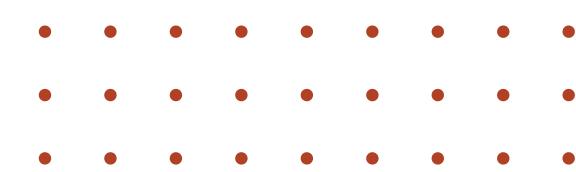




# **Analysis of Baccalaureate Exam Grades in Romania, 2018–2025**

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# Dataset:



- 2018-2025
- 2 sessions
- 3 written exams
- oral exams
- digital evaluation





# Why is this topic important?

This investigation examines student *participation* in the baccalaureate, key exam-related difficulties affecting pass rates, and subject preferences, while highlighting the **impact** of pre- and post-**pandemic** education on students' perceptions of the **exam's importance**.

IS THE BACCALAUREATE  
IMPORTANT TO ME?



# Methodology

01

DATA COLLECTION METHODS

03

AGGREGATIONS

05

GROUPINGS

07

VISUALIZATIONS

02

DATA CLEANING

04

STATISTICAL TESTS

06

DATA STORAGE



# How the Data were Analyzed?

The data were analyzed **comparatively**, covering the period from 2018 to 2025 (partial), with the aim of observing trends in **pass** rates and student participation in the baccalaureate examination.



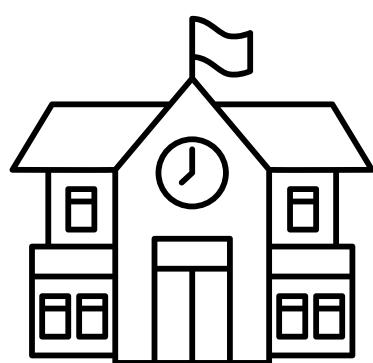
# Main findings from the data

## 1) AVERAGE FINAL GRADES BY YEAR

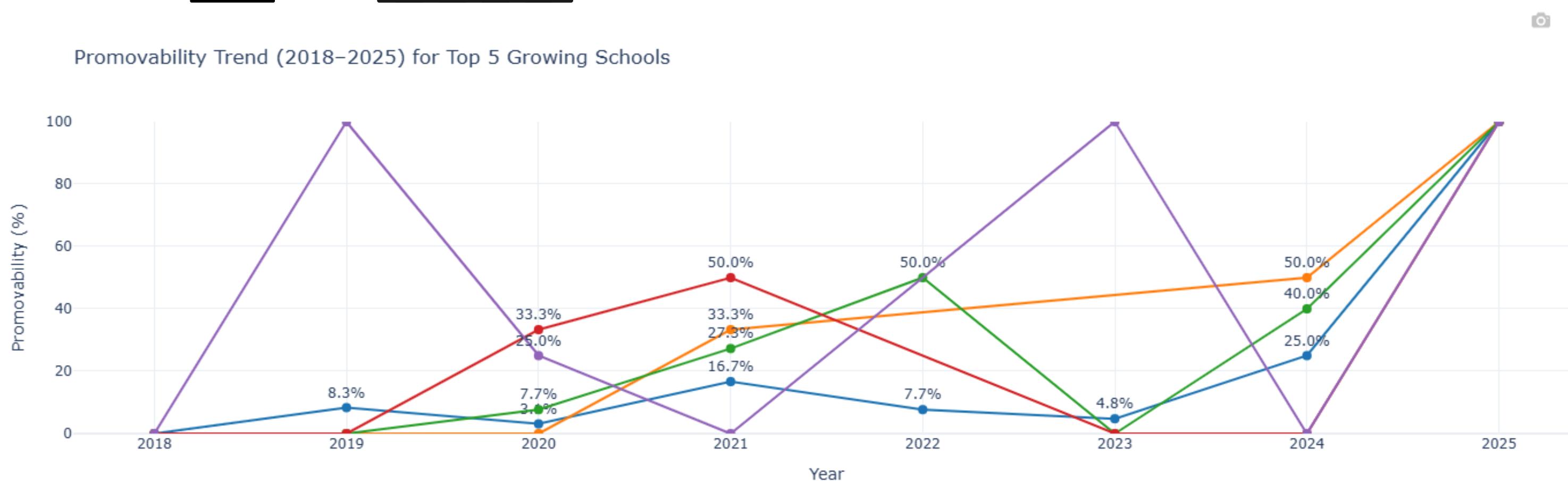
We begin with the **assumption** that the pandemic period, by forcing students to adapt to remote learning, navigate their home environments, and cope with social isolation, would **negatively** impact their **results**. Surprisingly, however, the scores for all three exams either remained **stable** or even **increased** during the pandemic compared to previous years.



