



### **ERASMUS+ BIP ON AI AND TEACHING**

# **BOOK OF CONTENTS**







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Tarragona, 2025 Universitat Rovira i Virgili

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ISBN: 978-84-1365-231-3





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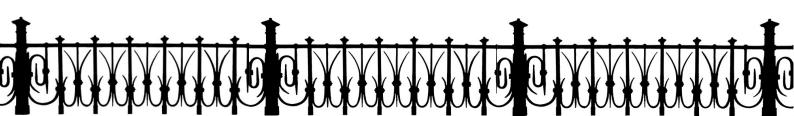
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### PROLOGUE: TEACHING IN THE AGE OF GENERATIVE AI

The rapid emergence of generative artificial intelligence (AI) in recent years has catalysed a profound transformation in the landscape of higher education. What once appeared as a distant technological frontier has now become a present reality: generative AI tools are capable of producing essays, code, data analysis, lesson plans, assessments, and creative content in seconds, often with remarkable fluency and relevance. The release of tools such as ChatGPT, DALL·E, and Claude, among others, has not only captured public imagination but has also raised fundamental questions for educators, institutions, and students.

The impact of this technological shift is particularly pronounced in higher education. For decades, universities have embraced digital technologies: learning management systems, online courses, open educational resources, etc. But generative AI marks a paradigm shift of a different magnitude. We are no longer discussing tools that support the dissemination of knowledge but those that participate in its production. This reality presents a dual challenge. On the one hand, educators must critically assess the implications of AI for academic integrity, pedagogical methods, and curriculum design. On the other, they must explore the potential of these technologies to enrich learning, foster creativity, and promote inclusion through personalized support and adaptive learning environments.

The Blended Intensive Programme (BIP) on *AI and Teaching* was conceived as a response to this moment of transformation. BIP initiatives, as supported by the Erasmus+ framework, are designed to bring together members from diverse institutions to co-learn and co-develop transnational, multidisciplinary perspectives. In this edition, the focus is clear: to explore, understand, and critically engage with the pedagogical opportunities and challenges brought forth by generative AI. Bringing together educators, researchers, and students from across Europe, this programme seeks to foster an open and constructive dialogue on how we can meaningfully integrate AI in our teaching practices. Through a combination of online sessions, in-person workshops, and collaborative project work, participants are encouraged to reflect on their own institutional contexts, share emerging practices, and design forward-looking educational scenarios that incorporate AI tools in ethical and pedagogically sound ways.

The need for such a programme could not be more pressing. Institutions across Europe are currently navigating how to revise academic policies, assessment criteria, and teaching strategies in response to the rise of AI. There is a shared understanding among many of us that our institutions are responding unevenly to the changes brought by AI. Some have taken swift steps to revise academic policies and update codes of conduct. Others have adopted a more cautious wait-and-see approach. In both cases, educators are often left to navigate these changes on their own, with limited training, conflicting messages, and little time to reflect. This programme seeks to counter that fragmentation by building community, offering structure for experimentation, and promoting dialogue across borders and disciplines. Amidst this uncertainty, there is an opportunity to reimagine education as a space where human and artificial intelligence can coexist in service of







deeper learning, critical thinking, and creative expression. If we approach this moment not with fear but with curiosity and care, we may be able to shape a future in which AI becomes an ally in our educational missions, rather than a threat.

Precisely because of this, a guiding principle of the programme has been to avoid both technooptimism and techno-panic. While it is tempting to either celebrate AI as a revolutionary force or to fear it as
an existential threat to education, the reality is more nuanced. Generative AI, like all technologies, reflects the
values, assumptions, and intentions of its users and creators. And one of the aims of this BIP has been to collect
the different views, opinions and actions developed by the members of the different higher educational
institutions. To reflect this, the present book of contents gathers the contributions and activities developed
throughout the BIP. It includes theoretical insights, practical cases, collaborative outputs, and methodological
tools. More than a mere record of what took place, it is an invitation: to continue the conversation, to test ideas,
and to build communities of practice that are capable of navigating (and shaping) the role of AI in education
with both responsibility and imagination.

As we begin this journey, we are reminded that the core of education is not technology, but the relationship between people and knowledge. AI may alter the tools we use and the paths we take, but the values that guide us remain unchanged: curiosity, empathy, rigour, collaboration. Let this BIP be a step toward ensuring that those values are not only preserved but enhanced in the age of AI.

Dr. Jokin Ezenarro

Dr. Daniel Schorn-García





### **INVITED SPEAKERS**







# FROM PROMPT TO PRACTICE: STRATEGIES FOR INTEGRATING GENERATIVE AI IN UNIVERSITY TEACHING

### Daniel Schorn-García & Jokin Ezenarro

Universitat Rovira i Virgili, Spain

The emergence of generative artificial intelligence (AI) tools such as ChatGPT, is prompting universities to reconsider long-standing pedagogical models. While the educational potential of these tools is considerable, their effective integration into teaching practice requires both technical and didactic literacy.

We identified six key areas in which AI can be meaningfully applied in the academic context: (1) learning to communicate effectively with AI through prompt engineering; (2) using AI for pedagogical assistance in content generation, activity design, or student feedback; (3) teaching programming and algorithmic thinking through customised GPTs; (4) leveraging multimodal AI tools for creative outputs; (5) generating personalised feedback based on rubrics; and (6) discussing the ethical implications of AI in assessment.

A central component for achieving these goals is the ROCEF model (Role, Objective, Context, Example, Format), a structured approach to writing prompts that help guide large language models (LLMs) towards useful, accurate, and relevant educational outputs. Applied examples of the ROCEF method exist in different disciplines, including: prompts for designing collaborative projects, generating formative feedback, writing exam questions, or creating numerical exercises contextualised to students' interests.

Other powerful tools exist for extracting the full potential of generative AI, such as the use of custom GPTs configured for specific didactic tasks, such as interactive tutors, content validators, and co-designers of activities. Also, AI-driven platforms such as Gamma, for presentation generation, and multimodal tools for image, video, and sound synthesis. The potential for combining such tools to create immersive educational experiences is immense, however, legal and pedagogical implications must be considered.

Rather than promoting wholesale adoption of AI, the proposed tools aim to cultivate critical awareness and pedagogical intention in the use of AI. This provides a framework for teachers to integrate AI tools not as shortcuts, but as catalysts for active learning, differentiation, and feedback-rich environments; reflecting on the role of educators not only as content facilitators, but as AI mediators, equipped to make informed, ethical, and creative decisions about the use of intelligent technologies in higher education.





# INTEGRATING ARTIFICIAL INTELLIGENCE INTO HIGHER EDUCATION: METHODOLOGICAL INNOVATIONS, ETHICAL FRAMEWORKS, AND GOOD PRACTICES AT URV

### Albert Fonts Ribas & Esther Rodríguez Gallego

Universitat Rovira i Virgili – ICE Network on AI in Teaching, Spain

This contribution presents a comprehensive overview of the initiatives undertaken by the Universitat Rovira i Virgili (URV) to integrate Artificial Intelligence (AI) into higher education. Through the ICE Network on Methodological Innovations with the Application of AI, URV has developed a multi-dimensional strategy encompassing pedagogical innovation, ethical reflection, and community engagement.

### 1. Structured AI Training for Teaching Staff

URV has implemented a tiered AI training strategy for educators:

- Entry Level: A self-paced Moodle course with curated resources developed by the AI in Education Network.
- **Intermediate Level**: 12-hour in-person training sessions focused on evidence-based practices.
- Advanced Level: Development of learning communities to foster collaborative innovation.

This structured approach ensures that faculty members can progressively build their AI competencies and apply them meaningfully in their teaching contexts.

#### 2. Methodological Innovations and Educational Resources

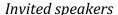
Since the release of ChatGPT in late 2022, URV has published guides for both faculty and students, covering:

- AI fundamentals and ethical considerations
- Technical usage and prompting strategies
- Curriculum integration and assessment design
- A catalogue of AI tools and a prompting guide
- A SPOC course (*Getting Started with Generative AI for Teaching*) with over 200 participants and high satisfaction ratings

These resources aim to empower educators and learners to use AI responsibly and effectively, fostering autonomy, creativity, and critical thinking.

### 3. Innovation Projects and Strategic Collaboration

URV has launched several innovation calls:







- INDOC Projects: Led by URV teaching teams
- **Bridge Projects**: Collaborative efforts between university lecturers and educators from other educational stages

#### Examples include:

- ChemAITeach&Eval: AI-enhanced learning in analytical chemistry
- *Multilingual Competence*: Using ChatGPT to support multilingual classrooms
- Ocean Detectives: AI-supported marine waste classification
- Digital Inclusion: AI tools for students with autism and ADHD

These projects demonstrate the diverse and inclusive applications of AI across disciplines.

