A person with glasses and a beard is shown in profile, working at a computer. The scene is dimly lit with a blue tint. In the foreground, a glowing, translucent digital brain is superimposed over the person's head, with intricate neural network patterns and bright blue light points. The background shows a computer monitor and office environment.

AI as CO-CREATOR

AI supported production of media learning resources

Markus Tischner & Sonia Hetzner

Innovation in Learning Institute, Friedrich-Alexander Universität Erlangen-Nürnberg

DISCLAIMER

YOUR TRAINER

MARKUS TISCHNER

Head of Media Production
FAU, Innovation in Learning Institute

Freelance Filmmaker
frisbee medien

Learning Media Production

Science Communication

AI supported Media Production



YOUR TRAINER

SONIA HETZNER

Managing Director
FAU, Innovation in Learning Institute

President
Media & Learning Association

Learning Design

Trainer Digital Learning



AGENDA

- I
AI Experiences in the group
- II
AI as Co Creator in the
conceptual stage
- III
AI as Co Creator in Media
Production



A group of diverse young people, including men and women of various ethnicities, are seated at a table. They are looking towards the camera with neutral expressions. The background is a blurred, colorful scene, possibly an outdoor market or festival. A dark blue horizontal bar is overlaid on the lower half of the image, containing white text.

WHY
ARE YOU HERE?



www.menti.com

Code: 17 30 27 81

Sign in to save AIs for later (it's free!)


THERE'S AN AI FOR THAT*


12,412 AIs for 15,247 tasks and 4,804 jobs.


#1 AI aggregator. Updated daily. Used by 20M+ humans.


AIs For You **New AIs** Tasks For You


Just Launched

 **MailGenerator**
✉ Email writing 🔔
No pricing


 **Milio**
🗂 Interview preparation 🔔
from \$35/mo


 **Cykel**
🔄 Task automation 🔔
No pricing 👤 6


 **Flint - Therapy Ch...**
😊 Emotional support 🔔
Free + from \$6.5 👤 1


 **VSona**
👥 Companionship 🔔
Free + from \$3.75/m... 👤 4


 **Lingolette** ✓
🌐 Language learning 🔔
Free + from \$9.99/m... 👤 20 💬 4

 **Auto Gmail** ✓
✉ Gmail Email replies 🔔
Free + from \$27 👤 25 💬 3

 **Monitr**
📊 Data visualization 🔔
Free + from \$12/mo 👤 7


 **Aflow**
🌀 Creativity enhancement 🔔
No pricing 👤 5

 **Revid**
🎥 Short videos 🔔
from \$32/mo 👤 14


 **Odyssey**
🚀 Productivity 🔔
from \$11.99/mo 👤 11


 **Thirdl**
📱 Digital marketing 🔔
No pricing 👤 9

Featured ⁱ

 **Paparazzi Docs** ✓
✍ Content generation 🔔
No pricing 👤 14 💬 1

 **Kin - Personal AI** ✓
🔪 Personal Develop... 🔔
No pricing 👤 423 💬 13

 **Thunderbit**
🔄 Workflow automat... 🔔
No pricing 👤 110

 **WavoAI** ✓
🎧 Audio transcription 🔔
Free from \$2/hr 👤 741 💬 5

- Search
- Free signup
- Home
- Just Launched
- Requests
- Most saved
- Tasks
- Timeline
- Get featured
- Job Impact Index
- Influencers
- Forum
- Newsletter
- Follow us
- Join Discord
- Contact us
- My Profile

AI as Co-Creator

AI support in the conceptual stage



I have to plan and implement a new course on the topic of "Scaffolding" for digital teaching.

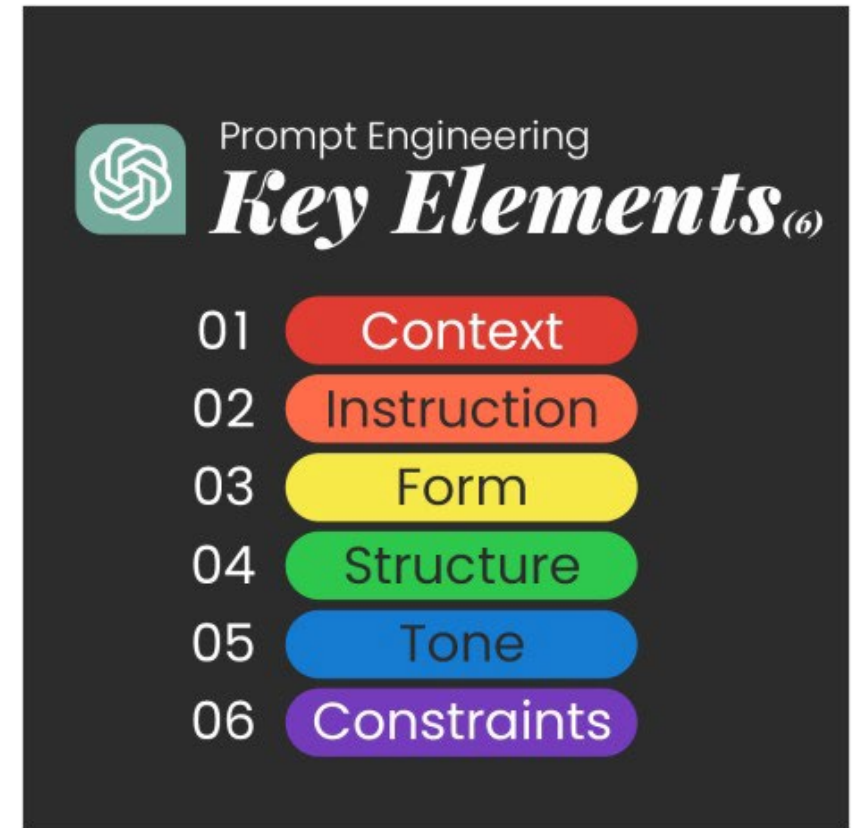


PROMPTING

AI as Co-Creator

AI supported production of Media Learning Resources

https://www.linkedin.com/posts/galalon22_prompt-engineering-key-components-activity-7074106943623114752-MJKs/



Prompt Engineering
Key Elements⁽⁶⁾

- 01 Context
- 02 Instruction
- 03 Form
- 04 Structure
- 05 Tone
- 06 Constraints

The graphic features a dark background with the OpenAI logo in the top left. The text 'Prompt Engineering' is in a sans-serif font, and 'Key Elements' is in a large, italicized serif font with a superscripted '(6)'. Below this, a vertical list of six items is shown, each with a number and a colored pill-shaped background: 01 Context (red), 02 Instruction (orange), 03 Form (yellow), 04 Structure (green), 05 Tone (blue), and 06 Constraints (purple).

Prompt Example

You are a university lecturer.

