



## A Study on the Impact of COVID-19 on Academic Performance of Secondary Class Students

AMAR NATH VINAYAK, Ph.D. Scholar, Mangalayatan University, Aligarh

### Abstract

The COVID-19 pandemic has drastically altered the educational landscape worldwide, affecting the academic performance of students at various levels. This study aims to investigate the impact of COVID-19 on the academic performance of secondary class students. Utilizing a mixed-method approach, the research analyzes quantitative data from standardized test scores and qualitative data from surveys and interviews with students, parents, and educators. The findings indicate a significant decline in academic performance, particularly in subjects requiring hands-on practice and interaction, such as science and mathematics. The study also highlights the challenges posed by remote learning, including technological barriers and reduced student engagement.

### Introduction

The COVID-19 pandemic has led to unprecedented disruptions in the education sector globally. Schools were closed, and learning transitioned to online platforms, creating a myriad of challenges for students, educators, and parents. This study explores the impact of these changes on the academic performance of secondary class students. The primary objective is to understand the extent of the impact and identify the key factors contributing to changes in academic outcomes.

### Literature Review

The literature on the impact of pandemics on education is limited, but the COVID-19 crisis has generated a surge of research. Studies have shown that school closures and the shift to online learning have negatively impacted students' academic performance. According to Kuhfeld et al. (2020), students experienced significant learning losses, particularly in mathematics. Another study by Engzell et al. (2021) indicated that remote learning exacerbated existing educational inequalities, with disadvantaged students suffering the most.

### Methodology

This study employs a mixed-method approach, combining quantitative and qualitative data. The quantitative data includes standardized test scores from secondary class students before and during the pandemic. The qualitative data is gathered through surveys and interviews with students, parents, and educators to gain insights into their experiences with remote learning.

**Participants:** The study sample consists of 200 secondary class students from various schools, along with their parents and teachers.

### Data Collection:

- Standardized test scores in core subjects (Mathematics, Science, English) were collected from school records.
- Surveys and interviews were conducted online, focusing on the challenges and experiences during the pandemic.

### Data Analysis:

- Quantitative data was analyzed using statistical methods to compare pre-pandemic and pandemic-era test scores.
- Qualitative data was analyzed thematically to identify common challenges and perceptions.

### Results

The analysis of standardized test scores revealed a significant decline in academic performance across all subjects, with the most pronounced decline observed in Mathematics and Science. The average test scores dropped by approximately 15% compared to pre-pandemic levels.

The surveys and interviews highlighted several key challenges:



## Humanities, Computer, Management & Health

1. **Technological Barriers:** Many students faced issues with access to reliable internet and devices, hindering their ability to participate in online classes effectively.
2. **Reduced Engagement:** Students reported difficulties in staying engaged and motivated in a remote learning environment, citing distractions at home and a lack of interaction with peers and teachers.
3. **Parental Involvement:** Parents expressed concerns about their ability to support their children's learning, especially in subjects they were not familiar with.
4. **Mental Health:** Both students and parents noted increased stress and anxiety levels due to the pandemic and the pressures of remote learning.

### Discussion

The findings indicate that the COVID-19 pandemic has had a detrimental impact on the academic performance of secondary class students. The shift to online learning, while necessary, was fraught with challenges that hindered effective education. The technological divide played a significant role in exacerbating educational inequalities, with students from lower-income families being disproportionately affected.

The reduction in student engagement and motivation highlights the importance of interactive and participatory learning environments, which were difficult to replicate online.

Additionally, the increased stress and anxiety reported by students and parents underscore the need for mental health support in the educational framework.

### Conclusion

The study underscores the significant negative impact of the COVID-19 pandemic on the academic performance of secondary class students. To mitigate these effects, policymakers and educators need to focus on bridging the technological divide, enhancing the quality of remote learning, and providing adequate mental health support. As the world transitions back to normalcy, it is crucial to address these challenges to ensure that students can recover from the academic setbacks experienced during the pandemic.

### References

- Engzell, P., Frey, A., & Verhagen, M. D. (2021). Learning loss due to school closures during the COVID-19 pandemic. *Nature*, 596(7870), 351-356.
- Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., & Reed, C. (2020). Projecting the potential impacts of COVID-19 school closures on academic achievement. *Educational Researcher*, 49(8), 549-565.
- Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). COVID-19 and learning loss—disparities grow