

# Generation AI

Nurturing future AI innovators



Generation AI  
Nurturing Future Innovators



**FAST** DISCOVERING  
THE FUTURE



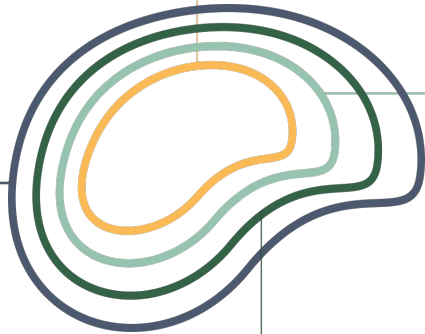
THE MINISTRY OF EDUCATION, SCIENCE,  
CULTURE AND SPORTS OF THE REPUBLIC OF ARMENIA

# Nurturing Innovator's Educational Path

**High School project**

**Launched in 2023**

**Doctoral project**



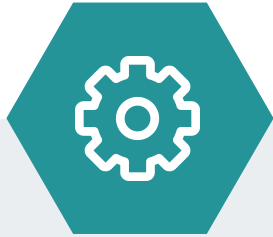
**Bachelor's Project**

**Development stage**

**Master's Project**

An educational pipeline launched within the state education system to bring innovative and competitive global education on national level, ensure accessibility, and nurture the next generation of AI innovators from high school to PhD levels.

# High School Project: OBJECTIVES



## Developing

Deliver skills in advanced mathematics and computer science as foundational knowledge for AI and overall tech proficiency



## Upskilling

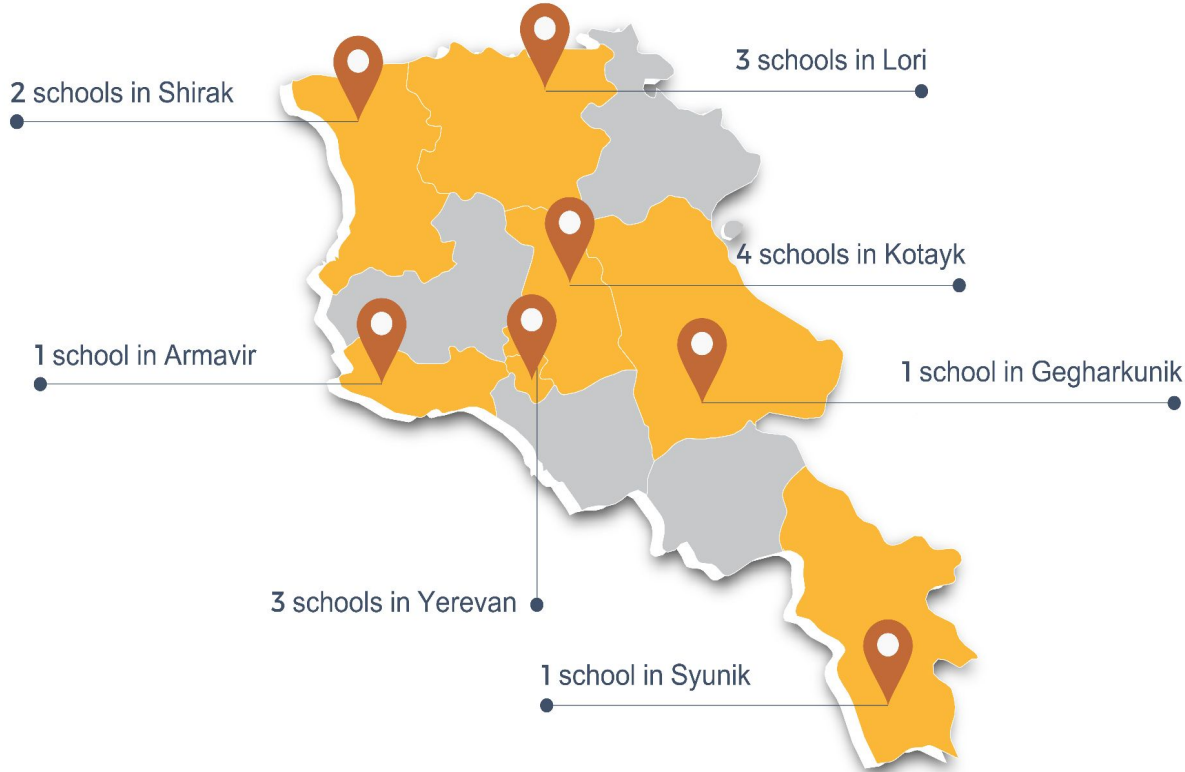
Provide differentiated AI education for high school students