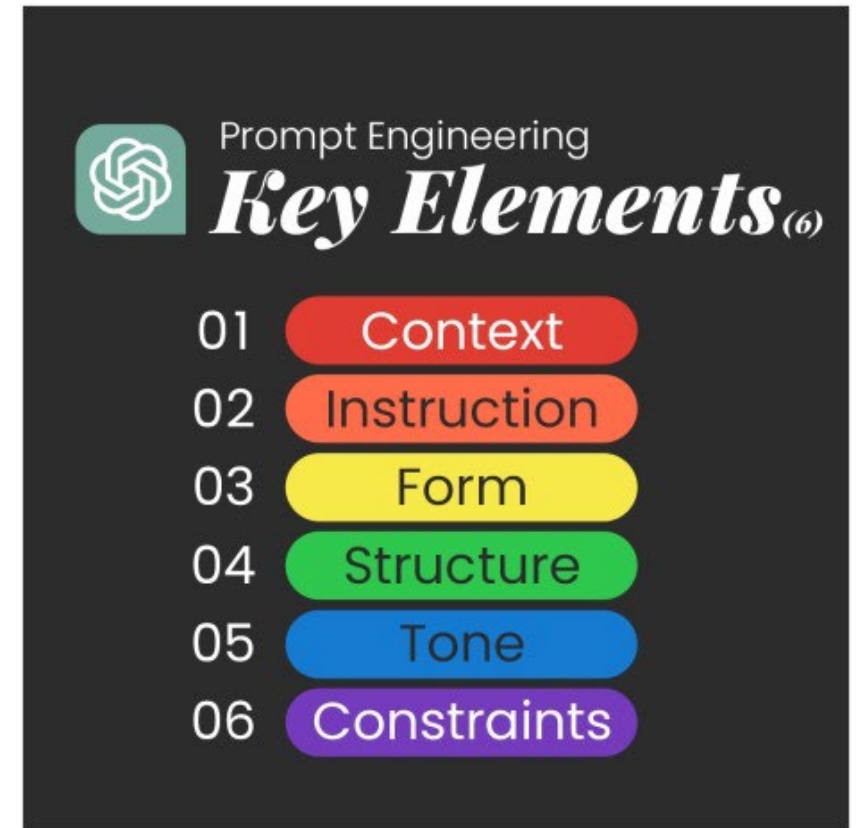
You shall create an online course on the practical application of Gilly Salmon's "Scaffolding" model in higher education teaching. Your target group is young university lecturers who already have some experience in university teaching.

The course will consist of seven modules.

The model will be introduced in the first module. In each of the next five modules, one stage of the five-stage model will be presented and one practical application in university teaching will be demonstrated. In the last module, the challenges and possible solutions for the five-step model in practice will be demonstrated.

The course should convey the content in an informative tone.

The sentences should be kept as simple as possible so that more complex ideas can also be easily understood. The generated texts should be long enough so that each module can be finished in ten minutes.



Learn something meaningful

Our commitment is rooted in the understanding that true education must resonate with its recipient.

- Popular topics:
- Programming
 - Physics
 - Civil War

AI as Co-Creator

AI supported production of Media Learning Resources



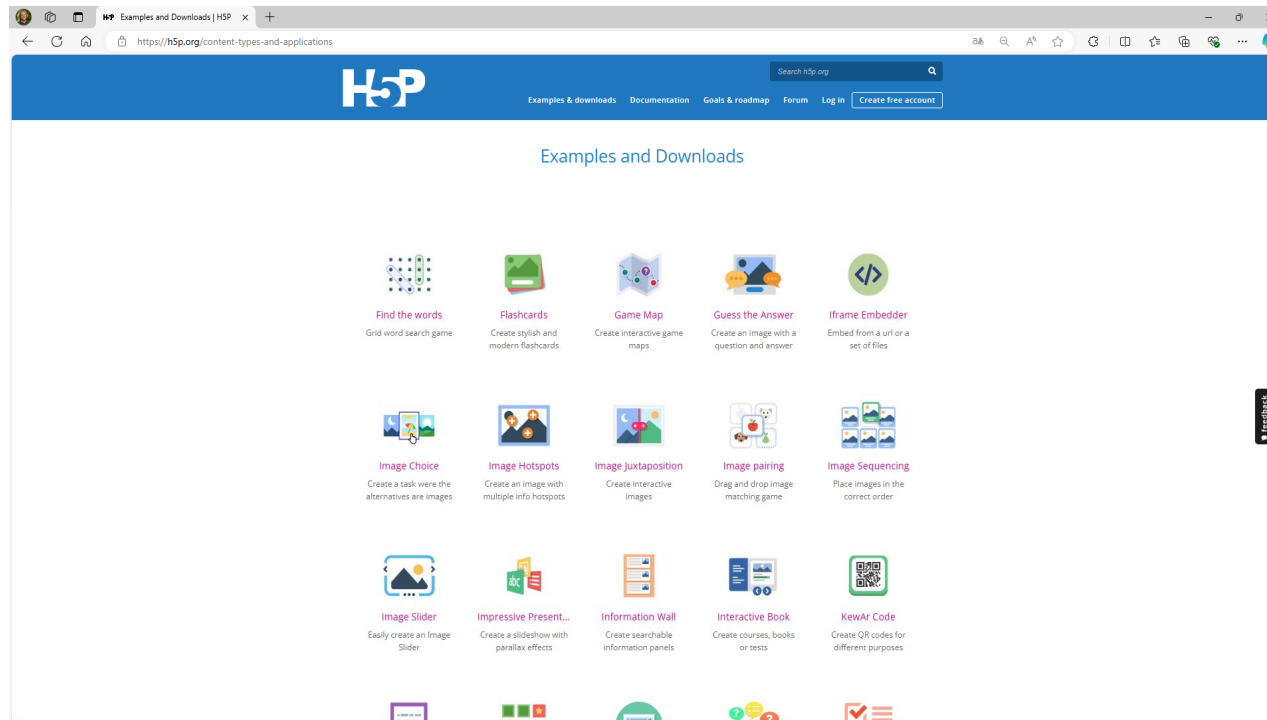
I need interactive learning and formative assessment elements for my course.



