

Magrid's Impact:

Case Study – 70% performance improvement



Case Study: Student Progress in a Portuguese school using Magrid

Objective:

The aim of this study was to assess the impact of Magrid on the cognitive and mathematical development of young learners, specifically focusing on both numerical and visuospatial skills. A pre-test (initial assessment) was conducted to establish a baseline, followed by a monitoring-progress test (2nd assessment) to measure the progress of students after 20 weeks of program implementation.

Participants:

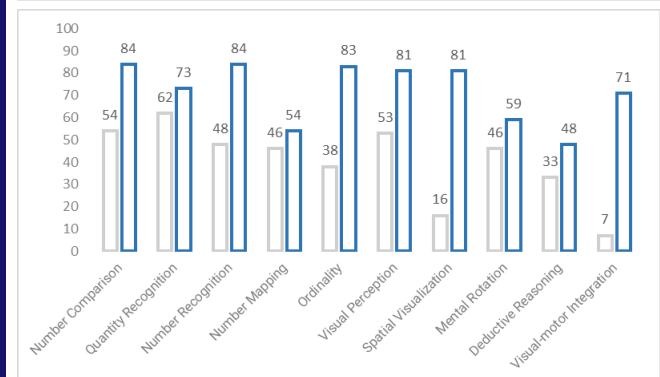
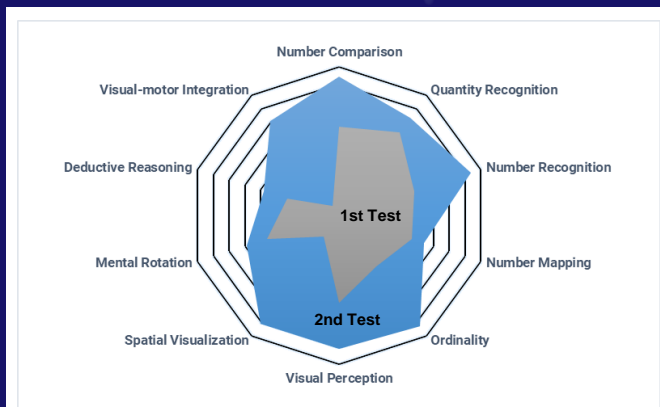
The study involved 145 five-year-old students from a primary school in Portugal. The Magrid program was integrated into their weekly schedule with sessions lasting 15 minutes, three times per week. During the first week, students completed introductory exercises to familiarize themselves with the platform before undertaking the pre-test.

Results:

- **Initial Assessment (1st Assessment):** Conducted during the first week, the pre-test assessed skills such as Number Comparison, Quantity Recognition, Number Recognition, Number Mapping, Ordinality, Visual Perception, Spatial Visualization, Mental Rotation, Deductive Reasoning, and Visual-Motor Integration. The initial results indicated below-average performance in both numerical and visuospatial tasks.
- **Monitoring-Progress (2nd Assessment):** After 20 weeks of consistent use of Magrid, the students' performance improved by an average of 70%. The key areas of improvement were:

Numerical skills: Enhanced abilities in Number Comparison, Number Recognition, Quantity Recognition, Number Mapping, and Ordinality.

Visuospatial skills: Significant progress in Spatial Visualization, Visual Perception, Mental Rotation, Deductive Reasoning, and Visual-Motor Integration.



	PRE-TEST	MID-TEST
	Avg correct % 1st Assessment	Avg correct % 2nd Assessment
Number Comparison	54	84
Quantity Recognition	62	73
Number Recognition	48	84
Number Mapping	46	54
Ordinality	38	83
Visual Perception	53	81
Spatial Visualization	16	81
Mental Rotation	46	59
Deductive Reasoning	33	48
Visual-motor Integration	7	71

Conclusion:

The findings from this case study demonstrate that the use of Magrid had a significant positive effect -70% average improvement- on both the numerical and visuospatial skills of the students. The structured, engaging sessions provided consistent progress, validating Magrid as an effective educational tool for early cognitive and mathematical development.