## Motivating

Raise student literacy and motivation towards AI and STEM research & innovation careers

# Generation AI in Numbers



15

Schools  
2023-2026

9

Schools  
2024-2027

7

Regions Across  
Armenia

61

Teachers and  
Instructors

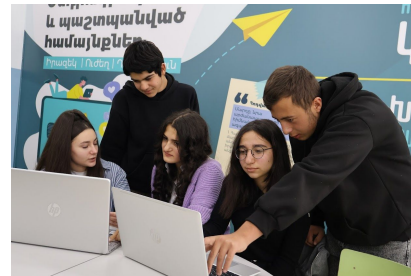
540

High School  
Students



## Advanced Mathematics: Enhanced, Student-Centered Teaching, and Regional Accessibility

# Introduction of Two New Professional Subjects into the School Curriculum: Python Programming and AI



# Comprehensive High School Curriculum

Generation AI  
Curriculum  
Matrix =

10th Grade	11th Grade	12th Grade	Additional Clubs
Advanced Algebra	Advanced Algebra	Advanced Algebra	Applications of Algebra, Python and AI in real-life
Python Programming Basic Level	Python Programming Advanced Level	Deep Learning Advanced Level	English
Machine Learning Mid Level	ML & Deep Learning Advanced Level	AI Applications Project Implementation and Presentation	Skills Development & Career Guidance
306 Academic Hours	324 Academic Hours	134 Academic Hours	500 Academic Hours

**Interpersonal**

Leadership & Adaptability  
Attention to Detail  
Curiosity & Inquiry  
Changemaker Mindset  
Self-Directed Learning

**Analytical**

Quantitative, Statistical & Logical Thinking  
Data Literacy & Analysis  
Object-Oriented Thinking  
Spatial Perception

**Future AI Innovator  
Competency  
Framework**

**Organizational**

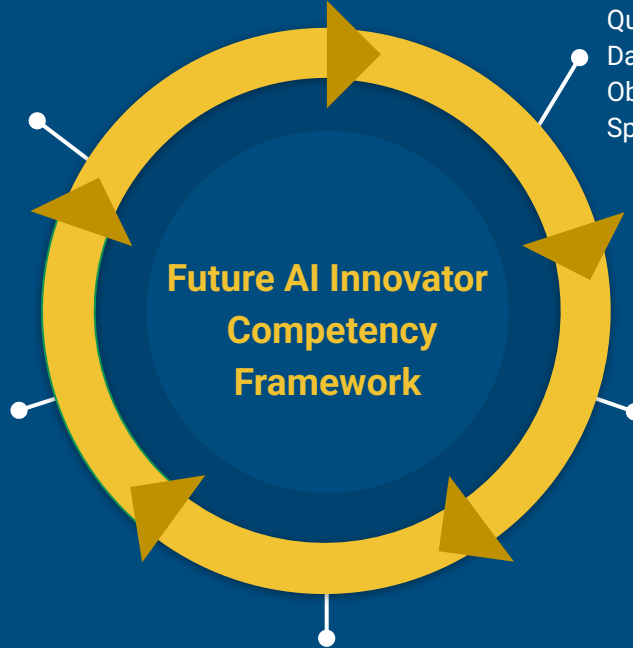
Time Management  
Project Management

**Problem-Solving & Innovative**

Problem Solving & Critical Thinking  
Decision Making  
Innovative & Creative Thinking  
Entrepreneurial Mindset

**Communication & Collaboration**

Technical Communication  
Presentation Skills  
TeamWork & Collaboration Skills





**The scale-up of  
Generation AI in up to  
45 schools will ensure  
accessibility for 85%  
and more of the  
students.**





It's a huge achievement, both for me and for my daughter.



