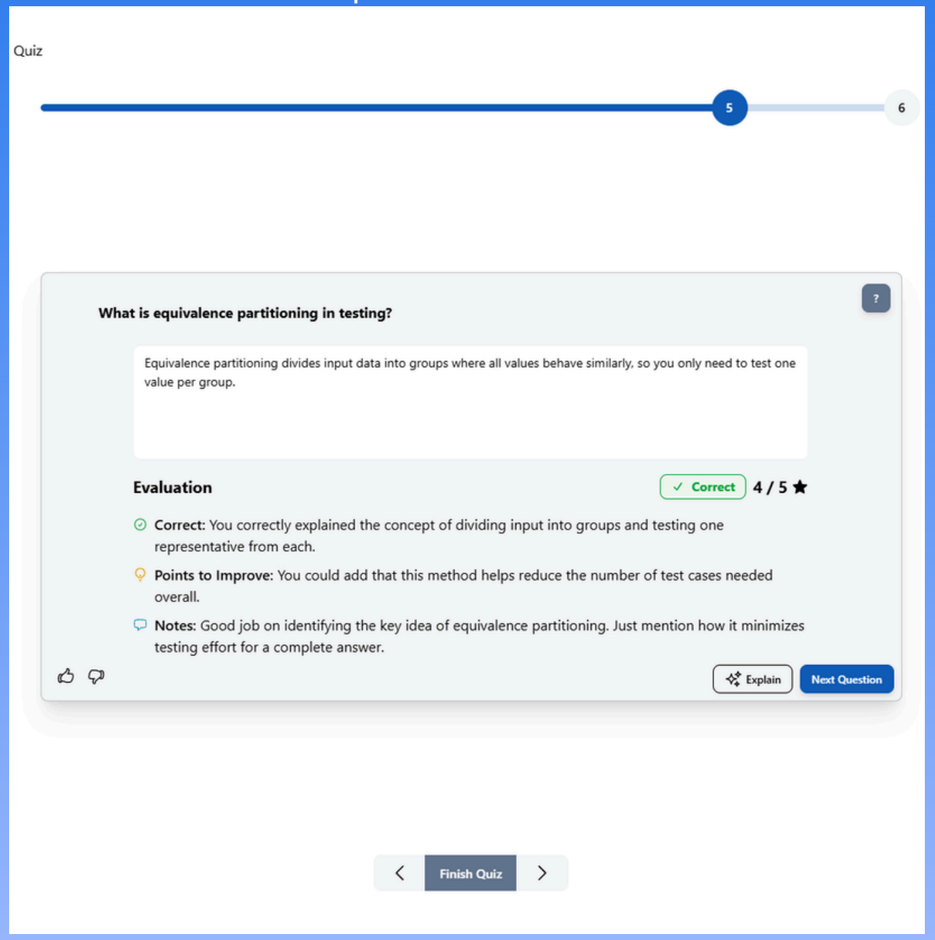


# Student View

Multiple-choice quiz → AI-generated questions to test knowledge and prepare for exams.




Free-text quiz → Students answer in their own words, with feedback after each response.



# Student Experience

**86%**
Found OneTutor helpful for exam preparation
In OneTutor survey · n=min. 239*

**98%**
Would recommend it for the same course next semester
In OneTutor survey · n=min. 239*

**72%**
Said chat responses contributed to their learning
In OneTutor survey · n=min. 241*

**65%**
Said quizzes contributed to their learning
In OneTutor survey · n=min. 241*

## How students use it:

- Used primarily for exam preparation and identifying & closing knowledge gaps
- Enables students to ask questions they would not raise in class
- 90% of students used the chat function
- In a classroom survey (n=270), 80% of students actively used OneTutor → those who opted out cited personal learning preferences, not AI aversion.

## Satisfaction:

- 86% satisfied or very satisfied with the chat function
- 82% satisfied with multiple-choice quizzes
- OneTutor rated as helpful for exam preparation as course scripts and lecture notes, above other AI tools and internet sources
- 68% felt well prepared for their exam through OneTutor



Source: bidt (2026). Ein KI-Tutor geht in die Lehre. Bayerisches Forschungsinstitut für Digitale Transformation. DOI: 10.35067/xypq-kn78

# Staff Experience

**84%**
Would deploy OneTutor again in the same course
Lecturer survey · n=min. 29 *

**97%**
Consider generative AI in HE fundamentally worthwhile
Lecturer survey · n= 31 *

**7.2**
Lecturer Promoter Score out of 10
Lecturer survey · n= 31 *

**2.4**
Average lecturer grade 1 = excellent
Lecturer survey · n= 31 *

## How lecturers use it:

- 66% regularly review quiz results across the cohort
- In 70% of active courses, lecturers created quizzes
- Average of 43 multiple-choice and 31 free-text questions created per course

## What lecturers report:

- 84% would use OneTutor again in the same course
- 75% regularly review student questions and AI responses
- Viewed as a meaningful complement to existing teaching methods



Source: bidt (2026). Ein KI-Tutor geht in die Lehre. Bayerisches Forschungsinstitut für Digitale Transformation. DOI: 10.35067/xypq-kn78

# Key Takeaways

01

## Learner Experience

OneTutor creates a safe space → students ask questions freely, save time, and study complex content at their own pace. Those who engage with it consistently report feeling better prepared for their exams.

02

## Staff Experience

Technology alone is not enough. Successful adoption requires institutional leadership, clear guidelines, and thoughtful integration. Lecturers with support unlock real value → those left without guidance hesitate.

03

## Curriculum Development

OneTutor works best as a deliberate complement to existing teaching → not a replacement. The right environment, where staff and students understand how and why to use it, makes the difference.



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# Get in Touch

Interested in piloting OneTutor at your institution?

contact@onetutor.ai

onetutor.ai

Currently deployed at 50+ institutions worldwide.