**AI GENERATED
H5P INTERACTIONS
WITH CHATBOTS**

H5P

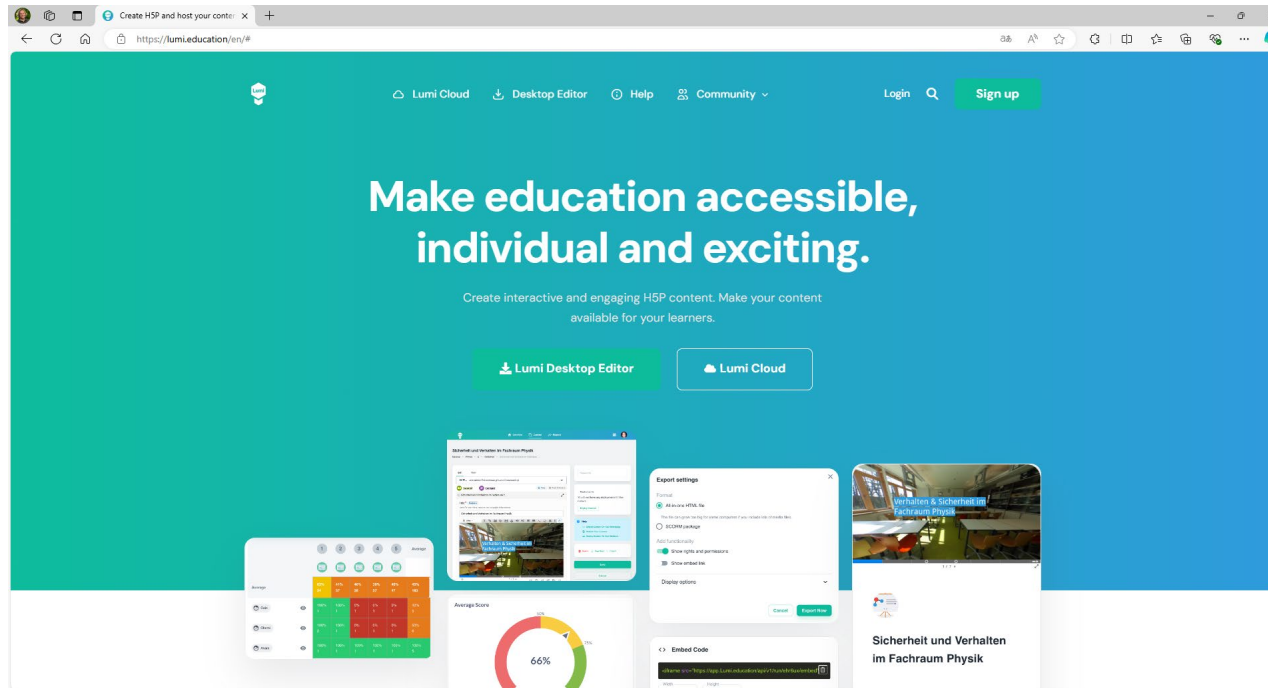
Authoringsystem for producing interactive learning media



www.h5p.org

Lumi

Offline-Editor for producing interactive H5P Content



app.lumi.education

AI generated H5P Interactions with Chatbots

Example: Single Choice Quiz

What is a key benefit of scaffolding in digital higher education?

- It supports student learning by providing temporary assistance.
- It requires permanent assistance throughout the entire course.
- It only focuses on providing technological tools.
- It ignores individual learning differences.

✓ Check



AI generated H5P Interaction

Example: Single Choice Quiz

To reduce teaching costs

Use an empty line to separate each question. In multi choice the first line is the question and the next lines are the answer alternatives. The correct alternatives are prefixed with an asterisk(*), tips and feedback can also be added: *alternative:tip:feedback if chosen:feedback if not chosen.

Example:

Question Set

Title * Metadata
Used for searching, reports and copyright information

Quiz introduction

Background image
An optional background image for the Question set.

+ Add

Progress indicator *
Question set progress indicator style.

Dots ▼

Pass percentage *
Percentage of Total score required for passing the quiz.

Questions * Textual Default

What is a key benefit of scaffolding in digital higher education?
*It supports student learning by providing

Create a multiple-choice quiz on the topic of "Scaffolding in digital higher education". Create 4 questions with 4 alternatives for each question. Only one question should be correct. Write the question in the first line of each multiple-choice block. The other four lines contain the alternative answers. Start the line with the correct answer with an asterisk and then write the answer without a space between the asterisk and the answer. There should be a blank line after the fourth answer. And then the next multiple-choice block. Do not add any labels, formatting or numbering to the entire text. Be sure to follow this format, as I will be inserting the output into the "H5P" tool in text mode, which expects this format.

Erstelle einen Fitnessplan für Widerstandstraining

Erzähle einen Mythos neu mit einem modernen Touch

Verrate mir Trivia über die Golden State Warriors

Erkläre mir Supraleiter als ob ich ein Kleinkind wäre

Senden Sie eine Nachricht an ChatGPT...

Tarif upgraden
Holen Sie sich GPT-4, DALL-E und...

MA Markus Tischner

AI generated H5P Interaction

Example: Summary

Choose the correct statement.

✓ Progress: 0/5

Scaffolding in digital higher education ignores individual learning differences.

Scaffolding in digital higher education requires permanent assistance throughout the entire course.

Scaffolding in digital higher education supports student learning by providing temporary assistance that helps students achieve learning goals.

Scaffolding in digital higher education only focuses on providing technological tools.

AI generated H5P Interaction

Example: Summary

Scaffolding relies on summative assessment only.

Write each statement on a separate line.
Use an empty line to separate sets of statements.
First statement is always correct.
If there is a tip - it is written on the first line with the prefix " : "

Summary

Title * Metadata
Used for searching, reports and copyright information

Scaffolding

Introduction text *
Will be displayed above the summary task.

Choose the correct statement.

Summary * Textual Default

Scaffolding in digital higher education involves providing students with temporary support structures to assist in their learning process.
Scaffolding in digital higher education permanently replaces traditional teaching methods.
It is designed to limit students' independence and creativity.
Scaffolding only applies to elementary and secondary education.

Effective scaffolding can include tools like digital prompts, interactive activities, and feedback mechanisms.
Scaffolding in digital education is primarily about limiting access to resources.
Only advanced learners benefit from scaffolding techniques.
Digital scaffolding tools should be used to discourage collaborative learning.

Please create a summary for the topic "Scaffolding in digital higher education". Write it in the form of five statement blocks. In each statement block, one correct statement and three incorrect statements should be listed one after the other without a blank line in between, so that the reader is challenged to find the correct statements. Write the correct statement on the first line. Add three incorrect statements in the next three lines without a blank line. Begin a new line after each answer. Add a blank line after the third incorrect statement and then start the next block of statements. The statement blocks should not contain headings, but should start directly with the correct statement. Do not add any labels, formatting or numbering and do not output the answer as pre-formatted code. Be sure to follow this format as I will be inserting the output into the "H5P" tool in text input mode, which expects this format.

- Erstelle einen Fitnessplan für Widerstandstraining
- Erzähle einen Mythos neu mit einem modernen Touch
- Verrate mir Trivia über die Golden State Warriors
- Erkläre mir Supraleiter als ob ich ein Kleinkind wäre

Senden Sie eine Nachricht an ChatGPT...

Tarif upgraden
Holen Sie sich GPT-4, DALL-E und...