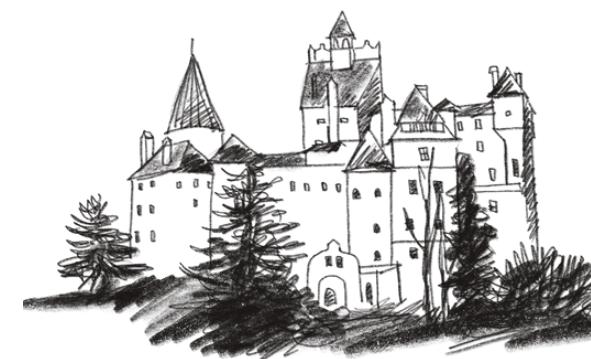
## 2) PROMOVABILITY TREND (2018–2025) FOR TOP 5 GROWING SCHOOLS



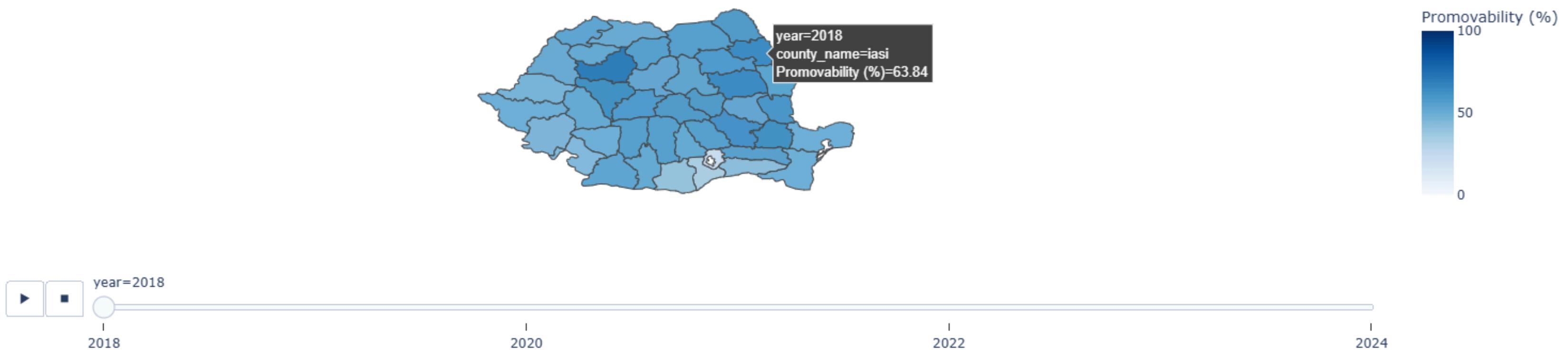
We aimed to identify schools that improved from a **low** pass rate in 2018 to a **stable** or **higher** rate by 2025. Some schools saw a decline in results during the first year of COVID-19, while others experienced an **increase**. For most schools, 2023 proved challenging, as pass rates began to drop again.