### 4. Mapping and Disseminating Good Practices

A dedicated working group has defined criteria for identifying good practices in AI-enhanced teaching, including curriculum design, classroom implementation, and assessment. Monthly hybrid sessions foster a **Community of Practice**, enabling faculty to share experiences and build a repository of practical cases.

#### **5. Ethical Implications and Self-Assessment Framework**

URV has developed a robust ethical framework aligned with European, Spanish, and Catalan guidelines. Key outputs include:

- An infographic summarizing ethical principles (e.g., transparency, privacy, sustainability)
- A self-assessment tool based on five principles: non-maleficence, justice, autonomy, beneficence, and explainability
- A rubric to evaluate AI-related teaching activities, considering risks and compliance with the EU AI Act (Regulation 2024/1689)

This tool is being piloted across the university and will be presented at upcoming innovation conferences.

#### Conclusion

URV's integrated approach to AI in education, combining structured training, methodological innovation, ethical reflection, and collaborative practice, serves as a model for institutions seeking to navigate the transformative potential of AI. The initiative highlights the importance of empowering educators, safeguarding students, and fostering responsible innovation in higher education.





# THE AI REVOLUTION: CHALLENGES AND OPPORTUNITIES OF THE ARTIFICIAL INTELLIGENCE IN OUR DAILY LIVES

Jordi Duch Gavaldà

Universitat Rovira i Virgili, Spain

La presentació té com a objectiu presentar la revolució de la intel·ligència artificial (IA) i el seu impacte en la societat i el mercat laboral, i en concret analitzar l'impacte i el potencial que tindrà la IA en la docència universitària. S'introduiran els diferents tipus d'IA i les seves aplicacions en àmbits com la predicció, la generació de continguts i els sistemes agentics que seran capaços d'interactuar. També es presentaran algunes de les tendències futures (AGI, IA com a infraestructura) i s'analitzaran reptes com el cost, els biaixos, la legislació i la integració amb el món físic.





### ARTIFICIAL INTELLIGENCE (AI) FOR EVERYONE

### Tàrek Lutfi

Servei de Recursos Educatius, Universitat Rovira i Virgili

¿What we do? At The Educational Resources service?

We give supporting use of the digital technologies for the entire university.

I would like to underline three of our fields of work.

The first one is that we give help to teachers using the Virtual Campus developed with Moodle.

Another field that this is one of the most recent, it is that we explore, disseminate and train for the critical and responsible use of artificial intelligence as a resource for teaching and for learning.

And the third one, and this is my main ambit, it is Digital Accessibility (DA). We promote that all the people, including those with disabilities, have access to digital technologies and also the artificial intelligence.

The Experience

How we have adapted the artificial intelligence guides at the URV to easy to read, with the help of students from the INSERLAB program at the URV. And how artificial intelligence has helped us in this process.

The context: Some preliminary questions

What is Easy-to-Read?

It is a way of writing and presenting information so that it is understandable to everyone. Also, for those who have difficulty understanding. For example: people with intellectual disabilities, the elderly, people who are not fluent in the language that we are using.

What is INSERLAB

INSERLAB is a URV programme to train people with intellectual disabilities to develop professional skills to find work in an ordinary environment.

How does the ERS collaborate with INSERLAB?

Since 2018 we have been hosting a trainee student every year who helps us to adapt the information on the service to easy-reading format.

In the 2023-2024 academic year, we adapted the URV's AI guides to Easy-to-Read

From the explosion to the democratization of AI?

Surely we all agree that artificial intelligence began long before 2022. But it was from its 'explosion' in 2022 that we created our first guides on artificial intelligence. With the aim of providing professors, students, and technical staff with basic information to get started in using this emerging technology.

### *Invited speakers*





And at that moment, when we made our first artificial intelligence guides, we asked ourselves two key questions: Can everyone understand what artificial intelligence is? And can everyone use artificial intelligence?

These questions move us to carry out this project started in 2024, in order to adapt our guides to Easy-to-Read.

And this 2025 We use these guides adapted to Easy-to-Read with the students from INSERLAB programme.

And we hope that the next 2026 We will continue working in this project. Maybe translating this guides adapted to Easy-to-Read to other languages such as Spanish or English.

The path: The process of adapting to Easy-to-Read

It was an iterative process. And the main steps were:

- Switch the web version to text document.
- Read, underline and prioritize the key information.
- Write an initial version in Easy-to-Read.
- Validate this initial version with people with Intellectual Disabilities. (ID)
- Compose final version.

And it is important to underline that in this process we had had a dialogue between human person and artificial intelligence machine.

The work carried out by the human being has been:

- Transform the document. From web format to text.
- Discriminate which information were the most important.
- Write an initial version in an Easy-to-Read format.
- Validate this version with people with intellectual disabilities or with some comprehension difficulties.
- Decides to incorporate or not the suggestions made by the validation team.
- Use artificial intelligence as a support tool, when appears some situations that generate some doubts.
- Define keywords. Applying the principles and rules of an Easy-to-Read format.
- Generate some images that will be used in the final product.
- And finally, create a slide's presentation. Using some artificial intelligence tools specialized in making slides presentations.

The work that artificial intelligence machine helped the humans to carry out were:

- Responding to human instructions (Prompts and conversations).
- Explain what Easy-to-Read is. The concept, the principles and the rules.
- Identify keywords in the document.
- Generate text adapted to Easy-to-Read.
- Generate a glossary of keywords in an Easy-to-Read format.
- Generate images and slides presentation.

We use different artificial intelligence tools such as: ChatGPT 3.0, Copilot and Gamma.

Results: Learning and teaching with AI

Related to the student with Intellectual disabilities:

### *Invited speakers*





- She learned about artificial intelligence with artificial intelligence and how to use artificial intelligence.
- She helped all people to understand artificial intelligence. Also, those who do not have an intellectual disability.
- And she increased her Self-esteem.

Related to the University and the society:

- This project responds to a real need related to democratize the access to artificial intelligence. We must not to forget that access to information is a human right recognized in international and local law.
- Create a resource about artificial intelligence that is useful to The Rovira i Virgili University Community and many other people.
- To make people with intellectual disabilities visible as creators of content and knowledge with added value. In summary, to make visible their needs and the value that they bring to the society.
- And many other results and benefits. That I can remember at this moment.

#### Transference

This 2024–2025 academic year, INSERLAB students have worked with artificial intelligence to create an infographic and a website for the Language Learning Space (EAL is its acronym in Catalan) applying Easy-to-Read guidelines.

They have used artificial intelligence to support this collaborative work.

And they have had The Easy-to-Read Artificial Intelligence Guide (In Catalan) as a support resource to do this work.

Let's recap? Our Key Points

In summary, the most important achieved aims that we would like to underline of this experience have been:

- The experience: How the URV's Educational Resources Service (SREd. Catalan Acronym) has adapted the Artificial Intelligence Guides to Easy-to-Read and how artificial intelligence has helped us in this process.
- The need to bring artificial intelligence to all people, also students with intellectual disabilities.
- The challenge: Adapting the URV AI Guides to Easy-to-Read.
- The opportunity: Internships for students in the INSERLAB program.
- The process: Collaboration between different services and people of the URV.
- The results: URV AI guides in Easy-to-Read & Democratization of the AI
- Transfer: Used in 2024-2025 INSERLAB subjects: Information and Communication Technology Artificial Intelligence (ICT-IA); Simulated Company. These guides can also be used by anyone at the URV and the surrounding area, as they are available in open access.
- Continuity: Translate this Easy-to-Read artificial intelligence guides into other languages: Spanish, English.





# STRATEGIES IN UNIVERSITIES TO ADDRESS EDUCATIONAL TRANSFORMATION WITH AI







# EMPOWERING EDUCATORS AND GUIDES: PRACTICAL STRATEGIES FOR RESPONSIBLE USE OF AI IN HIGHER EDUCATION

### Guðmundur Björnsson

Department of Geography and Tourism, Faculty of Life and Environmental Sciences, University of Iceland

This presentation shares hands-on strategies for integrating Artificial Intelligence (AI) into higher education, with a focus on curriculum design, online teaching, and peer capacity building. As a lecturer in tourism studies at the University of Iceland and academic coordinator for the university's national tour guide programme, I work at the intersection of environmental interpretation, blended education, and teacher training.

I will present how AI tools such as ChatGPT and other generative systems are used in my teaching to:

- Design course structures, lesson plans, and assessment rubrics
- Create high-quality presentation materials quickly and effectively
- Build and organize learning modules in Canvas, including AI-enhanced prompts
- Teach students—especially future guides—how to use AI responsibly to develop reflective and informed writing assignments

Beyond student-facing innovation, I have also played an active role in introducing AI practices within our faculty. This includes organizing internal workshops, advising colleagues on ethical implementation, and encouraging critical discussion around opportunities and limitations of AI in our discipline.

