

# ONLINE COURSES AND SILENT STUDENTS

## ΔΙΑΔΙΚΤΥΑΚΑ ΜΑΘΗΜΑΤΑ ΚΑΙ ΣΙΩΠΗΛΟΙ ΦΟΙΤΗΤΕΣ

Griva Anastasia, Maria Mitroulia, Armakolas Stefanos

### Abstract

During the Covid-19 lockdown, all teaching staff and students in Greek Universities were forced to adopt a different way of teaching and learning by adapting to online courses. Silent students are seen as passive learners or even as having difficulty with basic thinking or lacking understanding. Research in online education highlights tacit participation as a critical factor that educators should take seriously. In this research, we studied the "silence" of students in online lectures at the University of Patras. The main purpose of this paper is to understand why a group of students remain silent in their online courses or lack verbal participation. At the same time, some solutions are proposed for more effective online chat/communication and to improve distance education. The study analyzed data obtained from questionnaires distributed to a sample of 100 students. The results showed that student silence was common in online courses. However, students reported three perceptions of the cause of silence, namely, student-related factors, teacher-related factors, and cultural factors. These findings add to the academic literature on engagement in classroom interaction and information about the various difficulties' teachers have as they try to orchestrate discussions during their online teaching.

**Keywords:** *silent students, pandemic period, online courses, distance learning, interaction, communication, teaching, and learning*

### Περίληψη

Κατά τη διάρκεια της απαγόρευσης κυκλοφορίας λόγω του Κορονοϊού, όλο το διδακτικό προσωπικό και οι φοιτητές στα Ελληνικά Πανεπιστήμια αναγκάστηκαν να υιοθετήσουν έναν διαφορετικό τρόπο διδασκαλίας και μάθησης προσαρμοζόμενοι στις διαδικτυακές τάξεις. Οι σιωπηλοί φοιτητές θεωρούνται ως παθητικοί μαθητές ή ακόμα και ότι δυσκολεύονται στη βασική σκέψη ή έχουν ελλιπή κατανόηση. Η έρευνα στην διαδικτυακή εκπαίδευση αναδεικνύει την σιωπηρή συμμετοχή ως ένα κρίσιμο παράγοντα τον οποίο θα πρέπει οι διδάσκοντες να λαμβάνουν σοβαρά υπόψη. Στη παρούσα έρευνα μελετήθηκε η «σιωπή» των φοιτητών στις διαδικτυακές διαλέξεις στο Πανεπιστήμιο Πατρών. Ο κύριος σκοπός αυτής της εργασίας είναι να κατανοήσουμε γιατί μια ομάδα φοιτητών μένει σιωπηλή στα διαδικτυακά τους μαθήματα ή στερείται λεκτικής συμμετοχής. Παράλληλα προτείνονται κάποιες λύσεις για πιο αποτελεσματική διαδικτυακή συνομιλία/επικοινωνία και για τη βελτίωση της εξ αποστάσεως εκπαίδευσης. Η μελέτη ανέλυσε τα δεδομένα που προέκυψαν από ερωτηματολόγια που διανεμήθηκαν σε δείγμα 100 μαθητών. Τα αποτελέσματα έδειξαν ότι η σιωπή των μαθητών ήταν συνηθισμένη στα διαδικτυακά μαθήματα. Ωστόσο οι φοιτητές ανέφεραν τρεις αντιλήψεις για την αιτία της σιωπής, συγκεκριμένα, παράγοντες που σχετίζονται με τους φοιτητές, παράγοντες που σχετίζονται με τον καθηγητή και πολιτισμικούς παράγοντες. Αυτά τα ευρήματα προσθέτουν στην ακαδημαϊκή βιβλιογραφία σχετικά με τη συμμετοχή στην αλληλεπίδραση στην τάξη και ενημερώνουν για τις διάφορες δυσκολίες που αντιμετωπίζουν οι εκπαιδευτικοί καθώς προσπαθούν να εννοηστώσουν συζητήσεις κατά τη διάρκεια της διαδικτυακής τους διδασκαλίας.