### 3) PROMOVABILITY RATE PER COUNTY



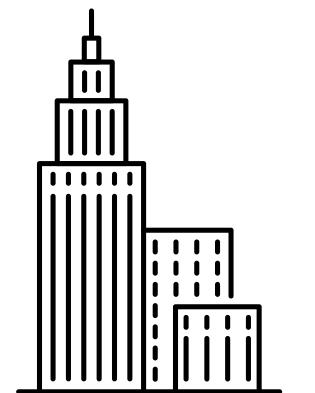
Student Pass Rate per County (2018-2024)



We selected **2018, 2020, 2022**, and **2024** to examine county-level pass rates before, during, and after the pandemic. Comparing 2018 and 2024, many counties showed a significant **increase**. Notably, the 2024 graduates began high school in 2020 at the pandemic's onset, yet most managed to stay dedicated to their studies.



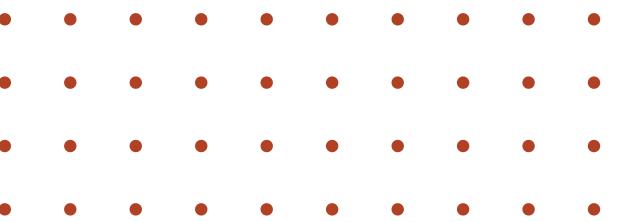
#### 4) ENVIRONMENTAL INFLUENCE ON STUDENT PERFORMANCE



Average Exam Score per Year by Environment



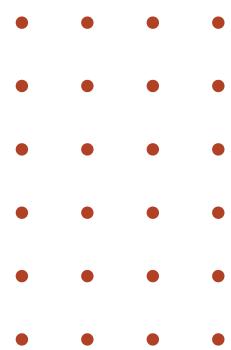
In Romania, most high schools are located in **urban** areas, requiring **rural** students to commute daily, which reduces study time and may affect performance. Transportation difficulties, especially during winter, further contribute to this issue. In **2022**, average scores were notably **low** for both rural and urban students.



## A STUDENT'S REFLECTION ON THE 2022 PASS RATE SITUATION

"It wasn't easy during the pandemic. The hardest part was staying focused in class, and some teachers were also less engaged. When we returned after the pandemic, they expected us to know all the material for the baccalaureate. We were prepared online as well, but we couldn't fully understand everything," says Rabia, a student of Turkish origin.

[from an interview given to Andreea Ofițeru for "Europa Liberă", June 6, 2022](#)

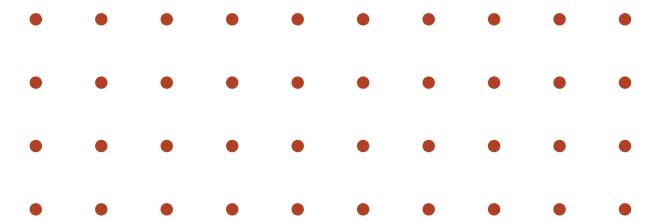


# Other findings

## 5) AVERAGE EXAM SCORE PER YEAR BY GENDER

Across all years, **female** students consistently achieved **higher** average scores than male students. Both groups experienced a sharp decline in **2022**, with the **drop** being more pronounced among **male** students. From 2023 onward, average scores recovered steadily, reaching their highest levels in 2024 and 2025.





## 6) STUDENTS' PREFERENCES FOR 'ELECTIVE SUBJECT'

- Geography: **333,523**
- Human Anatomy and Physiology, Genetics, and Human Ecology: **210,387**
- Logic, Argumentation, and Communication: **160,470**

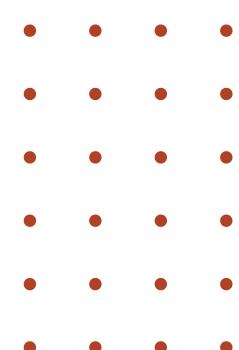
## 7) STUDENTS' MODERN LANGUAGE PREFERENCES