The presentation emphasizes how AI can serve not only as a content generator, but as a strategic partner in fostering inclusive, ethical, and engaging learning experiences. I hope to contribute examples of grassroots-level innovation that could inspire broader strategies in other institutions across Europe.





# DESIRABLE DIFFICULTY IN THE AGE OF AI: DESIGNING FRICTION IN AN ICELANDIC UNIVERSITY SETTING

### Bethany L. Rogers

University of Iceland, Reykajvík

As generative AI tools become more accessible, teachers face a paradox: what happens to "desirable difficulty" when tasks get too easy? This presentation explores how AI shifts—not erases—the role of productive struggle in higher education. Drawing from teaching experience in Icelandic history (SAG036G) and faculty development work at the University of Iceland's Center for Teaching and Learning (Kennslumiðstöð), I present strategies for crafting challenge that cultivates deep learning, even in AI-rich environments. Attendees will consider what kinds of difficulty remain meaningful, how to design friction that fosters engagement rather than frustration, and where AI can actually enhance—not flatten—the learning curve. Icelandic case studies provide a localized lens for globally relevant questions. Expect some theory, a few classroom-tested tools, and a quick interactive challenge to test your own prompt literacy.





# RETHINKING COURSE DESIGN WITH AI: INTEGRATING GENERATIVE AI INTO ABC LEARNING DESIGN WORKSHOPS

### Harpa Dogg Fridudottir

Centre for Teaching and Learning, University of Iceland

Generative AI has rapidly emerged as a transformative tool for, and in, higher education, offering both great opportunities and challenges. It is increasingly being used as a co-design partner for content creation and curriculum design and redesign. Research has shown that using generative AI to reorganize curriculum and courses can greatly improve the overall educational quality.

The Centre for Teaching and Learning (CTL) at the University of Iceland has been offering ABC learning design (LD) workshops for the past few years as a method to reorganize courses. We have adapted the ABC learning design method — originally developed at University College London by Nataša Perović and Clive Young — to incorporate generative AI. ABC LD is a collaborative, visual method for reviewing and redesigning courses using the six learning types identified by Professor Diana Laurillard: acquisition, investigation, practice, discussion, collaboration, and production. Teachers work independently or collaborate in small groups to create a visual storyboard of their course and the teaching methods that they find most effective for achieving the course's learning outcomes.

In our adapted workshops, teachers work with a specific course in mind and are guided to interact with generative AI tools (e.g., ChatGPT) using tailored prompts to support course redesign. These prompts help educators reflect on teaching strategies, explore new activity types, and critically engage with AI-generated suggestions. The goal is not only to enhance creativity and dialogue but also to explore AI as a supportive, reflective partner in course development. One teacher may work on a single course, but it may also be beneficial for teachers of the same course to participate in the same workshop to collaboratively review their course.

We are in the starting phases of these workshops and have so-far hosted two workshops and plan to host another one in May. In the next session, we plan to introduce a custom-built GPT, pre-trained with content specifically tailored to the ABC Learning Design framework and workshop context.

Feedback has been mixed — many participants found AI helpful for generating ideas, while others found it challenging to navigate and got confused by the AI suggestions. These sessions have provided valuable insights into how AI can be meaningfully integrated into structured learning design practices. Our key takeaway is the importance of an iterative, open-minded approach when developing new educational strategies.





# STUDENT PERSPECTIVES ON AI IN HIGHER EDUCATION: AUTHENTICITY, ETHICS, AND EDUCATIONAL CHANGE

### Sigurbjoerg Johannesdottir

### University of Iceland

As artificial intelligence (AI) becomes increasingly embedded in higher education, concerns about authenticity, integrity, and student agency are intensifying. This pilot study investigates graduate students' perspectives on AI's role in academic work, aiming to inform institutional policies that foster transparency, ethical practice, and meaningful learning experiences.

Grounded in the theoretical framework of student voice, which recognizes students as active contributors to educational development, the study explores how students engage with AI tools and perceive their impacts. A mixed-methods survey was administered to 12 graduate students at the University in Iceland, incorporating Likert-scale items and open-ended responses to capture both quantitative patterns and qualitative insights.

The research addressed six key questions: purposes for using AI, types of AI tools employed, attitudes toward AI, perceived impacts on academic development, ethical concerns, and beliefs about institutional support. Findings revealed varied levels of AI experience among students but a generally positive attitude toward its educational use. Students highlighted AI's benefits in saving time, generating ideas, structuring assignments, and enhancing critical thinking through reflection and synthesis. Common applications included explaining complex concepts, summarizing texts, and assisting in creative processes.

Despite positive attitudes, students expressed caution regarding data privacy, reliability of AI outputs, potential overreliance, and broader ethical implications. Concerns about academic integrity and the societal impact of AI technologies were also evident. Importantly, student feedback prompted refinement of the survey instrument, demonstrating the value of co-creating research tools that reflect students' authentic voices.

The pilot further illustrated how AI can serve both as a research subject and a methodological aid, with generative AI tools used to enhance question clarity while emphasizing the necessity of maintaining human judgment in educational research.

Ultimately, the study shows that AI need not erode authenticity in education; instead, its integration must be critically and collaboratively shaped. Institutions are encouraged to develop transparent AI policies, promote ethical literacy, and support thoughtful pedagogical integration that centers human values. This work lays the foundation for a larger institutional study and offers a model for student-centered, ethically grounded innovation in the age of AI.





# CASE STUDY: AI IN ACADEMIA: BUILDING INSTITUTIONAL READINESS AND CO-CREATING THE FUTURE OF LEARNING

### Anneli Kalm

### Tallinn University of Technology

TalTech (Tallinn University of Technology) like many other universities is looking for the most efficient way to leverage AI potential. In the presentation I will mainly focus on School of Business and Governance approach, but will also weave in on the university level approach as well. I think today we are still at the point where we are experimenting with different approaches and testing what works and what does not.

Phase I - Building the Foundation: Guidelines & Integrity

Objective: Establish a clear academic framework for AI usage

- Developed institution-wide (on university level as well as on School level) regulations for acceptable use of AI in written academic work
- Introduced citation standards for AI-generated content
- Aimed to preserve academic integrity while embracing new technologies

Phase II - Co-Creation with Educators: Rethinking Pedagogy

Objective: Empower teachers to integrate AI thoughtfully

- Organized co-creation workshops with teachers and didactics experts
- Focus areas:
- Assessment redesign to reflect AI realities
- Course structure revisions to foster AI literacy
- Assignment design to encourage productive and ethical AI use
- Outcome: Increased faculty engagement and creative use of AI in pedagogy

Phase III - From Policy to Practice: Inspiration & Application

Objective: Showcase real-world, academic use of AI

- Hosted inspirational seminar series for faculty and staff
- Demonstrated practical applications:
- AI in data analysis



### Strategies in universities to address educational transformation with AI



- AI-assisted report writing
- AI support in academic publishing
- Created momentum and confidence to expand use of AI tools in teaching

Phase IV – Upcoming: Supporting the Use of Chatbots in Moodle Courses

• Idea is to create for teachers a chatbot solution that they can use and with the help of a specialist to train on their structured material. So that the student can get real time feedback, and the teacher also has access to the types of questions and topics that the students struggle with the most. Some teachers have already piloted the approach, but now the question is to make it available to all interested.

Key Takeaways from TalTech's approach

- A phased implementation balances clarity, collaboration, and creativity
- Teacher involvement ensures relevance and buy-in even if not all is solved and clear
- Practical showcases demystify AI and accelerate adoption and make it more tangible





# STRATEGIES FOR THE IMPLEMENTATION OF ARTIFICIAL INTELLIGENCE IN UNIVERSITY EDUCATION IN HEALTH SCIENCES

### Eduardo Francisco Esteves

Instituto Superior de Saúde

This presentation explores the strategies adopted for the integration of Artificial Intelligence in university education in the fields of Physiotherapy, Nursing, and Dietetics and Nutrition. Concrete actions have already been taken, such as participation in consortia for the creation of data centers and the purchase of AI tools specific to the context of health education. The main strategic directions, challenges faced, and priorities set to ensure ethical, effective, and pedagogically aligned implementation will be discussed. The presentation will also address the expected impact of these initiatives on the training of future health professionals and the role of universities in leading this innovation process.





# INTEGRATION OF AI IN HIGHER EDUCATION: A CASE STUDY FROM VYTAUTAS MAGNUS UNIVERSITY

### Remigijus Žalkauskas

**Vytautas Magnus University** 

In response to the growing impact of artificial intelligence (AI) on academia, Vytautas Magnus University (VMU) has recently adopted a comprehensive strategic position on the ethical and responsible integration of AI in teaching, learning and research. This institutional framework is firmly rooted in the VMU tradition of artes liberales, which promotes critical thinking, ethical reflection and interdisciplinary collaboration.

