

PISA 2018 Data Visualization Project

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What We Did

This project analyzes PISA 2018 educational data focusing on two main research questions:

- Where does Greece stand among 80 participating countries?
- What are the gender gaps in different countries (including Greece)?

Deliverables

11 Static Visualizations: Comprehensive charts analyzing Greece's performance, gender gaps, and global comparisons.

2 Interactive Plotly Visualizations:

- Country Performance Explorer with dropdown filters (All Countries, Top 10, Top 20, Greece vs Top 5)
- Gender Gap Analysis with subject switching (Mathematics, Reading, Science)

2 PowerPoint Presentations: One for static visualizations and one for interactive plots with screenshots.

Key Findings

- **Greece's Rank:** 46 out of 80 countries (middle tier)
- **Overall Score:** 456.39 points
- **Gender Gap in Math:** Nearly equal (boys +1.49 points)
- **Gender Gap in Reading:** Girls dominate (girls +40.67 points ahead)

- **Gender Gap in Science:** Girls slightly ahead (girls +10.45 points)

Google Colab Notebook

Access the interactive notebook here:

<https://drive.google.com/file/d/1eEKTEZX0sDDHzfbUQmMjqe29Q7AfQ6j/view?usp=sharing>

*Data Visualization - Assignment 1
Master in Data Science, AUEB*