**Λέξεις Κλειδιά:** σιωπηλοί φοιτητές, περίοδος πανδημίας, διαδικτυακά μαθήματα, εξ αποστάσεως εκπαίδευση, αλληλεπίδραση, επικοινωνία, διδασκαλία και μάθηση

## **INTRODUCTION**

The outbreak of the COVID-19 pandemic forced several nations to develop and adopt distance education as a key alternative, turning to online learning courses (Murphy, 2020; Prasetyanto et al., 2022; Tesar, 2020). Although the lockdowns had negative effects, distance education plays an important role in facilitating the professional development of teachers and effectively supporting their academic work, ensuring the quality and efficiency in the way higher education institutions operate. Distance education offers substantial opportunities for learning and teaching among students and teachers (Fragkoulis & Armakolas, 2020).

Online courses can be held in various locations and are not limited to traditional classrooms. Bedrooms, kitchens, dining rooms, etc. could be teaching areas. In addition to this change in the teaching environment combined with the use of the internet and differentiated online teaching methods has affected the way teachers and students interact. However, during such courses, various malfunctions and challenges such as network platform congestion and insufficient teacher-student interaction and collaboration occur (Gupta, 2021). Another serious problem that complicates the work of teachers and causes them stress and confusion is the silence of some students. A silent classroom is often signifying insufficient interactive communication between educators and students (Deng, 2022).

Classroom interactions constitute the main components of qualitative teaching and learning outcomes. However, Covid-19 has necessitated a shift from face-to-face teaching techniques to online (Xhaferi & Xhaferri, 2021), making classroom interactions less controlled. Online classes may continue to be a teaching method in many countries due to the widespread pandemic. Prior research in this field underlines non-verbal participation as a major factor that educators should take seriously (Ho et al., 2023). In light of the growing importance of distance education, this article argues that investigating the reasons behind silence in online courses is imperative. The research questions that this study attempts to answer are as follows:

- 1) How effective have online classes been for students during the Covid-19 pandemic?
- 2) How prevalent was the phenomenon of silence in online class?
- 3) What factors contribute to students' silence in online class?
- 4) What strategies can the teachers employ to improve teaching and learning effectively?

This study is important because examines students' silence and it helps professors comprehend the reasons why some students choose not to speak and be in a non-verbal state in online classes. The research findings may provide a useful exchange of views on online pedagogical implications for educators to strengthen students' communication and academic performance during online lectures.

## 1. LITERATURE REVIEW

### 1.1 Definitions of Classroom “Silence”

It is clear that silence is common in onsite tutoring and is also experienced in online instruction (Zembylas & Vrasidas, 2005) primarily assessed on class participation (Bista, 2012). There are several definitions of “silence”. Bosacki (2021), in her book, pointed out that silence is the “absence of vocalization”. Medaille & Usinger (2019) insisted that students’ silence reflects the psychological state and behavior of the students, which is characterized by reluctance to communicate and take part in learning activities. In his article, Zhou (2021) argued that students’ silence should be defined as “no verbal nor literal responses” from students when educators start an interactive session during an online lecture. Silent students are seen as passive learners or even as having difficulty with basic thinking or lacking understanding (Wang et al. 2022). In conclusion, according to definitions given by previous researchers, students’ silence in online classrooms in this article, occurs when teachers pose a question and students don't respond, or they are reluctant, and unwilling and avoid expressing their thoughts and ideas when the teacher initiates a debate. It seems that such behaviors on the part of the students generally indicate that their negative attitude toward the teacher put obstacles in the teaching and learning process.