The policy sets clear guidelines for academic staff, researchers and students, including mandatory disclosure of AI-generated content, adherence to standards of academic integrity and the implementation of risk assessment protocols prior to the implementation of AI tools. A decentralised governance model provides oversight at faculty and degree programme levels, supported by a university-wide advisory group under the VMU Ethics Committee. The University clearly distinguishes between acceptable and prohibited uses of AI in academic practice to ensure learning outcomes and maintain academic integrity.

Through investment in technical infrastructure and professional development, the university aims to position itself as a regional leader in digital innovation, committed to human rights, environmental sustainability, and equitable access to education. For example, in accordance with this institutional AI position, VMU—together with academic and industry partners—is developing a Centre of Excellence dedicated to forest environment monitoring (Forest 4.0). This initiative envisions the creation of a national AI and Internet of Things (IoT) cluster to support the Lithuanian Smart Forestry Strategy and extend its impact internationally. As noted in the context of the SILVA Network Conference 2025, AI and digital technologies are reshaping educational paradigms, particularly in fields such as forestry and landscape management.

By investing in technical infrastructure and professional development, the University aims to become a regional leader in digital innovation, committed to human rights, environmental sustainability and equal access to education. For example, in line with this institutional AI possition, VMU is developing a centre of excellence for forest environmental monitoring (Forest4.0) with academic and industrial partners. This initiative aims to create a national AI and Internet of Things (IoT) cluster to support the implementation of Lithuania's smart forestry strategy and expand its impact internationally. As noted in the context of the SILVA Network 2025 conference, AI and digital technologies are changing educational paradigms, especially in areas such as forestry and landscape management.



### Strategies in universities to address educational transformation with AI



From personal experience I see potential applications of AI in forestry and landscape education: Virtual Forest Lab platforms simulating dynamic forest ecosystems (e.g., growth, disease, climate effects, species interactions under different scenarious); Automated species identification and forest health monitoring; Forest, Landscape policy, strategies documents analysis and comparis, landscape pattern recognition, planning scenarios generation, and adaptive management critique; Generation of teaching materials from scientific outputs and terminology simplification; Use of advanced research assistants (e.g., Scite AI) for responsible scientific literature review and AI content detection tools (e.g., Identific) for safeguard learning outcomes and uphold academic honesty.

From an administrative perspective, AI tools also could support curriculum development, study programme self-evaluation process, research performance analysis, and strategic planning.

For higher education institutions, the primary challenge lies in staff capasity development, selecting/creating appropriate tools, that align with academic aims while fostering critical, ethical AI literacy among future professionals.





# ARTIFICIAL INTELLIGENCE IN TEACHING AND LEARNING – WHAT IS THE UNIVERSITY OF ICELAND DOING?

### María Kristín Bjarnadóttir

Centre for Teaching and Learning, University of Iceland

In this presentation, I will discuss the University of Iceland's approach to the use of artificial intelligence (AI) in teaching and learning. The presentation is divided into three main parts:

### 1. Current Use of AI at the University of Iceland

I will begin by outlining the current landscape – how and where AI is already being used within teaching and learning at the University of Iceland. I will highlight specific projects and initiatives that are either ongoing or completed and discuss their impact on both students and instructors. Particular attention will be given to the role of the Centre for Teaching and Learning in supporting faculty members as they navigate this evolving landscape.

### 2. New Policy Development and the Rector's Working Group

The second part of the presentation will focus on a new policy initiative launched by the Rector of the University of Iceland. A dedicated working group has been established to identify key priorities and possibly develop a clearer framework for the use of AI within the institution. I will present the group's goals and the anticipated implications of this work.

### 3. Nordic Collaboration on AI Policies in Higher Education

Finally, I will briefly introduce a collaborative project involving the University of Iceland and other Nordic universities. This initiative aims to compare AI strategies across countries and institutions, to share best practices and develop joint recommendations for the responsible and effective use of AI in higher education.





### UNIVERSITY-WIDE FRAMEWORK FOR GENERATIVE AI IN EDUCATION

### Alice Schaap

### Vrije Universiteit Amsterdam

This presentation consists of three parts: I) how we at Vrije Universiteit Amsterdam came up with our generative AI in education framework; II) plans to update this framework and III) how we work together, university-wide, on AI-related challenges and opportunities.

I) How we at Vrije Universiteit Amsterdam came up with our generative AI in education framework

The framework is now online; a translation in English will follow soon (mid-June).

It all began with the release of ChatGPT 3.5 at the end of 2022. In the beginning, the focus was most of all on the fear of fraud and academic misconduct. Later, there was also time to consider the possibilities that genAI could offer education. In any case, there was a clear need for guidelines, frameworks and policies.

Since this was totally new territory in many ways, we've teamed up with another university in Amsterdam and set up a taskforce. This AI taskforce consists of eight scientists who have advised our rectors on how to deal with AI in education. We have then translated this advice into a framework. This is our advice for anyone dealing with AI in education: seek advice from the scientists and experts you already have in your institution!

#### II) Plans to update this framework

This framework already needs an update, because of developments in the tech industry and in our university. The dilemma is how to ensure you don't keep falling behind, because developments in the tech industry are happening incredibly fast (and not always in a way that we consider ethical and responsible). In our university things are changing as well: we are looking for other ways to work together on this issue.

III) How we work together, university-wide, on AI-related challenges and opportunities

The Vrije Universiteit Amsterdam has recently established the VU Artificial Intelligence Competence Network (AICN). The VU has established this network to stimulate and facilitate active, cross-domain, and multidisciplinary collaboration among AI actors in our university. The primary goal is to jointly develop and apply responsible AI solutions that add concrete value and create a positive impact in education, research and business operations.

The AICN consists of various multidisciplinary teams, such as policy & strategy, AI literacy and community engagement. The reason that colleagues in education, research and business operations (support) are working together more closely, is to be able to switch between tasks more efficiently and to learn from other domains.



### Strategies in universities to address educational transformation with AI



After all, we all have to deal with AI, whether it is in research, education or support. One of the next steps is to develop an institution-wide AI vision and policy, so it's not just focused on education. For us, this network is a new way of working together, and at the same time on a completely new theme. We are still trying to figure out how we can switch between the domains more quickly. Working in such a network with colleagues from other fields who deal with the same AI issues is certainly very insightful and educational.





### LEGAL AND ETHICAL ASPECTS OF USING AI







### AI LITERACY SKILLS AMONG UNIVERSITY STUDENTS

### Barbara Loranc

University of Bielsko-Biala

As generative Artificial Intelligence (AI) can have a transformative impact on higher education, understanding students' AI literacy skills is essential for integrating these technologies into academic settings in an effective and appropriate manner. The importance of AI literacy is increasingly recognised by educators and policymakers, leading to discussions on how to embed these skills in curricula and educational frameworks (Abegglen et al, 2024). Drawing on Walter's (2024) discussion of AI literacy, this study investigates the AI literacy skills of university students, focusing on their skills in prompt engineering, awareness of AI ethical regulations, and experiences with using AI assistants for studying and language learning. Additionally, it explores students' perspectives on ethical AI use in academic writing, and their awareness of AI limitations. The research involved a survey of 170 university students majoring in language studies and education at a medium-sized public university in Poland, with specialising in either teaching or translation. Quantitative and qualitative data on the students' AI usage patterns, ethical considerations, and future expectations for AI in education were collected. The results reveal that while most students appear to be comfortable using AI tools for academic support, only a small percentage possess more advanced prompt engineering skills. Furthermore, awareness of AI ethical regulations varies widely, with many participants expressing uncertainty about academic integrity and responsible AI use. The study also found that many students recognize the need to develop critical awareness of AI limitations, emphasizing the importance of transparency, bias detection, and reliable content evaluation. Notably, the qualitative feedback highlighted a positive outlook on the role of human teachers with the majority of participants believing that AI cannot currently replicate both their expertise and emotional competences.





# INTERSECTIONALITY, CYBERCULTURE, AND ARTIFICIAL INTELLIGENCE: EMBODIED SPEECH FROM EXPERIENCE

### Edméa Santos

#### Universidade Federal Rural do Rio de Janeiro

This article examines the interconnectedness of intersectionality, cyberculture, and artificial intelligence, combining theoretical foundations, practical approaches, and lived experiences. Grounded in Kimberlé Crenshaw's concept of intersectionality [1], it analyzes how intertwined oppressions manifest in bodies, data, and algorithms, revealing the ethical and political challenges posed by emerging technologies. An illustrative case is Deputy Renata Souza's experience. She requested an AI-generated image of a Black woman residing in a community in Rio de Janeiro, but the result included discriminatory elements. This outcome demonstrates how biased data used in training AI systems perpetuate social inequalities.