MA Markus Tischner

AI generated H5P Interactions with Chatbots

FURTHER EXAMPLES

<https://h5p.org/GPT>

AI as Co-Creator

AI supported production of Media Learning Resources



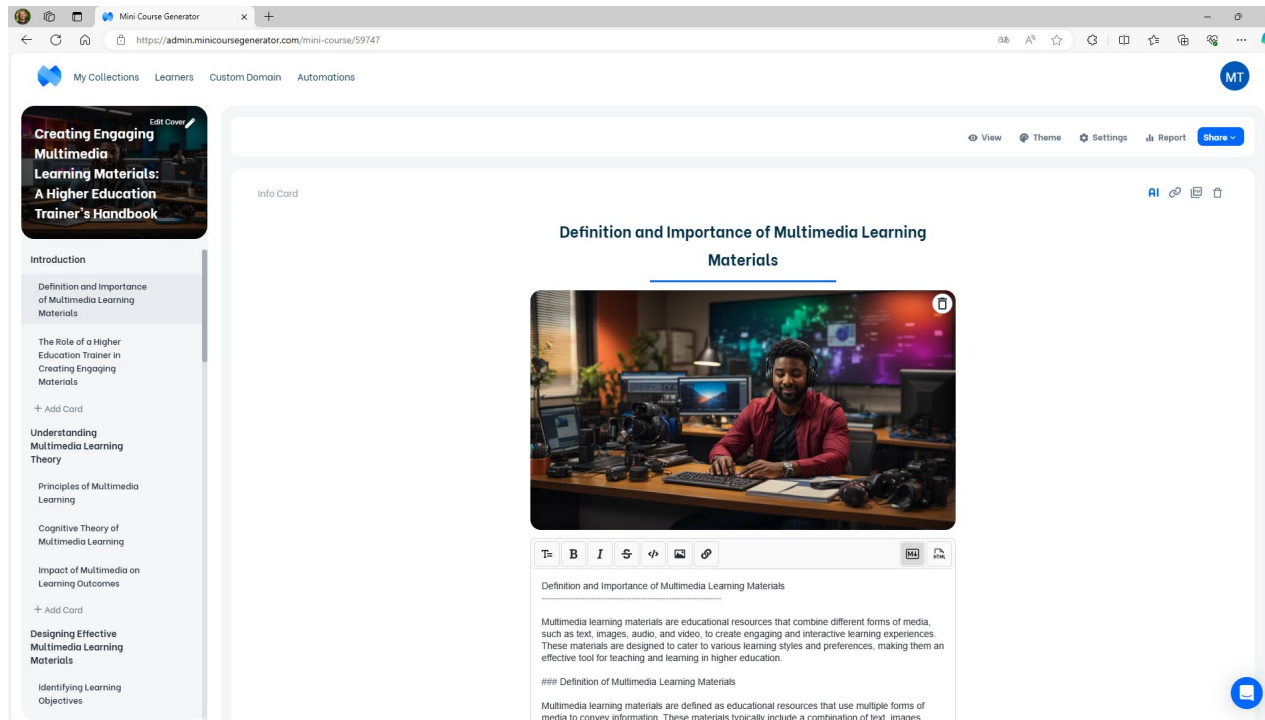
I have only little time but I need a whole course for my students class.



**COMPLETE
COURSES WITH
COURSE GENERATORS?**

Mini Course Generator

Automated course generation



The screenshot displays the Mini Course Generator web application interface. The browser address bar shows the URL <https://admin.minicoursegenerator.com/mini-course/59747>. The top navigation bar includes links for "My Collections", "Learners", "Custom Domain", and "Automations", along with a user profile icon labeled "MT".

The main content area is titled "Creating Engaging Multimedia Learning Materials: A Higher Education Trainer's Handbook". The left sidebar contains a table of contents with the following items:

- Introduction
 - Definition and Importance of Multimedia Learning Materials
 - The Role of a Higher Education Trainer in Creating Engaging Materials
 - + Add Card
- Understanding Multimedia Learning Theory
 - Principles of Multimedia Learning
 - Cognitive Theory of Multimedia Learning
 - Impact of Multimedia on Learning Outcomes
 - + Add Card
- Designing Effective Multimedia Learning Materials
- Identifying Learning Objectives

The main content area displays the "Definition and Importance of Multimedia Learning Materials" section. It features a video player showing a man in a red jacket sitting at a desk with multiple monitors. Below the video is a rich text editor with the following content:

Definition and importance of Multimedia Learning Materials

Multimedia learning materials are educational resources that combine different forms of media, such as text, images, audio, and video, to create engaging and interactive learning experiences. These materials are designed to cater to various learning styles and preferences, making them an effective tool for teaching and learning in higher education.

Definition of Multimedia Learning Materials

Multimedia learning materials are defined as educational resources that use multiple forms of media to convey information. These materials typically include a combination of text, images,

www.minicoursegenerator.com

Coursebox

Courses from your materials

The screenshot displays the Coursebox web application interface. The browser address bar shows the URL <https://my.coursebox.ai/courses/47442/about>. The top navigation bar includes 'SEARCH COURSES', 'MY PLAN', 'SUPPORT', and 'PRODUCT UPDATES', along with an 'Upgrade' button and utility icons. The left sidebar shows the user profile 'Markus Tischner' and navigation options: 'Courses' (My Courses, Drafts, Create), 'Resources', 'Groups', 'Courseboxers', and 'Calendar'. The main content area features a course card for 'Praktische Anwendung der Cognitive Theory of Multimedia Learning in der Hochschullehre' by Markus Tischner. The course description states: 'Dieser Online-Kurs richtet sich an junge Hochschullehrende mit ersten Erfahrungen in der Hochschullehre. In diesem Kurs werden wir die Cognitive Theory of Multimedia Learning vorstellen und ihre praktische Anwendung in der Hochschullehre erforschen. Insbesondere werden die Multimedia-Prinzipien vorgestellt, um den Unterricht effektiver zu gestalten. Der Kurs wird in einem informativen Ton gehalten und die Sätze sind einfach gehalten, um komplexe Gedanken leicht nachvollziehbar zu machen. Jedes Modul kann in etwa zehn Minuten durchgelesen werden.' Below the description are sections for 'About this Course', 'Course objectives' (listing understanding of foundations, principles, and evaluation), and 'Skills and Knowledge' (listing 'Hochschullehre', 'Multimedia Learning', 'Lehrmethoden', 'Theorie und Praxis', and 'E-Learning'). A 'Support' sidebar on the right contains a message: 'Click Get Started or Resume to progress through the course.'

www.coursebox.ai

H5P Smart Import

Automated generation of H5P Interactions



[Info on h5p.com](https://h5p.com)

[Tutorial-Video on Youtube](https://www.youtube.com/watch?v=...)

H5P Smart Import as Co-Creator

Current Status



DECLARATIVE KNOWLEDGE (factual knowledge, know-what)

e.g. What types of bicycles are there?



PROCEDURAL KNOWLEDGE (action sequences, know-how)

e.g. how do you ride a bicycle?

FORMULAS, REACTION EQUATIONS ETC.