### 1.2 Previous Studies on Classroom Silence

Besides perceiving silence as non-participation, silence in online situations may be considered a consequence of blocking and silencing (Zembylas & Vrasidas, 2005). However, despite academic research on online silence from different perspectives, few of them attempt to uncover the reasons for this phenomenon. The exception is the article of Kalman (2008), which identified several categories of silence in the online classroom, analyzed the cause of online silence, but did not delve into the specific reasons behind it.

Regarding online courses during the COVID-19 period, as universities used alternative educational technologies for student learning and most of them opted for e-classes (Shehzadi et al., 2021) several articles have explored how environmental factors affect the academic performance of college students taking e-classes during that season. For example, Beyari (2022), Kang & Kim (2021), Realyvásquez-Vargas et al. (2020) and Sarkar et al. (2021) researched how students perceive online courses during Covid-19. While a study by Chatta et al. (2022) explored the faculty’s perception of e-courses. Gupta (2021) analyzed the effects of Covid-19 on classroom instruction. The researchers Xhaferi & Xhaferri (2021) analyzed students’ interaction activities that took place in e-classes at a university in North Macedonia during the lockdowns. According to Weiner (2020), online university classes in the United States were “deathly quiet” where no one is talking. He refers that there are long pauses as professors pose a question and wait for students' answers that never come. Also, most responses to an oral task are short and weak just to avoid awkward silence.

However, up to date, a small number of papers have investigated students’ silence in online classes during the pandemic. Zhou (2021) analyzed the reasons that a group of postgraduate students kept silent during online courses and concluded that there are three reasons: the peculiarity of e-classes, the uniqueness of postgraduate academic lessons, and other general reasons similar to those in the traditional classroom. In the same way, Lv et al. (2021) conducted a case study on classroom interaction and the “silence” behavior of students in some e-courses during Covid-19. Deng (2022) addressed the problem of student silence in online courses as it affects students' academic performance. His sample was “EFL” (English as a Foreign Language)

students whose communicative ability is essential for second language learning. A study by Ho et al. (2023) sought to capture students' perceptions of student silence in terms of its frequency, reasons, and impact on classroom interaction and meaningful learning.

While research on the silent classroom has been well depicted in scientific literature, this phenomenon has gained new importance in the virtual learning environment during, and most likely after, the COVID-19 era. Based on the literature review, this article urges that it is necessary and urgent to shed light on the reasons behind non-verbal communication within the e-classroom in today's increasingly prosperous distance education.

## **2. METHODOLOGY**

The present study involved 100 students from the University of Patras, Department of Economics. The participants were students from different programs and levels of study and ranged from first to final-year undergraduates. All participants had taken online courses almost exclusively since the start of the pandemic in 2020 and thus had plenty of online learning experience. What makes the research available is that the authors were able to attend the online courses as students, which facilitates better data collection and understanding. The data was mined by administering questionnaires to fellow students through Google Docs. The survey was conducted between February and May 2023 while the questionnaire was available online from 12/02/2023 and completed on 12/05/2023. All students participated voluntarily.

The questionnaires used in this research study were distributed directly to the respondents and online through social networking. The format of the questionnaire used for this study was the weighted questionnaire. The creation of the questionnaire and the methodology were based on the Khan et al. (2021) model. Furthermore, they extended their research by using Confirmatory Factor Analysis to examine whether all the measured variables explicitly explain their respective latent construct or not. Also, the methodology was formed based on the relevant literature mentioned earlier according to Xhaferi & Xhaferri, (2021) and Chatta (2022). The questionnaire includes 19 questions that were closed-ended and allowed only specific answers.