The theoretical framework draws on Patricia Hill Collins's [2] concept of "controlling images," which reveals how historical stereotypes have been used to justify inequalities. The author extends this idea with the concept of "image control," presented as a methodological and political tool to challenge dominant narratives and create alternative, pluralistic representations. A striking example is Giselle Beiguelman's artwork *Tyrannical Botany*, which uses AI to create "abject" flowers that critique racist and sexist terminology in botanical taxonomy. The text also addresses representations of Black bodies and racial hierarchies in AI systems, as investigated by the Algorithmic Justice League, which highlights patterns of colorism and inequality in algorithm-generated representations.

In the Brazilian context, the debate on the ethical use of AI has been enriched by the Ethical Manual for the Use of Generative Artificial Intelligence, organized by Lúcia Santaella. This document provides guidelines for the responsible use of such technology, emphasizing transparency, integrity, and accountability. The author connects the concepts of escrevivências [3] and Afrofuturism, advocating for inclusive and critical pedagogical practices. Practical examples from the GPDoc group illustrate these methodologies, such as debates on algorithmic justice and representativity.

Ultimately, the article argues that research must go beyond denouncing inequalities by proposing new horizons and envisioning possible futures. Research is framed as a technology of reexistence, employing writing and imagery as political and creative acts to contest dominant narratives and foster inclusion and presence.



### Legal and ethical aspects of using AI



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### ENTREPRENEURIAL EDUCATION AND AI IN LANGUAGE TEACHING

### Odeta Gluoksnyte

### Mykolas Romeris Uiversity

This presentation combines insights from two related talks focused on the transformative role of Artificial Intelligence (AI) and entrepreneurial education in higher education, specifically within the field of language teaching.

The presentation, "Entrepreneurial Education and AI in Language Teaching," highlights strategies for integrating entrepreneurial thinking into language education. It encourages project-based learning, communication simulations, collaborative work, and problem-solving exercises that align with entrepreneurial principles. Students are also introduced to language-related business opportunities such as app development, language teaching enterprises, and social initiatives, preparing them for real-world applications.

AI's role is equally emphasized, showcasing how technologies like AI tutors, chatbots, translation tools, automated assessments, and pronunciation apps can personalize learning and improve language proficiency. A special focus is given to "prompt engineering"—teaching students how to effectively communicate with AI systems to enhance outcomes.

The second part of the presentation, "AI in Education: Opportunities vs Threats," provides a balanced view of the benefits and challenges AI poses in education. While AI increases productivity, accessibility, and personalized learning, it also raises concerns such as data privacy, misinformation, job displacement, and ethical use. The talk advocates for human oversight and emphasizes the importance of using AI responsibly to augment—not replace—educators.

Together, these presentations offer a university-level strategy that equips language learners with both modern technological competencies and an entrepreneurial mindset, essential for success in a digital and globalized world.





# AI IN HEALTHCARE: ETHICAL ASPECTS, AND GOOD PRACTICES, AND TOOLS AT MU-SOFIA, FPH

### Nikoleta Leventi

#### MU-Sofia, FPH

Artificial intelligence (AI) is rapidly transforming numerous sectors, and of course healthcare. This presentation provides an overview of the critical ethical considerations, emerging good practices, and relevant tools associated with the integration of AI within healthcare, specifically tailored for Master of Science students in our program at Medical University – Sofia (MU-Sofia), Faculty of Public Health (FPH). As future leaders and innovators in their respective fields, it is paramount that these students develop a robust foundational understanding of both the potential and the inherent responsibilities that accompany AI in healthcare.

Recognizing the significant transformative potential of AI to reshape public health practices, the curriculum provides a wide-ranging review of the ethical and societal aspects, the challenges that arise, ongoing global and regional initiatives, and the pertinent policies and regulations governing this rapidly evolving field.

Our teaching emphasizes the critical evaluation of the benefits and risks associated with various AI applications in healthcare. Students are encouraged to move beyond a purely technical understanding and to deeply consider the broader societal context in which these powerful technologies are being implemented. This includes exploring how AI can impact patient care, diagnostics, drug discovery, public health surveillance, and healthcare administration.

A significant portion of the course is dedicated to dissecting the complex ethical landscape of AI in healthcare. We delve into crucial considerations such as data privacy and security, algorithmic bias and fairness, transparency and explainability of AI models, accountability and responsibility in case of errors, and the potential impact on the traditional doctor-patient relationship.

Furthermore, the course introduces students to emerging good practices in the field. This includes discussions on the importance of robust data governance frameworks, the need for multi-disciplinary collaboration in AI development and implementation, the significance of user-centered design principles, and the imperative of continuous monitoring and evaluation of AI system performance.

To provide a global perspective, the course also introduces key international initiatives and regulatory frameworks shaping the future of AI in healthcare. This includes an overview of the European Union's efforts towards trustworthy AI, the specifics of the EU AI Act and its implications for the healthcare sector, and the World Health Organization's (WHO) initiatives and guidelines on the ethical and responsible use of AI for



### Legal and ethical aspects of using AI



health. Understanding these global and regional policies is crucial for navigating the complex regulatory environment and fostering international collaboration in AI-driven healthcare innovation.

In conclusion, this course aims to empower our MSc students with the critical thinking skills and foundational knowledge necessary to navigate the exciting yet complex terrain of AI in healthcare. By fostering a deep understanding of the ethical considerations, promoting awareness of good practices, and introducing relevant global initiatives, we strive to cultivate a generation of professionals who can drive the transformative power of AI responsibly and ethically to improve health and well-being for all.





### «GenAI» FOR RESEARCH AND TEACHING

### Emmanuel Polonowski

University of Paris-East Créteil

We are currently seeing the very rapid spread of the use of a particular type of algorithmic tools, wrongly called "AI", based on LLMs and whose objective is to perform probabilistic text completion. Other image, sound or video generation tools, based on similar algorithmic techniques, are also being used more and more massively. However, it appears that users do not always understand how they work, which poses problems for many uses, and that they lack an informed understanding of the socio-environmental impacts of these tools. In a context of growing awareness of the environmental issues related to mining, waste management and greenhouse gas emissions, it is essential to carefully weigh the expected benefits of using these tools against their impact.

In this presentation, we will briefly review how a computer works and the algorithmic foundations of "generative AI." We will then observe the limitations of LLMs for probabilistic text completion as well as the socio-environmental consequences of the development and use of these tools. The questions we will ask ourselves to open the discussion will be the following: do we really need these tools? are the benefits we expect from them really worth the socio-environmental cost induced? in a sober development approach, can we consider alternatives to the use of these tools, and of every environmentally expensive tools in general (mainly computers)?.





### GOOD PRACTICES AND INNOVATIVE TOOLS







### ENGLISH LESSON PLANNING USING ARTIFICIAL INTELLIGENCE

### Romalda Kasiliauskiene

#### MRU Sudovian Academy, Lithuania

The integration of digital technologies into the learning process has become an essential part of modern education. The use of artificial intelligence (AI) in lesson planning offers new opportunities to personalize learning, differentiate tasks, and optimize teachers' workloads [1]. Technology integration can be explained through the SAMR model [2], which includes four levels: substitution, augmentation, modification, and redefinition. AI enables especially the last two stages by allowing for complete transformation of lesson structures and instructional methods. The theoretical background covers Constructivist Learning Paradigm, Second Language Acquisition Theories, and Universal Design for Learning (UDL). According to constructivist theory [3,4], learning is an active process in which learners build knowledge through interaction with their environment and others. AI tools that generate content tailored to students' skills and learning pace support this theory. For example, learners can be given individualized tasks that encourage reflection, exploration, and autonomous language use. Krashen's theory of second language acquisition emphasizes key concepts such as comprehensible input, affective filter, and monitor hypothesis [5]. AI can effectively generate language input that is understandable yet slightly beyond the learner's current level, thus supporting natural language acquisition. Moreover, AI creates a low-anxiety environment where learners can progress at their own pace without the fear of making mistakes in front of peers. The UDL model promotes inclusive teaching by encouraging the presentation of information in multiple formats, ensuring accessibility for all learners regardless of their abilities or needs [6]. AI technologies enable lesson content to be presented as text, audio, visuals, or interactive formats—essential in language education, where exposure to authentic and diverse input is key.

The use of artificial intelligence (AI) into education is reshaping how lessons are planned and delivered. In English language teaching, AI provides opportunities to personalize instruction, enhance engagement, and streamline teacher workload. From generating lesson materials to adapting content to individual learners, AI is becoming a powerful tool in the hands of educators. Practical Applications of AI in Lesson Planning includes:

#### 1. Content Generation

AI tools can assist teachers in creating:

- Lesson plans based on curriculum goals and student level.
- Custom reading texts, grammar exercises, quizzes, and vocabulary activities.
- Questions aligned with Bloom's taxonomy for critical thinking development.
- 2. Personalization and Differentiation
- AI analyzes student performance data and suggests tailored content.