Are completely ignored

SETTING PRIORITIES / TECHNICAL RELEVANCE

Only the author knows

AI as Co-Creator

AI supported production of Media Learning Resources



I need multimedia elements for my course.

GENERATIVE AI

IT DEPENDS...

**Text to
Speech**

**Music
Creation**

Text to Picture

**Photograph
Extention**

Video Avatars

Text to Video

Voice Cloning

AI as Co-Creator

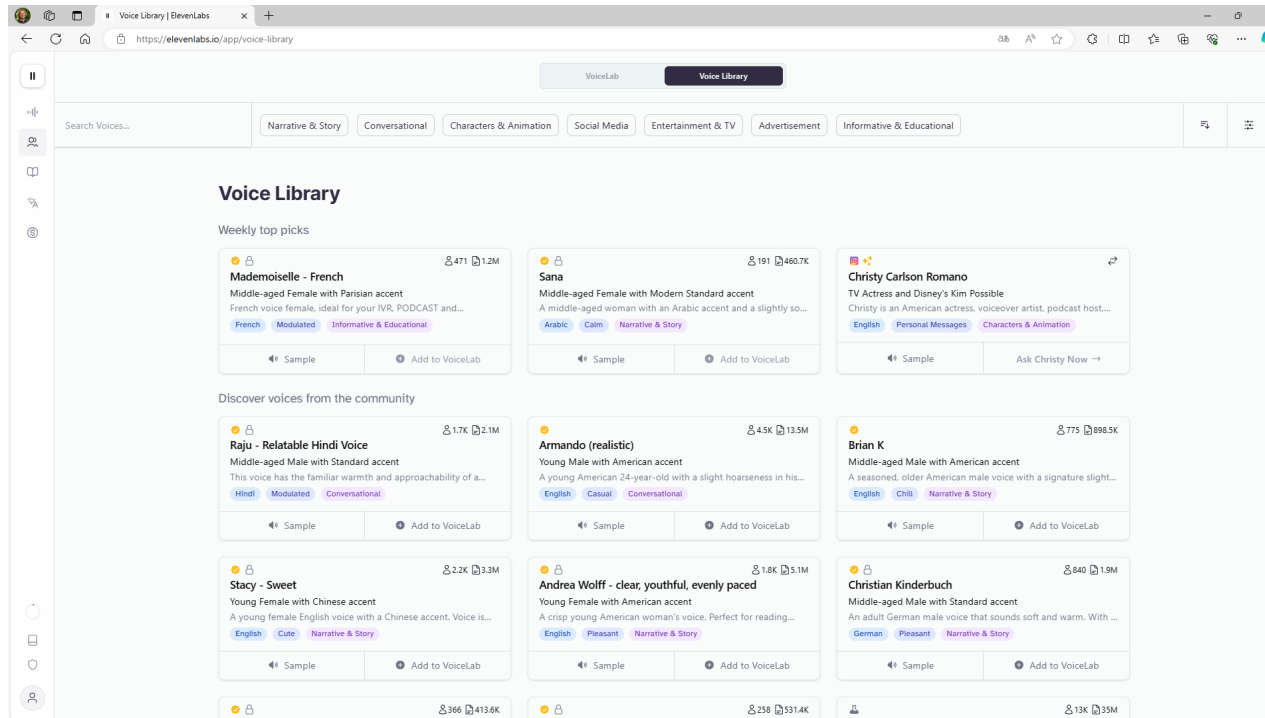
AI supported production of Media Learning Resources



I need a voiceover & music for my Online Course.

Elevenlabs

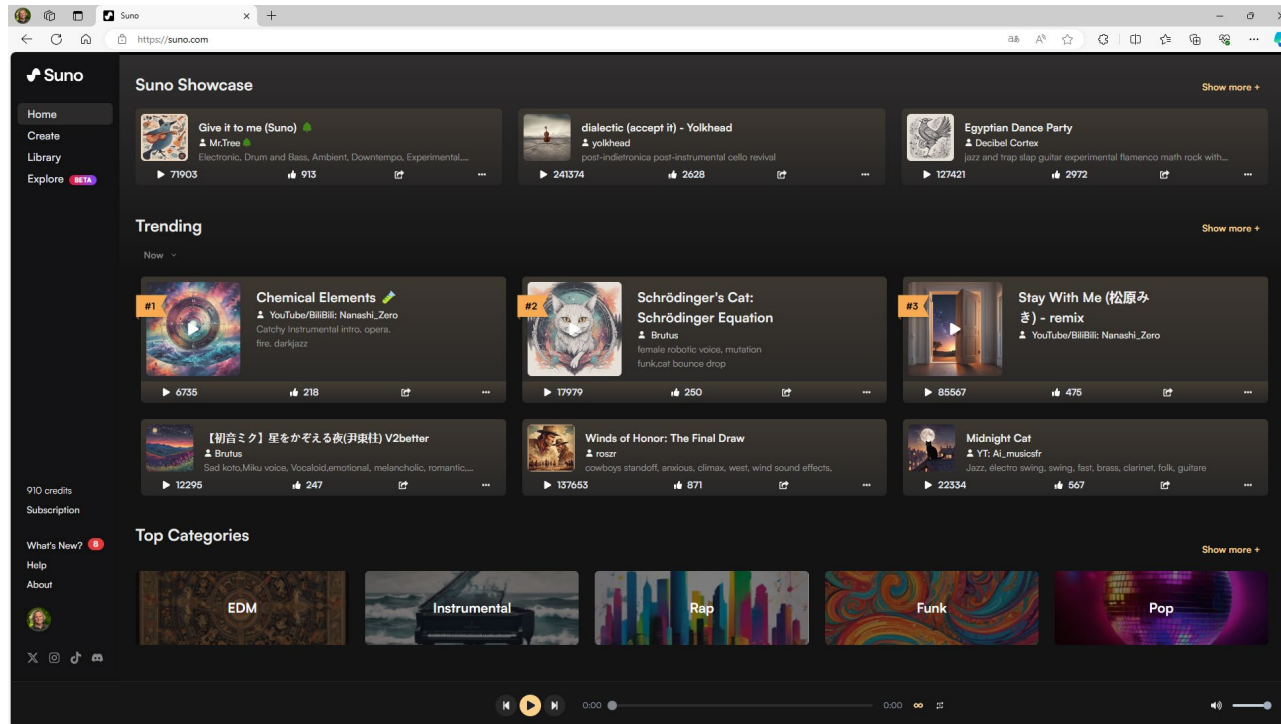
Professional Text to Speech Generator / Voice Cloning / Dubbing