# High School Project's First Year Impact

# M&E AND IMPACT MEASUREMENT PLAN

2023-2024

## GEN AI Schools

## Other Schools

### Advanced Algebra

- Pre-test
- Mid-Year Olympiads
- End of Year Exams

- End of Year Exams  
(Tavush Region)

### Python Programming

- Mid-Year Olympiads
- End of Year Exams

### Motivation and Behavioral Change

Based on the Methodology and Guidance from  
**Analysis Group**

### Yearly Satisfaction Survey

# STUDENT'S KNOWLEDGE EVALUATION & COMPARISON

2023-2024



8

Region



18

School

355

Program  
Student



111

Non-Program  
Students

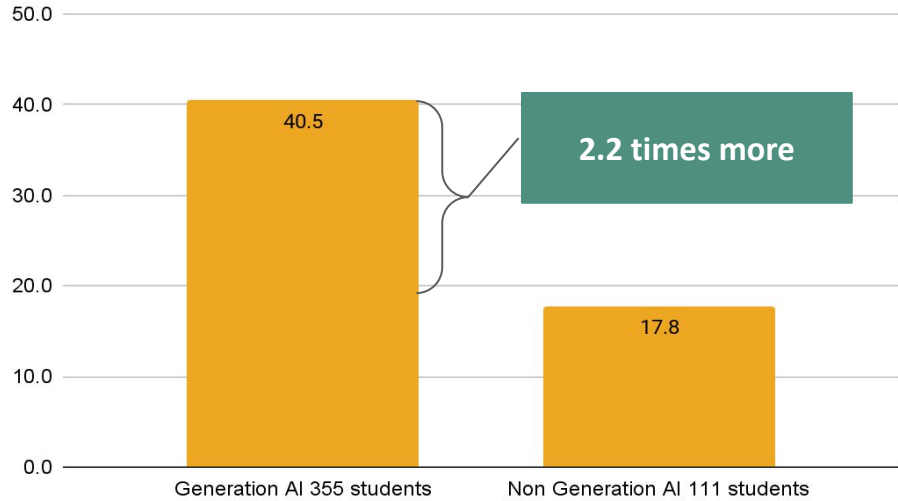


Around **51%** have advanced from a low knowledge level to an intermediate and higher.

2024 Final Advanced Algebra Exam, 10th Grade					
		0-25	26 - 30	31 - 75	76 - 100
Pretest grades	0-25	49%	32%	18%	1%
	26 - 30	28%	34%	30%	9%
	31 - 75	20%	23%	26%	31%
	76 - 100	4%	8%	30%	58%

Improvement    Constant    Backslide

## The results of 10th grade advanced algebra final exam (2024)



**Generation AI students achieved higher average scores in the final advanced math exam compared to students enrolled in similar program.**