- Tasks can be differentiated by difficulty or format to meet diverse learner needs.
- 3. Time-Saving Automation
- AI can help check multiple-choice quizzes, generate feedback, and adapt materials instantly.
- Teachers can quickly generate alternative lesson formats (e.g., digital/remote vs. in-person).
- 4. Data Analysis for Instructional Insights
- AI tools can identify student learning gaps, topic difficulties, or patterns in mistakes.
- This data informs targeted teaching and intervention strategies.
- 5. Idea Generation for Teachers
- AI can provide creative ideas for activities, games, and project-based learning.
- Helps overcome planning fatigue or lack of inspiration.

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# EXPLORING CONTENT CREATION AND SENTIMENT ANALYSIS WITH GENERATIVE AI FOR INTERNATIONAL STUDENTS OF THE BAPROGRAMME "GERMAN BUSINESS COMMUNICATION" (GBC)

# Janina M. Vernal Schmidt

University of Applied Sciences Zwickau

Content creation, such as product descriptions, blog or social media posts, new ideas for content, customer support, or summaries, is a crucial skill in business communication. It helps GBC students, as future leaders, marketing and sales professionals, entrepreneurs, or business developers, to communicate ideas, influence decision-makers, and build meaningful relationships with takeholders. In my presentation, I will discuss tools and techniques for a) content creation and b) automated content analysis that we have already tried out or that I am planning to use in future classes about business communication. I will draw on three state-of-the-art LLMs, namely ChatGPT, Co-Pilot, and Llama 2, to explore their potential for enhancing a) storytelling in a blog post and b) conducting a sentiment analysis of blog posts. Of course, I will briefly explain the text analysis method sentiment analysis and why it is important for our GBC students to learn how to perform this type of text analysis.





# ENHANCING STUDENT ENGAGEMENT AND LEARNING OUTCOMES WITH AI-POWERED TOOLS: GOOD PRACTICES FROM THE CLASSROOM

#### Simeon Slavchev

Faculty of Public Health "Prof. Dr. Tzecomir Vodenitcharov, MD", Medical University, Sofia

This presentation explores effective strategies for integrating artificial intelligence (AI) tools into university teaching, with a focus on enhancing student engagement, participation, and learning outcomes. Drawing on my experience as a university lecturer, I highlight the practical use of interactive platforms and generative AI assistants in both lectures and academic events.

A central element of my approach is the use of Mentimeter, an interactive presentation tool that enables real-time polling, quizzes, and feedback. By incorporating Mentimeter into lectures and workshops, I create dynamic and participatory learning environments where students can actively contribute, reflect, and respond to course content. This fosters inclusivity and provides immediate insights into student understanding.

In addition, I utilize Perplexity and Claude—advanced AI research assistants—for both my own academic research and for designing workshop tasks for students. These tools assist in generating up-to-date information, summarizing complex topics, and creating customized frameworks for classroom activities. Students are encouraged to use these AI platforms to support their independent research, critical thinking, and collaborative projects.

The presentation will share concrete examples of lesson formats, assignment types, and feedback mechanisms that leverage AI tools to promote active learning. It will also address practical considerations such as accessibility, digital literacy, and the importance of guiding students in the ethical and effective use of AI technologies. The session aims to provide educators with actionable insights and adaptable practices for integrating AI into their own teaching contexts.





# FROM CONCERN TO TRANSFORMATION: EMBRACING GENERATIVE AI IN THE TEACHING-LEARNING OF WRITING RESEARCH PROJECTS/PROPOSALS

# Leonel Tractenberg

Faculty of Administration and Finance, State University of Rio de Janeiro, Brazil

I am an Associate Professor at the School of Administration and Finance at the Rio de Janeiro State University, where I have been teaching since 2012. My teaching responsibilities span both undergraduate and graduate programs and include courses such as Organizational Behavior, Human Resource Management, Undergraduate Thesis Seminars, and Research Project/Proposal Development, among others. My academic background includes bachelor's degrees in Mathematics and in Psychology (including a teaching credential and professional license), as well as a master's and a PhD in Education, with a specialization in Educational Technology. My research and professional practice have been largely centered on active teaching-learning methodologies and the use of educational technologies in face-to-face, hybrid, and online learning environments.

My experience with Generative AI is empirical in nature. I began using Generative AI tools professionally to support a range of academic and pedagogical activities, including topic exploration, exam and teaching case creation, student paper evaluation, literature reviews, academic writing and article development, text analysis, translation, comparative chart construction, article review, and reference formatting. The tools I use most frequently include ChatGPT, Copilot, ChatPDF, Perplexity, Scispace, and NoteGPT. Additionally, my students frequently use Canva, which integrates AI features for creating presentations.

Since 2024, I have observed a growing use of Generative AI among students enrolled in the course "Research Project Development," which I teach to senior undergraduate students in Business Administration. The aim of this course is to guide students in developing a research proposal, which will serve as the foundation for their final projects in the following semester. Throughout this process, students are expected to acquire foundational knowledge and skills in research, including problem definition, literature review, research methodology, critical analysis, data analysis, and academic writing. However, I have noticed a concerning trend: an increasing number of students have been using Generative AI in a superficial and expedient manner—prompting the AI to generate texts or even entire research proposals, which they then copy and paste as their own work. This practice undermines the fundamental purpose of the course and shifts the instructor's role toward evaluating AI-generated content rather than student learning. This issue has caused me considerable concern as an educator and has prompted me to rethink the pedagogical design of the course.

Beginning in the second semester of 2024, I transitioned from a lecture-based format to a more participatory model, where classes became collective guidance sessions. In these sessions, each student was required to present and discuss the current stage of their research project/proposal. In addition to submitting the final





written proposal, each student was also required to deliver a short presentation to demonstrate their understanding of their work. At this stage, the use of Generative AI was permitted, provided that plagiarism was avoided and real bibliographic sources were properly cited. However, there was not yet a structured approach to integrating Generative AI into the research project development process.

In the first semester of 2025, prior to starting the research proposal construction, I divided the class into groups and introduced an activity called the "AI in Research Seminar," which was conducted over four 2.5-hour sessions. Each group was responsible for a brief presentation on one of the following topics:

- 1. Origins and Types of AI: What is AI? How did it emerge? What are its main types?
- 2. Generative AI: What is Generative AI? How does it work? What are the current tools and their applications?
- 3. Ethics of Generative AI: What are the ethical challenges associated with Generative AI? Can it be considered a co-author? What about plagiarism—how can it be avoided?
- 4. Generative AI in Research I: Which Generative AI tools are most appropriate for academic literature reviews? What are some effective prompt strategies?
- 5. Generative AI in Research II: How can Generative AI be used to define research questions and problems? What prompts are recommended?
- 6. Generative AI in Research III: How can Generative AI support the design and structuring of research proposals? What prompts are recommended?
- 7. Generative AI in Research IV: How can AI assist in transcribing, synthesizing, and analyzing qualitative and quantitative data? What prompts are recommended?
- 8. Generative AI in Research V: How can AI be used for scientific writing, editing, and enhancing academic texts? What prompts are recommended?
- 9. Further Learning on Generative AI I: What books, ebooks, and articles can help deepen understanding of AI and Generative AI?
- 10. Further Learning on Generative AI II: What videos, lectures, and courses (free or paid) are useful for learning more about AI and Generative AI?

Although the course is still ongoing, I have already observed a high level of student interest and engagement, as evidenced by the quality of their presentations. Additionally, I have received positive feedback from students, many of whom acknowledge frequent use of Generative AI in their academic work but report reluctance to disclose this to faculty due to fears of punishment or reprisal. Several students have stated that I am one of the few instructors who openly encourages them to learn how to harness Generative AI to enhance their academic learning and productivity.

Following the conclusion of the seminar, students will begin developing their research proposals. This next phase will offer an opportunity to assess whether the integration of Generative AI into the curriculum has led to improvements in the quality of their research projects/proposals.





# AI CHALLENGES IN THE STUDY PROCESS: EXPERIENCES FROM RELIGIOUS STUDIES, PSYCHOLOGY, AND MYTHOLOGY LECTURES

# Dalia Senvaitytė

### Vytautas Magnus University

#### Introduction

I'll discuss AI challenges and its use in the study process based on my experience in teaching.

AI use during lectures and seminars:

- 1. Students ask AI questions about the topics being studied and analyze the answers received, evaluating the depth of the analysis and identifying any inaccuracies in the AI's responses.
- 2. Students create imaginary conversations between different theorists and analyze those discussions.
- 3. Students use AI to prepare summaries of texts and then compare them with the original texts to evaluate their accuracy.
- 4. I teach students to use AI as an "editor" for their written work by helping them generate a structure, identify opposing arguments, formulate summaries, and organize bibliographic descriptions.
- 5. For seminars, students create advertising images using AI, drawing on the theoretical material studied in the context of advertising psychology.
- 6. I use AI to generate lecture ideas, including brainstorming topics and structuring the material.