- English: **1,166,405**
- French: **84,008**
- German: **7,208**

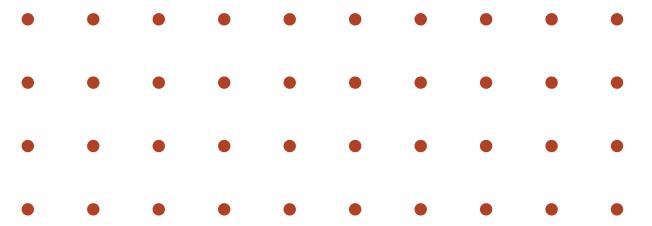


## 8) STUDENTS' ATTENDANCE

year	Part-time attendance	Evening		Day
		2018	1.79	1.93
2019	1.66	1.42	96.92	
2020	2.46	2.67	94.86	
2021	1.91	2.13	95.97	
2022	1.59	1.6	96.8	
2023	1.72	2.06	96.21	
2024	1.38	1.48	97.15	
2025	1.13	1.39	97.48	



# Interpretation of findings



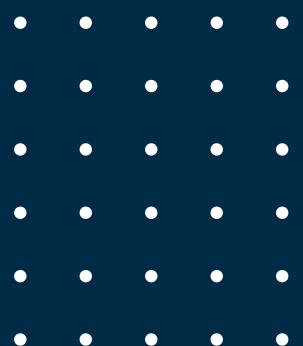
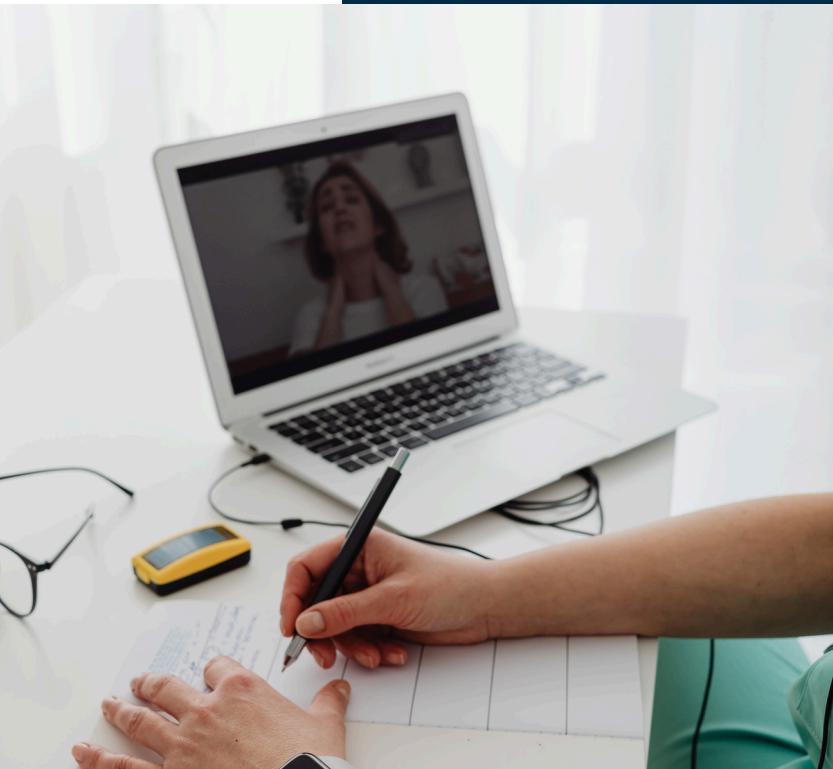
The adaptation of subjects to remote learning might have reduced the difficulty of exams, while new learning methods, alternative explanation channels, and the extra time students spent at home instead of commuting helped improve overall performance. The transition from online to in-person learning particularly affected students who took the exam in 2022.



# Conclusion & Recommend

## SUGGESTIONS FOR FUTURE RESEARCH

The analysis is particularly relevant because, in January 2026, Romanian high schools host the last cohort of twelfth graders who experienced the pandemic for one year. Their results in the first and second exam sessions will be key to assessing post-pandemic pass rates among students with at least one year of remote education or who are readjusting to in-person learning.





# Thank You

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