# STUDENT'S MOTIVATION EVALUATION

2023-2024

8

Region



1,572

Student



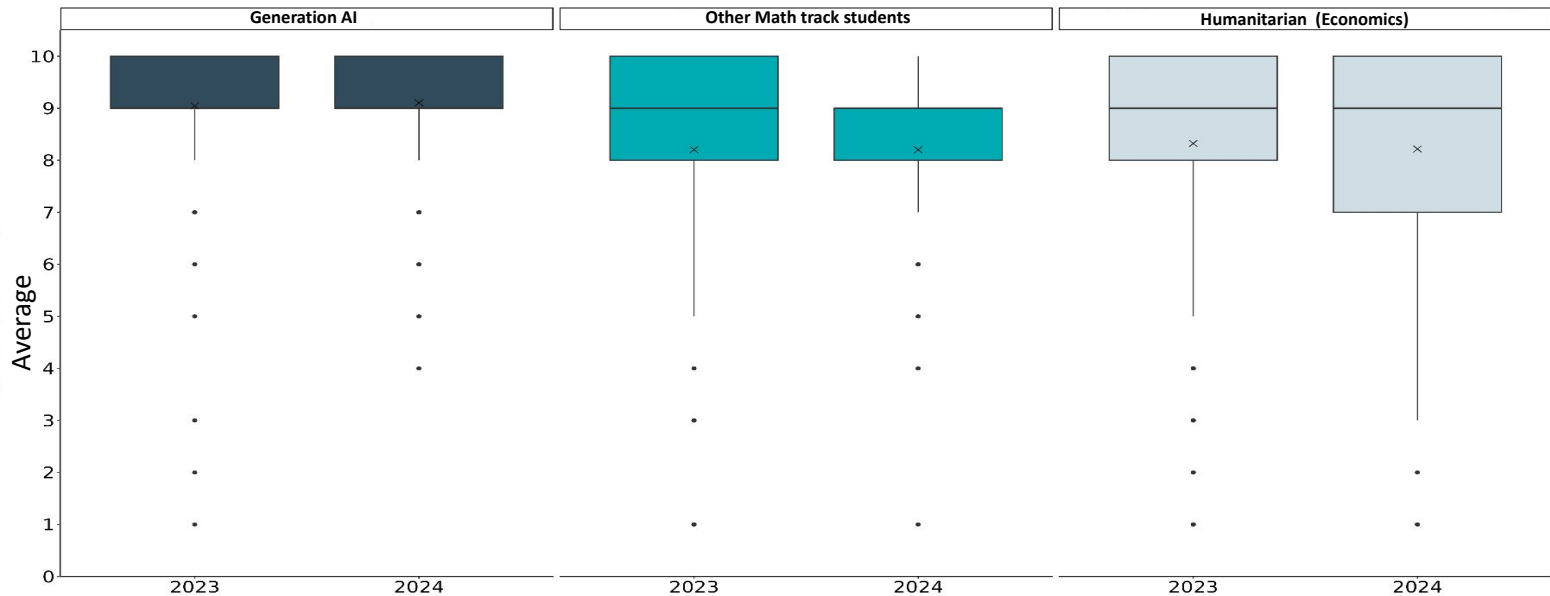
24

School

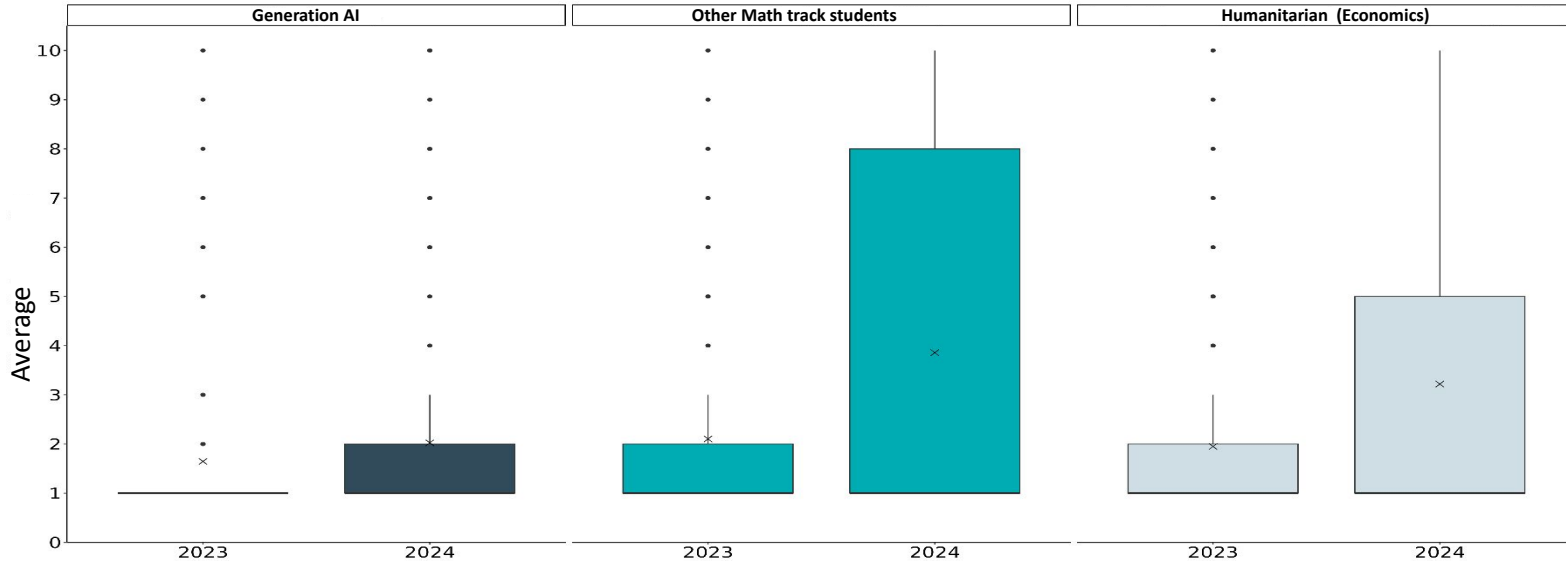




# Generation AI students maintain high levels of interest in Math, while other cohorts exhibit a downward shift

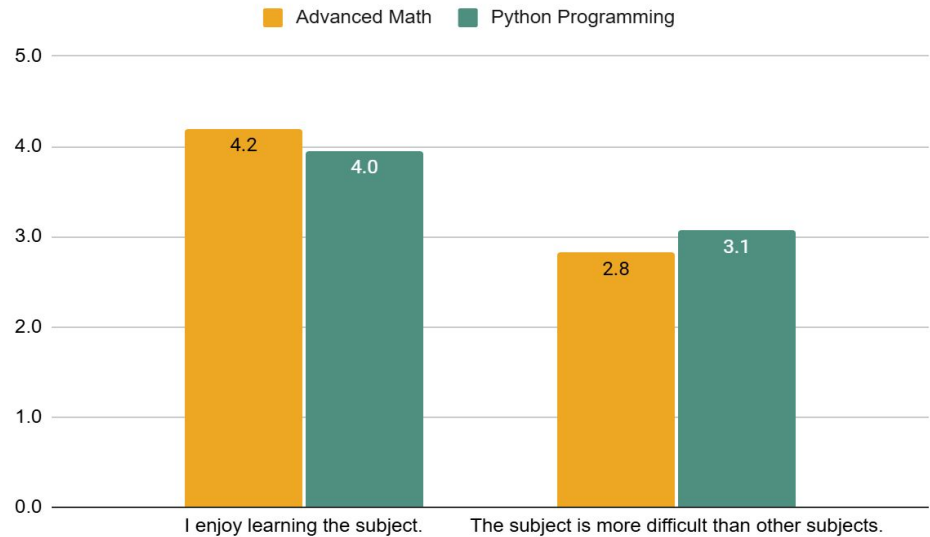


# Generation AI students report less mistreatment from teachers relative to other cohorts

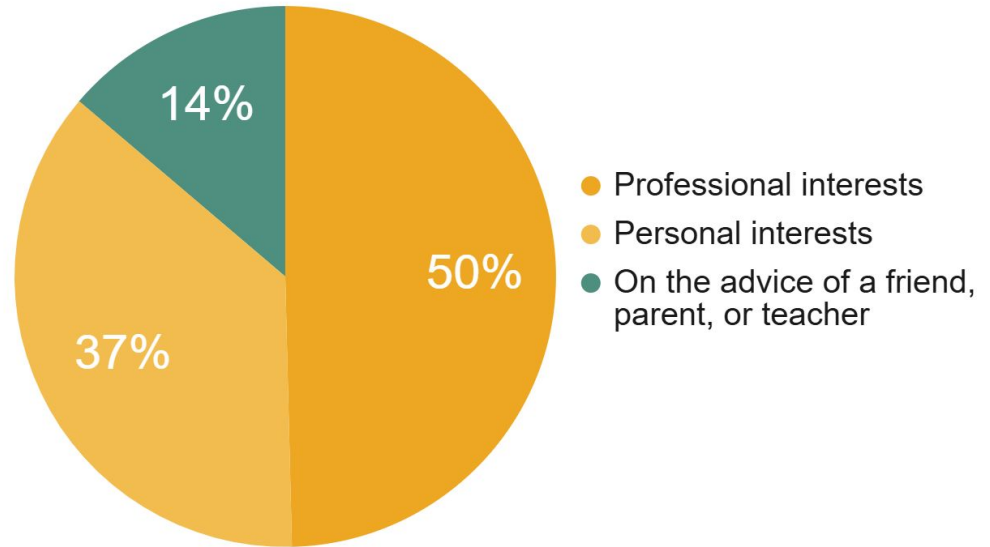


**Most of the students are thrilled to participate in the program's lessons, despite the difficulty.**

10th Grade end-of-year satisfaction surveys (2024)



# Generation AI aligns with the professional and personal objectives of the majority of students.



10th Grade end-of-year satisfaction surveys (2024)



# Time to Nurture AI Creators

Not Just Users