EDUCAITION 2026

משרד החינוך
מינהל חדשנות
וטכנולוגיה

The Future of Assessment is Now

Designing and Implementing the World's First AI-Integrated Matriculation Exam for Data Analysts

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From a Bubble to an Open Sea

Promoting learning relevance for
an AI-saturated era by
adapting the matriculation exam
rof (snoitseuq dna erutcurts)
testing in integration with AI applications

Data Analysis Program K-12

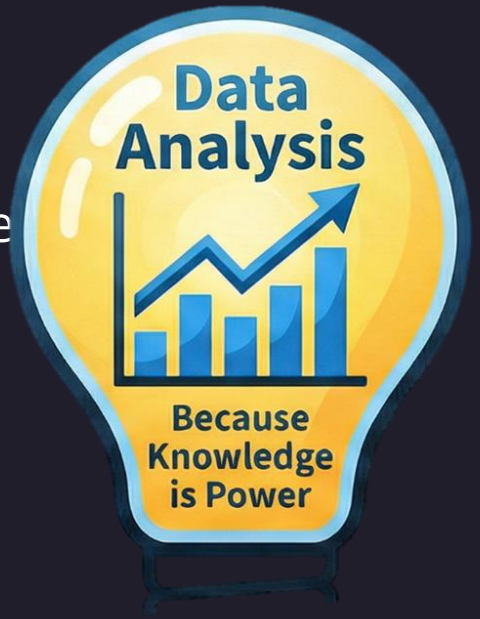
Our Mission: Data-Driven Decision Making.

Core Skills: Data analysis, analytical thinking, and comple

problem-solving using advanced tech.

The Vision: Staying at the forefront of technology to

prepare graduates for the evolving digital workforce.



The Learning Process in the Track

Independent & Collaborative Learning

Questions requiring subject-matter competencies, Analytical thinking and Data analysis

Digital open-material exams in a closed environment

Learning → **Questions** → **Assessment**

With AI

The Learning Process in the Track

Independent & Collaborative Learning

Learning with Human & AI

Questions requiring subject-matter competencies, Analytical thinking and Data analysis

Questions requiring AI competency

Questioning, critical thinking, and exercising moral judgment

Digital open-material exams in a closed environment

Digital exams with access to AI tools, simulating the real world

Digital exams with access to AI tools, simulating the real world

Learning → **Questions** → **Assessment**

The most valuable currency is no longer information; it is the human ability to ask the right questions

The Research Process

The Research Question?

How can the structure and questions of matriculation exams be redesigned for AI integration to enhance learning relevance in an AI-saturated era?

Methodology

Approach: hcraeseR desaB-ngiseD neewteb noitaroballoc evitca htiw srehcaet dna srehcraeser

Process: Iterative cycles of designing, implementing, analyzing, and refining

Data Collection: Mixed-method tools

Analysis: Thematic content analysis to identify pedagogical and technological insights

Population: "margorP sisylanA ataD" kcarT loohcS hgiH

Participants: 11 Teachers and their students

Role: Active partners in co-designing the exam format and piloting

The Institute for Applied Research of AI in Education

Research procedure

Academic Year 2023/2024

Initial development and first implementation Pilot

→

Academic Year 2024/2025

Changing paradigm and First assessment

→

Academic Year 2025/2026

Advanced implementation, assessment, and pedagogical deepening

Process Stages

Defining Competencies

01

Methodology Development

02

Formulating Rubrics

03

Tool Development

04

The Great Opportunity

From technical data analysis to value-driven business analysis

The ledoM maxE egatS-3

A recursive process that simulates real-world consulting.

1 Stage

Client Discovery

AI’s Role :
Business client

The student investigates the client to understand the problem.

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2nd Stage

Consultant

AI's Role:
Data Analysis Expert

The student analyzes raw data to find patterns, anomalies, and insights with AI tools.