In particular, the questionnaire is divided into five parts. The first part concerns six questions that are designed to discover the consequences of the pandemic on teaching and student performance. The second part consists of three questions that determine the state of the phenomenon. Part three aims to uncover the cause of silence in online classes. This part includes three multiple-choice questions which are categorized into three dimensions namely, student-related factors, teacher-related factors, and cultural factors. The student-related factors include lack of interest, nervousness or shyness, multitasking, and so on. Teacher-related factors include the teachers' weakness in online teaching, teacher-student relationships, and so on. Cultural factors focused on students' perception about being afraid of losing their physical presence, and do not want to be perceived as showing off during the e-lecture. The fourth part consists of two multiple-choice questions and probes into potential approaches that educators can employ to enhance teaching effectiveness and facilitate better learning results. Finally, the fifth section concerns demographics - individuals - of the sample subjects, for example, gender, age, studies, years of service, etc.

With the collection of the results, the questionnaire responses were registered in the SPSS (Statistical Package for Social Sciences) program. Subsequently, a frequency analysis was performed to analyze the distribution of the responses. Furthermore, the authors considered specific questions to be of significant importance and conducted a correlation analysis to highlight the relationship between these questions. The questions related to the demographic characteristics - individual data of the sample subjects are characterized as "Independent" variables, while the questions investigating the consequences of Covid-19, the silence of students, and the reasons for silence are characterized as "Dependent" variables.

### **3. ANALYSIS**

Before the statistical processing and analysis of the results, Cronbach's correlation coefficient  $\alpha$  was calculated to check the reliability of the questionnaire. This index increases as the correlations between the elements increase. For this reason, it is also called an internal affinity index. In other words, this indicator reflects the extent to which all elements of a cumulative scale measure the same creation. It essentially expresses the homogeneity of the sample. The received values range from 0-1. According to Zafeiropoulos (2015), values greater than 0.7 express consistency and ensure consistency and reliability. In our case, it was found that Cronbach's entire questionnaire was 0.8. Therefore, we conclude that our questionnaire as a whole is reliable.

Firstly, we present the results of the research, as they arise from the 100 questionnaires distributed in electronic form. The results encompass the sex of the respondents, their age, years of service in the educational sector as members of the faculty of the University of Patras, and their educational status. The majority of respondents who answered the questionnaire are women with a percentage of 51%. Regarding age distribution, the majority of students (33%) belonged to the 25-34 age group, closely followed by the 19-24 age group (26%). The largest percentage of learners (60%) were at the undergraduate level during the pandemic.

According to the results of the questionnaire, the pandemic affected students' studies, as expressed by 58% of the sample. Moreover, 57% indicated that pandemic lockdowns have affected teaching. It is worth noting that 68% of respondents felt that the quality of learning was greatly affected, and 47% reported that their final grades were also impacted.

Secondly, we present the main findings of our research study on online courses and silent students. In the question about the effectiveness of online classes for students during Covid-19 crisis, the outcomes showed that 49% perceived that e-classes are highly effective (Table 1). Moreover, 13% indicated them to be sufficient. At this point, it is worth mentioning that only 2 persons found these courses to be somewhat effective, and one individual expressed that they are not effective.

**Table 1** Online classes during Covid-19

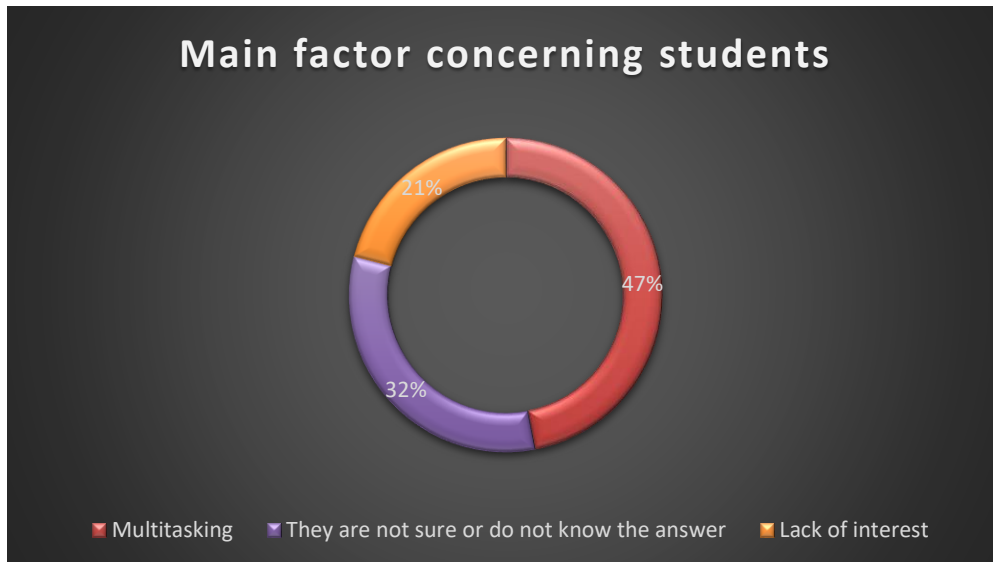
<b>Online classes</b>	<b>Frequency</b>	<b>Percentage %</b>
Too much	35	35,0
A lot	49	49,0
Quite	13	13,0
A little	2	2,0
Not at all	1	1,0
<b>Total</b>	<b>100</b>	<b>100,0</b>