elevenlabs.io

Suno

AI Music-Generator



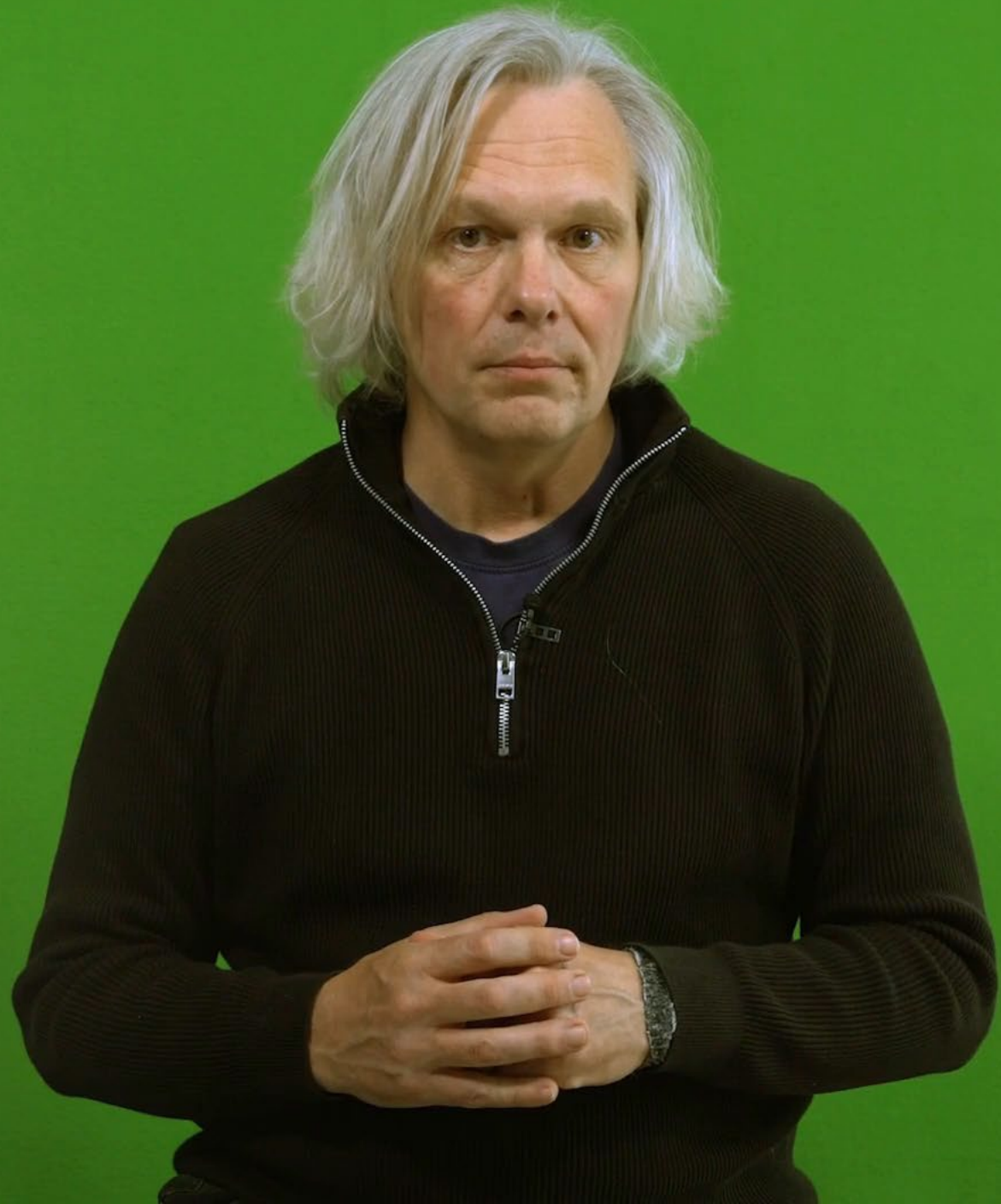
suno.com

AI as Co-Creator

AI supported production of Media Learning Resources

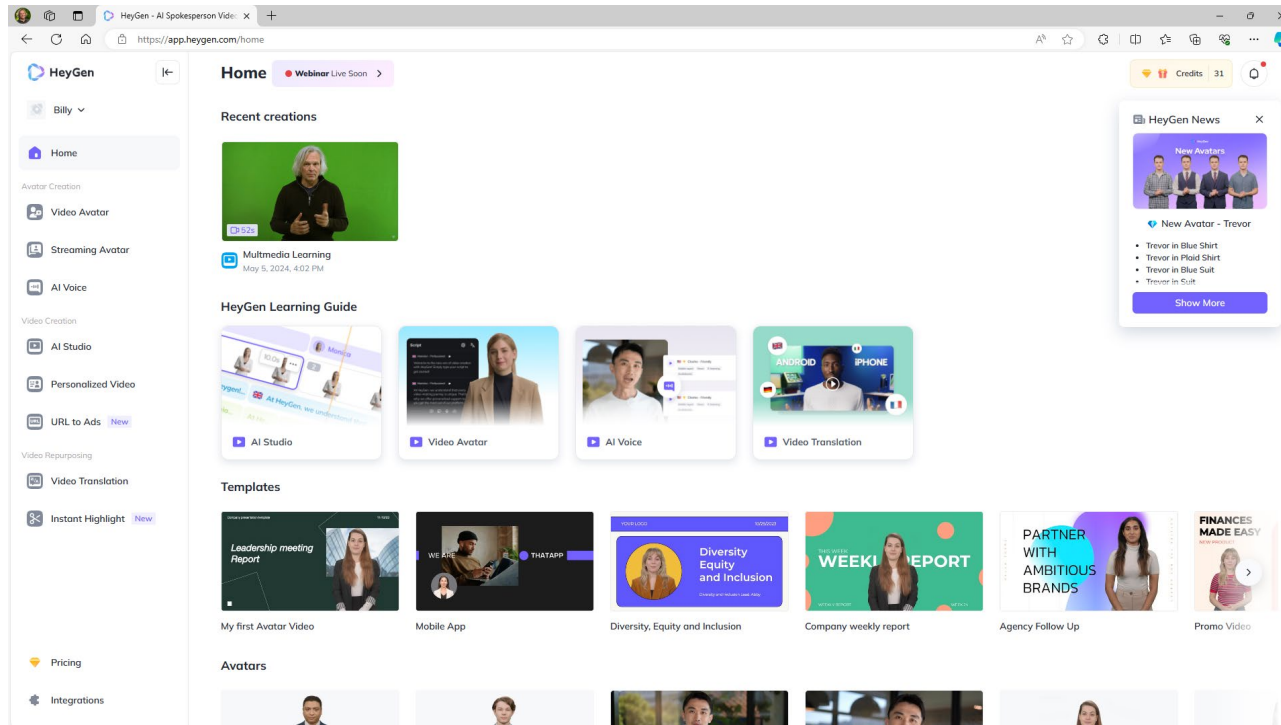


I need a Talking Head Video for my Online Course.