#### AI and exams:

The challenges of conducting online exams.





# AI ACROSS BORDERS AT SAARLAND UNIVERSITY: INTEGRATING DIGITAL TOOLS IN INTERCULTURAL CLASSROOMS (GOOD PRACTICES AND TOOLS)

# Yuliya Stodolinska

#### Saarland University

The rapid development of artificial intelligence in the 21st century leads not only to new discoveries and exciting advancements but also to new challenges that impact people worldwide. The recent release of innovative tools like ChatGPT and similar artificial text generators has sparked curiosity among everyday users, who eagerly explore their capabilities for daily tasks. Scholars are interested in exploring the new AI, and educational institutions are considering ways to integrate the use of AI into their curricula [1,2].

Within the project "AI Across Borders," carried out at Saarland University, our team, headed by Prof. Dr. Astrid Fellner and Eva Nossem, aimed to study AI-based text generators usage in the Humanities and Cultural Studies. Within the framework of the project, we focused on integrating AI tools into the intercultural classrooms and at exploring linguistic, social, and cultural boundaries that AI text generators create and/or help to overcome. Learning about and with such tools brings to the fore the crosslinguistic performance of AI, the performance of AI across language borders, as well as its biased performance in terms of race, class, gender, etc. In our project we emphasize the importance of not only integrating AI-based text generators into university teaching but also helping students to acquire the necessary skills for working with AI writing tools and to understand their applicability, potentials, and limitations in order to develop comprehensive critical expertise.

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# TEACHER AND ARTIFICIAL INTELLIGENCE IN LITHUANIA: SITUATION AND PROSPECTS

# Edita Vosylienė

Suduvian Akademy, Mykolas Romeris University. MRU

I want to start today's presentation as a teacher, who has 20 years teaching practice. I worked in a children's family home in Avikilai village for 13 years like a social pedagogue. We had many practical sessions with children, addressing their social and integration problems. Artificial intelligence came along with mobile smart devices and took away children's active leisure time. They want to sit in front of a screen, but they don't want to go outside even though they live in nature and need to move for their emotional and physical health.

I am working like an Art Education pedagogue in the kindergarten now. Working in a small group of 10-15 children in a preschool, I use the Educational Art Therapy method, which includes elements of art, music, dance, and drama. SEN children are integrated into these groups. Children with a big special needs participate together with a student assistant. Educational art therapy sessions on the development of emotional literacy of preschool children with SEN is reflected in the picture. I use artificial intelligence tools to find music without commercials. In these classes with preschool children, contact and teacher values are important. By interacting directly with children, I teach them to know themselves and the world around them through artistic means. Educational art therapy strengthens the child's inner powers, increases resistance to negative environmental influences, teaches to recognize, name his own emotions and others' emotions while drawing, moving or playing in order to release emotions.

I teach Music Didactics at the Suduvian academy too. I use ChatGTP, interactive music recording tools, smart floors, boards, music notes, and instruments. I am interested in artificial intelligence tools for music creation, such as Suno AI, Boomy AI. Suno AI is an advanced artificial intelligence tool that allows you to turn simple text queries into complete musical compositions. Boomy AI is an AI-based music creation platform that uses advanced AI algorithms that allow users to quickly and easily create unique musical compositions.

I value live contact and active activities. Artificial intelligence stimulates interest among children, but also has harmful consequences. The teacher is primarily an example and authority for the child. His values, knowledge and knowledge of innovations stimulate students' motivation to learn.





# AI AS A TEACHING ASSISTANT: TOOLS FOR INFORMATICS AND LANGUAGE INSTRUCTORS

# Margarita Hakobyan, Gohar Nahapetyan

#### Kh. Abovyan ASPU

#### Summary:

In this joint presentation, we explore how Artificial Intelligence can function as a dynamic and reliable *teaching assistant* in two distinct academic areas: informatics and language instruction. By combining perspectives from both fields, we demonstrate how educators can use AI not only to lighten their workload but also to enhance student learning, creativity, and autonomy.

Our session introduces practical, user-friendly tools that address the everyday challenges university instructors face—whether it's assessment, giving timely feedback on essays, or engaging students with personalized support. The goal is to equip educators with AI-powered solutions that are easy to integrate, adaptable, and pedagogically sound.

We present a toolkit that we generally use in our disciplines:

#### For Informatics:

- Code checkers and auto-completion tools (e.g. GitHub Copilot)
- AI-based feedback generators for assignments
- Interactive coding platforms with intelligent tutoring systems

#### For Language Instructors:

- Writing support tools like ChatGPT, Grammarly
- AI chatbots for conversation practice and vocabulary building like ChatGPT, Gemini, PI
- Lesson and quiz generators that adapt to language levels the ones like Kahoot!, Diffit
- Tools that help with assessment like Google Forms, ChatGPT

The presentation will include a survey conducted among students at KH. Abovyan ASPU to determine the percentage of active AI users, the disciplines that acquire more need in AI usage, examples of classroom use, tips for ethical implementation, and practical ways to foster responsible student engagement with AI. We emphasize that AI is here to support—not replace—human teaching, freeing educators to focus more on student interaction and deeper learning.





Key message:

Al can be a creative, time-saving partner for both informatics and language instructors. With the right tools, teaching becomes more efficient, engaging, and student-centred—across all disciplines. All is already here, we cannot hinder progress and should be willing to embrace the possibilities that open up to help our students use them to get knowledge and not get lost in the flow of information.





### GOOD PRACTICES AND TOOLS AT BRNO UNIVERSITY OF TECHNOLOGY

# Vojtech Bednarsky

### Brno University of Technology

At Brno University of Technology, we strive to ensure that our students – especially at the Master's level – acquire not only theoretical knowledge, but also the ability to work efficiently with state-of-the-art tools and practices. All plays an increasingly important role in this effort.

During a dedicated three-week module, students are trained to conduct research for their semester projects using tools such as ChatGPT, Google Scholar, and Perplexity AI. They learn how to formulate queries, evaluate the credibility of sources, and build up-to-date overviews of their selected topics.

In addition, we emphasize the responsible use of generative AI tools. Students are guided to understand that these tools can significantly assist them (e.g. in code generation or idea structuring), but should not replace their own reasoning. Critical thinking and verification of AIgenerated outputs are constantly encouraged.

A key principle is that whatever content is created or supported by AI must be fully understood by the student. We require that students can clearly explain and defend their results, both in writing and in oral presentations.

As part of one of the lectures, students also explored AI tool integration using APIs, enabling them to prototype and connect generative models to their semester projects. This practical, handson exposure prepares them to work with modern AI solutions in a real-world engineering context.

In my PC exercise we also integrate ANN-based tools into teaching, for example:

- In assignments, students train small networks to predict circuit behavior.
- In group projects, they compare simulation vs. AI prediction.
- In optional sessions, they learn how to use AI to create models faster.





# EMPOWERING BUSINESS ORGANIZATION WITH GENERATIVE AI: A PRACTICAL EXPERIENCE AT THE URV

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This session presents a structured and replicable approach for integrating Generative AI (GenAI) into the undergraduate course "Business Organization" at Universitat Rovira i Virgili (URV), with the goal of fostering students' critical, ethical, and effective use of AI in business contexts. The methodology followed a two-phase structure. In the first phase, a 1.5-hour workshop was delivered in Spanish across two sessions to four student groups (1M, 2M, 3M, and 5M) from the Bellisens and Terres de l'Ebre campuses. It introduced prompt engineering strategies for business tasks such as drafting interview scripts and creating AI-powered presentations. The workshop also included a concise explanation of the probabilistic and black-box nature of GenAI models to stress the importance of verifying potentially erroneous outputs. Students were shown how to combine general-purpose tools like ChatGPT with task-specific models. Through short demo videos, they learned to integrate tools such as Perplexity, Napkin, Gamma.app, Flourish, and Elicit with ChatGPT and DeepSeek, using concrete examples to address ethical risks like hallucinations, bias, and data privacy.

The second phase consisted of hands-on classroom case studies delivered in Spanish (groups M1, M2, M3) and English (group M4), focusing on using GenAI as a tool for complex problem-solving. The most illustrative case study involved a Datathon linked to Unit 4, in which students conducted real market research on the most popular restaurant in Tarragona to detect customer dissatisfaction and propose actionable improvements. Using Tripadvisor data, students built a dataset from scratch and analyzed it with Google Colab's AI Agent, a 2025 open-access tool specialized in data science. Unlike standard GenAI models (e.g., ChatGPT-40 or DeepSeek), this AI Agent autonomously performs iterative reasoning and uses programming tools (e.g., Python), making it more reliable and powerful. With it, students processed unstructured text (customer reviews), applied text mining techniques, and created advanced visualizations (e.g., word clouds, sentiment analysis). They identified key dissatisfaction factors (e.g., "rude staff", "long wait times") and optionally used ChatGPT for brainstorming and refining marketing proposals. The winning team built the most complete dataset, generated the most insightful outputs, and proposed the best marketing plan. The entire case study was completed in under two hours. Our classroom experience showed that combining GenAI models can significantly reduce the time required to complete complex tasks and enable students to tackle challenges well beyond their technical background—moving beyond superficial ChatGPT interactions, which often carry the risk of producing opaque (black-box) or incorrect outputs.