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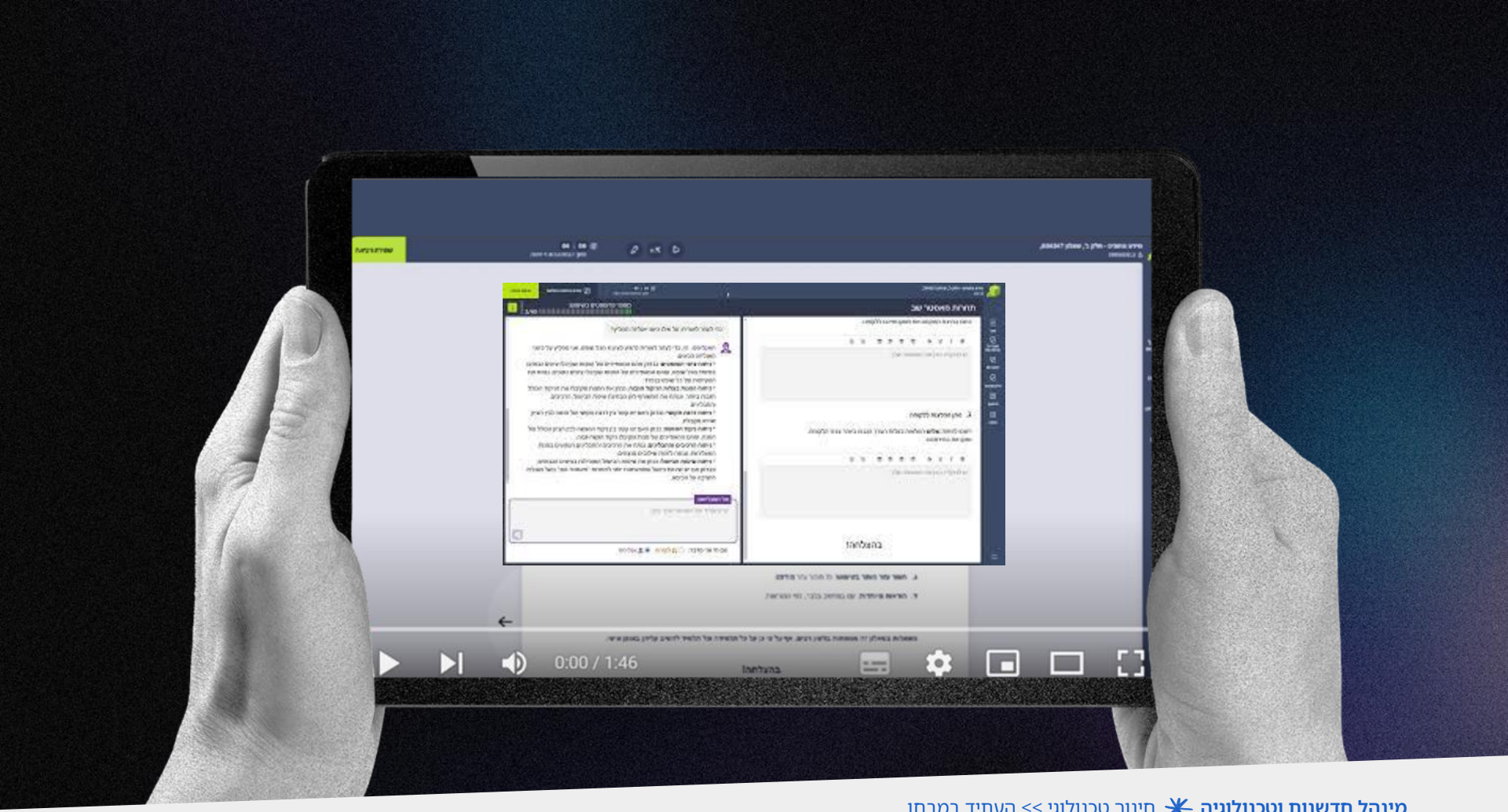
3rd Stage
Recommendations

AI's Role :
Business client

The student formulates strategic recommendations based on the previous analysis.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Three-Stage Assessment Rubric

Chain of Thought (CoT)

- A technique for solving complex problems
- Encourages LLMs and students to break problems into smaller, well-justified steps.
- Enhances reasoning abilities and enables “Thinking aloud”.
- Leads to more accurate, transparent, and well-grounded responses.

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CoT-Based Assessment

- Focuses on how students ask questions and reason, not only on final answers.
- Makes thinking visible through explicit intermediate reasoning steps.
- Enables formative assessment of students ’thinking processes.
- Encourages reflective, critical, and metacognitive use of AI.

Key Takeaways

01
Assessment Must Mirror Reality

02
From Lecturer to Mentor

03
Redefine "Cheating" as "Collaboration "

04
Evaluate Process, Not Just Product

05
The "Human in the Loop" is Critical

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Thank you

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