Heygen

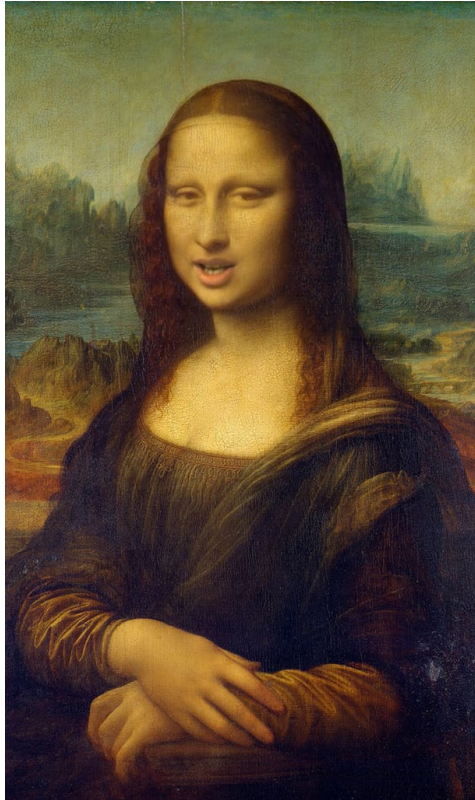
AI Video Avatar Generator



heygen.com

Heygen

AI Photo Avatar Generator



Hello, I am Mona Lisa, known for my mysterious smile. Painted by Leonardo da Vinci in the early 16th century, I reside in the Louvre Museum. My enigmatic expression has captivated viewers for centuries. Welcome to my world of intrigue and art!

heygen.com

AI as Co-Creator

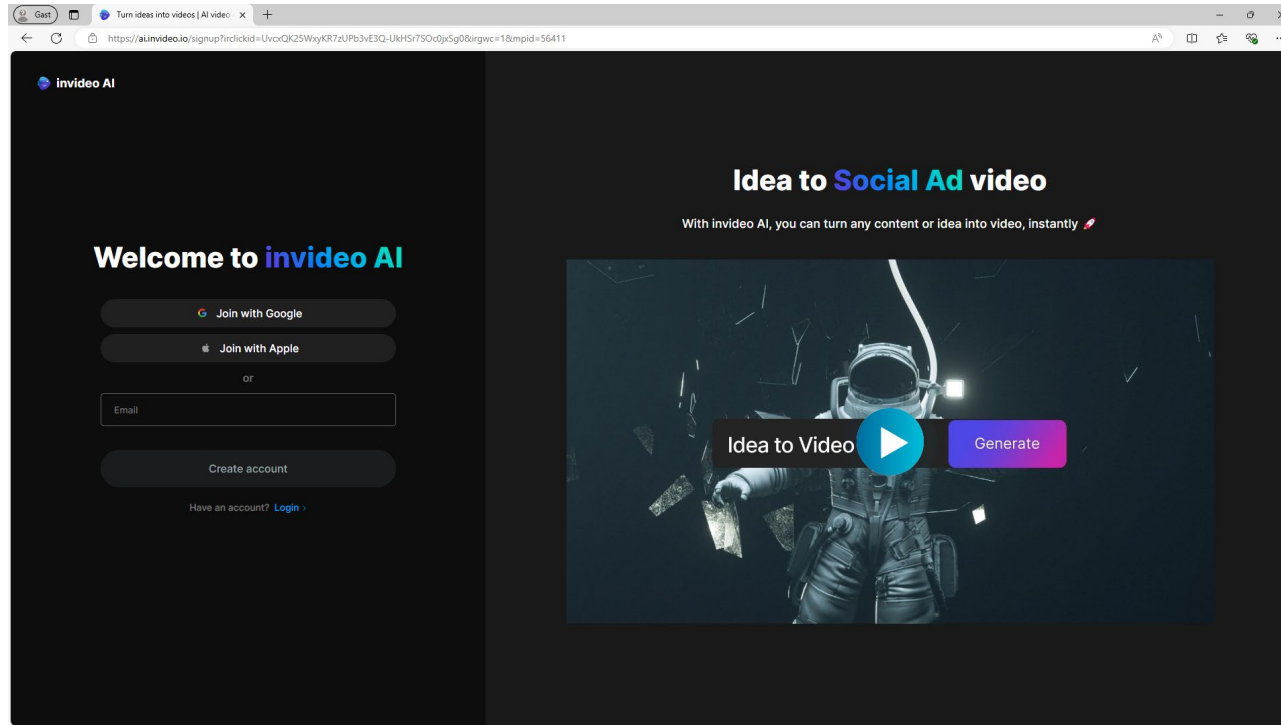
AI supported production of Media Learning Resources



I need a complete Explainer Video for my Online Course.

Invideo

AI Text to Video Generator (with footage)



ai.invideo.io

Prompt

For Invideo

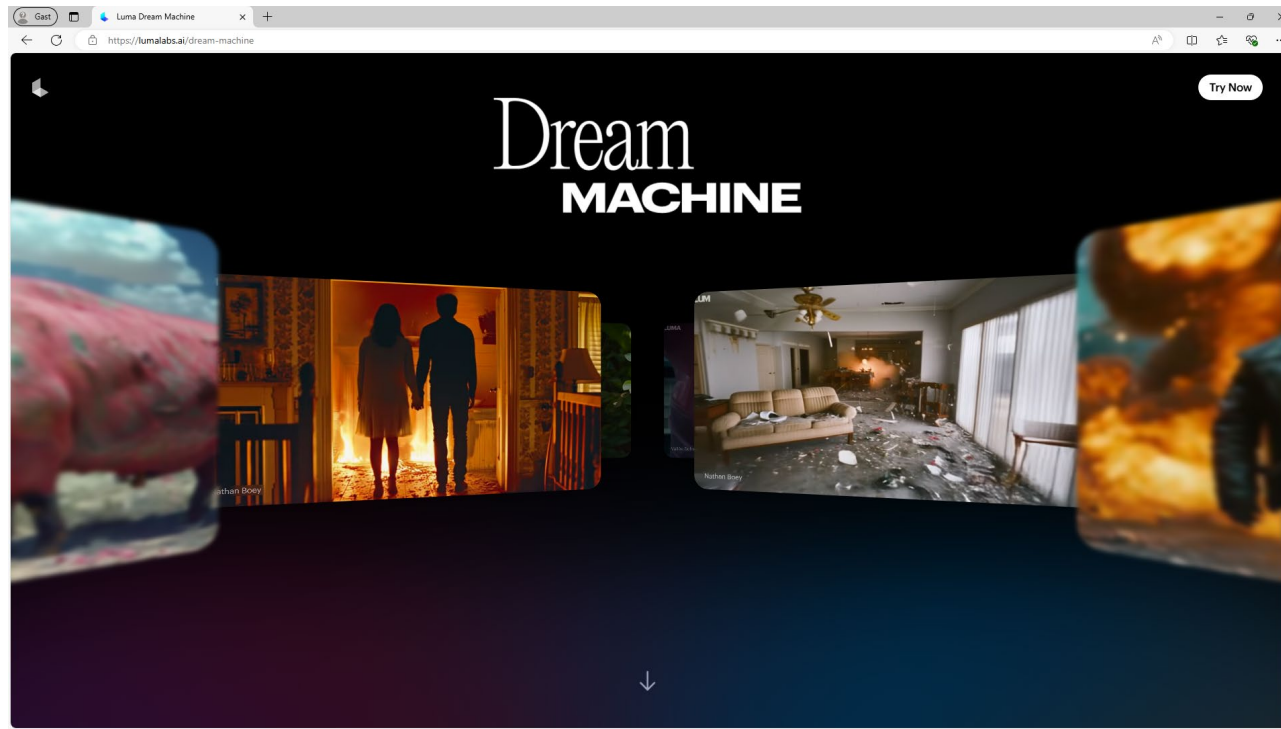
Create an explainer film on the practical application of Gilly Salmon's "Scaffolding" model in higher education teaching. Your target group is young university lecturers who already have some experience in university teaching. The film shall last three minutes

