Applications, Tools and Perspectives of AI in Education for Secondary School Teachers

HELLENIC MINISTRY OF Education, Religious Affairs and Sports

CTI DIOPHANTUS

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eTwinning
National Support Organisation

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ΑΙΕΝ ΑΡΙΣΤΕΥΕΙΝ
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AI4edu

Contact Seminar

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Agenda

- AI is here! Now what?

- What is AI4EDU?

- Why AI4EDU?

- Practical Application

- Next Steps

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Since 1956...

- Artificial intelligence was formally established as a field at a meeting of some prominent American scientists in 1956 (source: Wikipedia).

- From then until November 2023, it had not greatly affected educational practices.
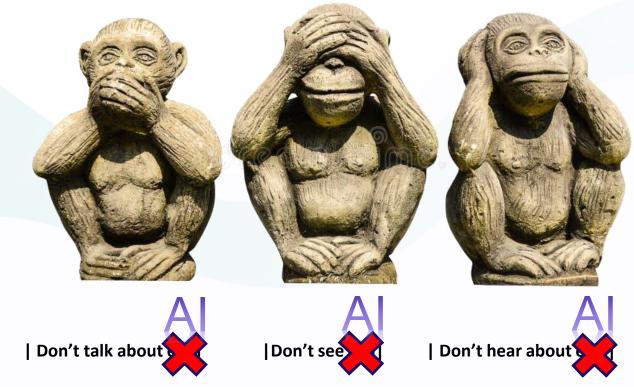
- But now we have generative AI!

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The dictum of the three wise monkeys

AI | Don't talk about ❌

AI |Don't see ❌

AI | Don't hear about ❌

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Don't see evil

The phrase "See no evil" reflects the reluctance of some school leaders and teachers to acknowledge the inevitable change that generative AI brings to the educational landscape.

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Don't talk about evil

- By not talking about AI, teachers and school leaders potentially hinder open dialogue on how it can be ethically and effectively integrated into teaching and learning processes.

- This silence prevents the development of a shared understanding and the establishment of guidelines that could facilitate the responsible use of AI in education.

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Don't hear about evil

- Some teachers ignore the voices of the direct stakeholders - their students - who are increasingly using productive AI, not only in school.

- Students are more familiar with and willing to explore new technologies and are already finding boring educational systems that fail to integrate them.

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The path to the solution is therefore:

To learn about

To listen to our students and the society

To talk about

AI

AI

AI

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Let's talk about the cars

Just as the introduction of the car required society to develop new rules, infrastructure and safety measures, the integration of generative AI in education requires an intensive effort to establish the 'rules and safety zones' needed for safe and productive travel.

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The belt, the helmet and the traffic lights

By learning from the past and working together across all sectors, we can create an educational environment that harnesses the transformative power of AI, while ensuring that technology serves the interests of all students and all teachers.

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AI4EDU Objectives

Learning **HOW** to use artificial intelligence:

- Explore what kind of problems, obstacles, challenges can arise when AI is used by students and teachers

- We explore the impact of AI applications on learning and teaching

- We suggest ways to implement AI in education in an effective, ethical, equitable and inclusive way.

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AI4EDU Objectives

Learning **ABOUT** artificial intelligence:

- Through workshops in the context of the IT course, students will learn:

  - how AI applications work,

  - what kind of technologies they incorporate,

  - what their strengths and weaknesses are,

  - what their limitations are.

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AI4EDU Objectives

Learning **WITH** artificial intelligence:

- An interactive AI assistant for students (Study Buddy), aimed at supporting students in their daily study for school and their schoolwork

- An AI application for teachers (Teacher Mate), aimed at supporting them in preparing lessons and assessing students.

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Study Buddy

- Study Buddy creates thought-provoking questions that relate to the learning material.

- These questions allow students to practice and reinforce their knowledge in an engaging and interactive way.

- Study Buddy evaluates students' responses and provides valuable feedback, helping them to identify areas of strength and areas that may need further attention.

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Study Buddy Features

- **Explanation tool: explains terms using both general conversation and conversation with a specific textbook.**
- Interactive concept learning: Facilitates learning and understanding of concepts interactively.
- **Text summary: Summarizes texts, highlighting key points.**
- Assessment quizzes: creates quizzes for self-assessment.
- **Review of written work: Assists in revising written assignments with suggestions for improvement.**
- Grading information: provides grading information assigned by teachers.
- **Test Taking: Allows students to participate in tests assigned by their teachers and view the grades generated by the AI.**
- Dashboard: Displays test results, final grades and teacher feedback.
- **Chat functionality: Supports text and voice interactions for queries.**
- User profile management: Includes profile customization with multilingual options.

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Teacher Mate

- It enables teachers to design tests and quizzes tailored to effectively assess students' knowledge and understanding.

- The app harnesses the power of artificial intelligence algorithms to automatically grade students' short open-ended answers, providing them with immediate feedback.

- Teacher Mate serves as a reliable tool for monitoring student progress. By analysing the data on his or her performance, the app helps to identify areas where additional support or intervention may be required.

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Teacher Mate Features

- **Create a lesson plan: Allows teachers to create lesson plans using both General Conversation and Conversation with specific textbooks.**
- Create Quiz: allows the creation of quizzes with editable due dates, exam durations and AI-generated content that teachers can review and modify.
- **Create presentations.**
- Grading tool: assists in grading by providing AI-generated grades that teachers can customize.
- **Creating teaching materials: Supports the creation of various teaching materials.**
- Provides support for the creation of learning tools: It helps to explore concepts related to the course material.
- **Creating tests: Creates tests with parameters such as title, description, total score, duration and question types. All test content is generated with artificial intelligence, but is editable by the teachers.**
- Class management: teachers can add classes and manage student information.
- **Teacher dashboard: Provides information on test results, grades and allows further actions such as grading and feedback.**
- Chat functionality: Offers text and voice interactions for direct communication and question resolution.

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Why AI4EDU

- It is made by teachers for teachers. This fundamental principle ensures that every feature, from lesson planning to grading, is built with the practical needs and challenges of teachers in mind.

- Direct teacher involvement in the development process means that AI4EDU takes into account the specifics of teaching, teacher challenges, and student needs in a way that generic AI platforms cannot replicate.

- In this way it ensures that its tools are not only innovative but also practical, relevant and directly applicable in the educational context.

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Why AI4EDU

- Unlike generic models, AI4EDU integrates the curricula directly into its functionality.

- This means that teachers can align lesson plans, quizzes and tests directly to the curriculum, ensuring that all educational content is relevant and up-to-date.

- This integration provides a seamless bridge between the digital and traditional educational worlds, something that generic AI models cannot offer.

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Let's go!

https://apps.ilsp.gr/ai4edu/

Username : etw_teacher_**ZZZZZ**
Password   : anything you like

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