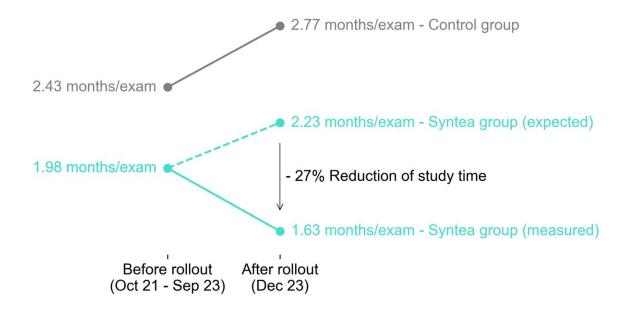


Generative AI can accelerate study time, research shows

February 23 2024

Average study durations before and after Syntea rollout



Average study durations before and after Syntea rollout. Credit: IU Internationale Hochschule

Time plays a crucial role in higher education learning and influences learning progress and the achievement of academic goals. Shortening learning time through AI-supported, personalized approaches can help to reduce drop-out rates and increase enrollment rates.



Researchers from the International University of Applied Sciences (IU) have shown for the first time at scale the positive effect of generative AI in <u>higher education</u> within a large and diverse treatment group (n = ca. 1,000 IU students). Results show that generative AI can help to accelerate learning progress.

The <u>research paper</u>, "Revolutionising Distance Learning: A Comparative Study of Learning Progress with AI-Driven Tutoring," is in <u>preprint</u>.

The research tested whether the use of the AI-supported learning assistant Syntea, which was made available in almost all IU <u>online</u> <u>courses</u> in October 2023, influences the learning progress of distance learning students.

Analysis by the IU research team shows that by using Syntea, the average time taken by IU distance learners to complete a course reduced by 27% compared to baseline. This means that for a three-year bachelor program students will be able to save almost 10 months of their study time. This is based on the assumption that this effect will be extrapolated on the total study time.

Dr. Sven Schütt, CEO, of IU International University of Applied Sciences, stated, "This landmark study underscores the revolutionary impact our AI learning companion Syntea is having on higher education. And as we continue to innovate, that impact will only increase. The findings suggest that education is on the brink of unprecedented improvement, paving the way for possibilities we couldn't have imagined just a year ago.

"Extrapolating this finding to the 15-year educational journey of the average bachelor <u>student</u> implies the potential to accelerate in average four years of education, opening up completely new opportunities to reshape our education system."



The research focused on the new Syntea feature, "Exam Trainer" which was released for several IU courses (around 40) in October 2023, continuing the history of the LLM (large language models) enabled innovation Syntea started in early 2022.

In the future, it is planned that the trainer function will be available for half of IU's courses. The trainer feature prepares students for the exam giving them the next exam-like question, thus providing personal feedback in the same style as you would have in the exam. By doing so, IU students receive a lot more feedback compared to students at other universities, which helps them progress faster.

More information: Revolutionising Distance Learning: <u>A</u>

<u>Comparative Study of Learning Progress with Ai-Driven Tutoring</u>

Provided by IU Internationale Hochschule

Citation: Generative AI can accelerate study time, research shows (2024, February 23) retrieved 2 May 2024 from https://phys.org/news/2024-02-generative-ai.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.