First, the model shall be introduced. Then, every stage of the five-stage model shall be presented. After that, the challenges and possible solutions in practical teaching for the five-step model shall be demonstrated. The film should convey the content in an informative tone. The sentences should be kept as simple as possible so that more complex ideas can also be easily understood.

Result

Lumalabs Dream Machine

AI Text to Video Generator (from scratch)



Lumalabs.ai

Prompt

For Lunalabs Dream Machine

A group of 6 students is discussing in a classroom. They are sitting around a big round table in the foreground of the frame. In the background, a lecturer is supervising the discussion. He is not talking to the students. The classroom is a modern style room with big windows and a interactive whiteboard on the wall.

Result 1

Result 2

MEDIA OPTIMIZATION

A HUGE TIMESAVER

**Audio
Enhancement**

**Sharpening
Pictures**

Voice Dubbing

Color Grading

**Text Based
Editing**

Captions

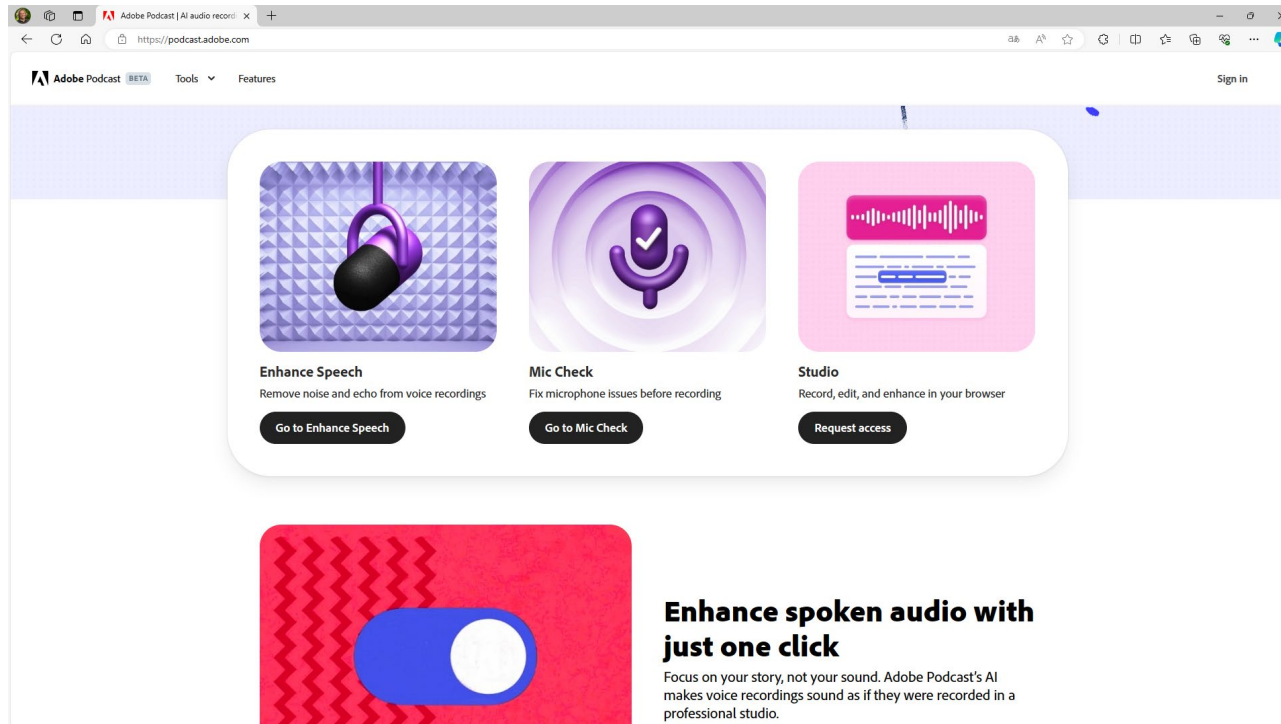
Music-Remix

Upscaling

Transcription

Audio Enhancement

Adobe Podcast - Online Service for enhancing audio



The screenshot shows the Adobe Podcast website interface. At the top, there is a navigation bar with the Adobe Podcast logo, a "Tools" dropdown menu, and a "Features" dropdown menu. A "Sign in" link is located in the top right corner. The main content area features three prominent cards:

- Enhance Speech:** Represented by a microphone icon in a purple acoustic foam background. The text below reads "Remove noise and echo from voice recordings" and includes a "Go to Enhance Speech" button.
- Mic Check:** Represented by a microphone icon with a checkmark inside a purple circle. The text below reads "Fix microphone issues before recording" and includes a "Go to Mic Check" button.
- Studio:** Represented by a pink card with a waveform and a document icon. The text below reads "Record, edit, and enhance in your browser" and includes a "Request access" button.

Below these cards, there is a red rectangular graphic with a blue toggle switch. To the right of this graphic, the text reads: "Enhance spoken audio with just one click". Below this, a smaller line of text states: "Focus on your story, not your sound. Adobe Podcast's AI makes voice recordings sound as if they were recorded in a professional studio."

podcast.adobe.com/

Voice Dubbing

Automatic translation combined with voice cloning



[Original Film \(en\)](#)

[Dubbed Film \(ger\)](#)

[Dubbed Film \(por\)](#)

heygen.com

... commentary in snack-sized mouthfuls



"I want AI to do my laundry and dishes so that I can do art and writing, not for AI to do my art and writing so that I can do my laundry and dishes."

Author and videogame enthusiast **Joanna Maciejewska** nails it (although bathroom cleaning goes ahead of laundry and dishes)

"I'm sure I deserve a lot of criticism"



Markus Tischner

markus.tischner@ili.fau.de

Sonia Hetzner

Sonia.hetzner@ili.fau.de

www.ili.fau.de

THANKS

For your attention!