Finally, we also designed other case studies involving spatial reasoning (e.g., complex crosswords) and problems with misleading logic cues that current AI systems consistently solve incorrectly. These exercises





were intended to teach students the limitations of these models and to foster deeper critical thinking, discouraging inappropriate uses of GenAI—a common issue we have observed among students lacking basic GenAI literacy.

Keywords: Generative AI, Higher Education, Critical Thinking, Practical Application, AI Ethics, Business Organization, GenAI Literacy.





### WAYS OF USING AI IN LANGUAGE LEARNING AND EDUCATION

### Isabelle Vacher

#### Universität Duisburg Essen

This presentation, delivered by Dr. Isabelle Vacher, explores various applications of Artificial Intelligence (AI) in language learning and education. The discussion covers "fun facts about AI" and examines how both students and the presenter utilize AI tools, particularly ChatGPT.

Students are reported to use AI for translation in language classes, generating texts and exercises, and acting as an interviewer for written competence interactions. AI also serves as a vocabulary trainer, capable of generating vocabulary lists (e.g., an A to Z list for a B2 level on "holiday in Paris") and providing grammar explanations.

While AI demonstrates strengths in phonetic transcription and offering feedback for writing skills, its reliability in certain areas is questionable. For instance, only 50% of corrections provided by AI are considered reliable. In phonetic analysis, AI was noted to find only three mistakes while inventing new ones. The presentation also touches upon DeepL, mentioning that exams might involve commenting on errors made by this translation tool.





# MAIN CONCLUSIONS FROM JOINT ACTIVITIES





# Strategies in universities to address educational transformation with AI



The discussion on strategies for addressing educational transformation with AI revealed both optimism and concern. Participants recognized that artificial intelligence is already reshaping higher education and acknowledged the growing pressure on universities to adapt quickly and meaningfully. Examples from various European countries were shared, including initiatives where national governments are investing in centralized data centers and AI infrastructure, such as in Portugal. These efforts reflect the broader commitment of the European Union to supporting digital transformation in education.

Despite this support, there was widespread agreement that many universities remain unprepared, particularly in terms of financial resources, technical infrastructure, and staff readiness. The costs associated with software licenses, staff training, and ensuring interdisciplinary integration of AI tools were cited as major barriers. Moreover, the fast-approaching implementation deadlines, such as the introduction of AI-informed assessment systems by September 2025, were seen as unrealistic for many institutions, especially those with limited resources or experience in digital innovation.

The group emphasized that the deployment of AI in education must not be merely reactive or driven by hype. Rather, it should be grounded in pedagogical purpose, ethical responsibility, and critical thinking. AI should be seen as a tool that enhances learning, not as a substitute for intellectual engagement. In this regard, the discussion highlighted the need for continuous development of digital and scientific literacies, helping students and educators navigate AI tools thoughtfully and critically.

A strong consensus emerged around the idea that academic integrity and authorship must be preserved in an age of generative AI. Participants called for clear guidelines to ensure that AI-generated content does not replace the voice and reasoning of the learner. The responsible use of citations, transparent authorship practices, and critical evaluation of AI outputs were seen as essential competencies.

Among the most pressing unresolved questions was how to equip educators and students with the knowledge and confidence required to engage critically with AI technologies. Participants expressed concern that the overuse or uncritical reliance on AI could weaken the ability of the students to think independently, solve problems creatively, and develop a strong sense of intellectual agency.

As a practical response, the group suggested that oral examinations may gain renewed importance in the AI era. Unlike written assignments, oral exams are less susceptible to outsourcing or manipulation by AI tools. They offer dynamic, real-time interaction and enable instructors to assess not only knowledge but also reasoning, clarity of expression, and communication skills, core aspects of student development that AI cannot mimic.

Ultimately, the group advocated for a balanced, reflective, and human-centered approach to AI in higher education, one that leverages its potential while safeguarding the fundamental values of critical inquiry, equity, and learner autonomy.



# Legal and ethical aspects of using AI



The conversation on legal and ethical aspects of AI in university teaching brought to the surface a wide range of regulatory, social, and pedagogical challenges. Participants began by acknowledging that generative AI tools pose both opportunities and risks, particularly in relation to data privacy, student autonomy, and algorithmic bias. The discussion was framed by the recent adoption of Regulation (EU) 2024/1689, which classifies certain generative AI systems as high-risk technologies and sets clear obligations for their use in educational contexts.

One of the key insights was the growing concern around the environmental impact of AI systems, particularly in terms of water consumption and  $CO_2$  emissions, which are rarely addressed in institutional policies. This broadened the ethical reflection to include sustainability alongside privacy and fairness.

Participants raised several critical questions:

- What measures should universities adopt to ensure the ethical and lawful use of AI tools by faculty?
- How can universities protect fundamental rights such as non-discrimination, transparency, and freedom of thought while integrating AI into teaching?
- Should institutions restrict student access to certain AI tools based on GDPR compliance or potential for misuse?

There was general agreement that many of these responsibilities would fall on IT departments and legal advisors, but also that teachers must be actively involved in evaluating and selecting the tools used in their classrooms. Some participants proposed that universities could develop their own in-house AI systems to better control compliance and accessibility.

The group also emphasized the need for equal access to AI tools. Requiring students to use paid platforms was seen as potentially exclusionary, especially in diverse classrooms. One recommendation was to rely on free versions of AI tools when possible, ensuring a level playing field for all learners.

Regarding the role of educators, participants stressed the importance of:

- Testing AI tools before integrating them into formal assessments
- Warning students about data privacy risks
- Using fictional data or anonymized examples in teaching materials that involve personal data

Despite the richness of the debate, the group acknowledged the uncertainty surrounding many of these legal and ethical issues. AI technologies are evolving faster than policies and guidelines, making it difficult to establish fixed rules. However, there was strong consensus that AI is here to stay, and that the only way forward is through experimentation, critical reflection, and shared institutional responsibility.

While the discussion raised many questions, no specific policy recommendations for educators were formally agreed upon. This reflects the complexity and novelty of the topic, and the need for further collective work to develop robust, adaptable frameworks for the ethical and legal integration of AI in higher education.





This session focused on identifying effective strategies and innovative tools for integrating artificial intelligence into university teaching. Participants emphasized that the successful use of AI in education depends not just on the technology itself, but on how it is implemented through interdisciplinary collaboration, practical engagement, and ethical reflection.

One of the most important insights was the need to involve students, teachers, and support staff in the co-design of AI-based learning environments. Rather than adopting a top-down approach, the group advocated for collaborative, hands-on workshops and training sessions that promote AI literacy across roles. This participatory model was seen as essential for ensuring that AI tools are not only technically functional, but also pedagogically meaningful and inclusive.

Special attention was given to personalized AI tools, such as custom large language models (LLMs) and chatbots, which can adapt to the needs of the individual learners. These tools were discussed as promising solutions to improve student engagement, provide tailored feedback, and support diverse learning profiles, particularly students with disabilities or learning challenges.

At the same time, participants stressed the importance of ethical implementation. AI tools must be deployed with transparency, critical awareness, and pedagogical control. Teachers need to understand how these tools work, what data they rely on, and how to evaluate the quality of their outputs. The group agreed that educators should be able to formulate precise, purposeful prompts, and encourage students to engage with AI outputs critically rather than passively.

A strong consensus emerged on the value of AI for transforming teaching practices, but there was also a shared frustration regarding the lack of concrete case studies and implementation roadmaps. Participants noted that while many theoretical discussions exist, few real-world examples show how AI has been successfully integrated into specific university contexts. This gap makes it difficult for educators to move from intention to action.

Among the open questions, the group raised the need for more institutional support to test, evaluate, and adapt AI tools in teaching. What kind of training is most effective? How should universities document and share successful practices? And how can educators ensure that innovation does not exacerbate inequality or overwhelm those with limited digital experience?

The recommendation for teachers from the groups was clear: approach AI with a reflective mindset, always weighing its benefits against its limitations. Rather than relying on AI outputs uncritically, teachers should model how to interrogate, adapt, and contextualize them. The goal is not to automate teaching, but to enrich the learning process, especially in ways that promote inclusion, creativity, and student agency.