Table 2 is tabulated as the responses to the question about the level of silence occurrence during online courses. The majority of students (48%) claimed that silence was noticed to a very large extent. Only 12% answered that it was sufficient. It is worth noting that no one answered this question negatively.

**Table 2** Silence during online classes

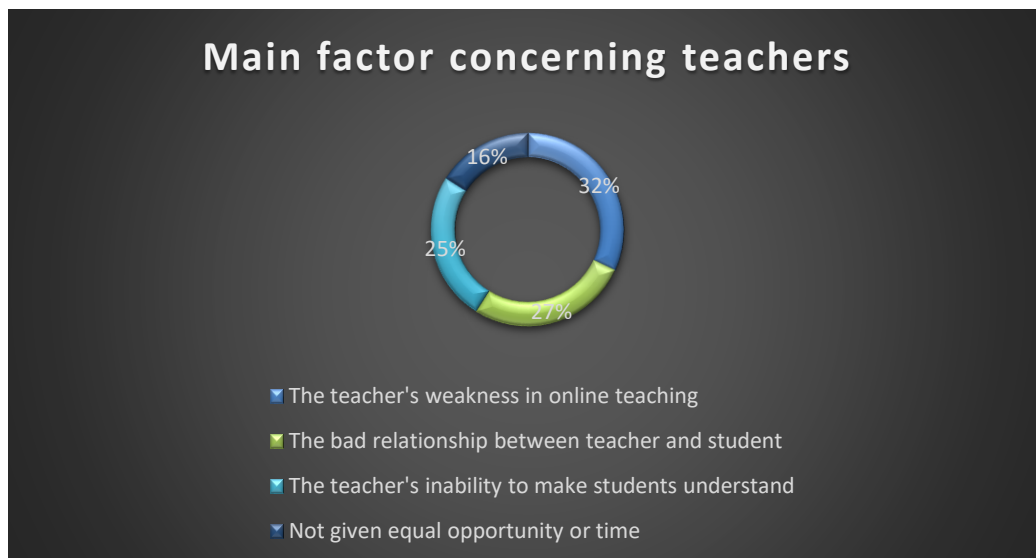
<b>Silence</b>	<b>Frequency</b>	<b>Percentage%</b>
Too much	48	48,0
A lot	40	40,0
Quite	12	12,0
<b>Total</b>	<b>100</b>	<b>100,0</b>

The reasons for students' reluctance to actively participate and remain completely quiet in online classes (Figure 1), were divided into three categories: students themselves, the teacher, and the culture. The main student factor, as indicated by 47%, is that they are dealing with multiple activities during e-lectures. A percentage of 32% claimed that their reluctance to take part in these courses is due to uncertainty or lack of knowledge of the correct answer. According to data, 21% of the participants attributed their hesitation to a lack of interest.



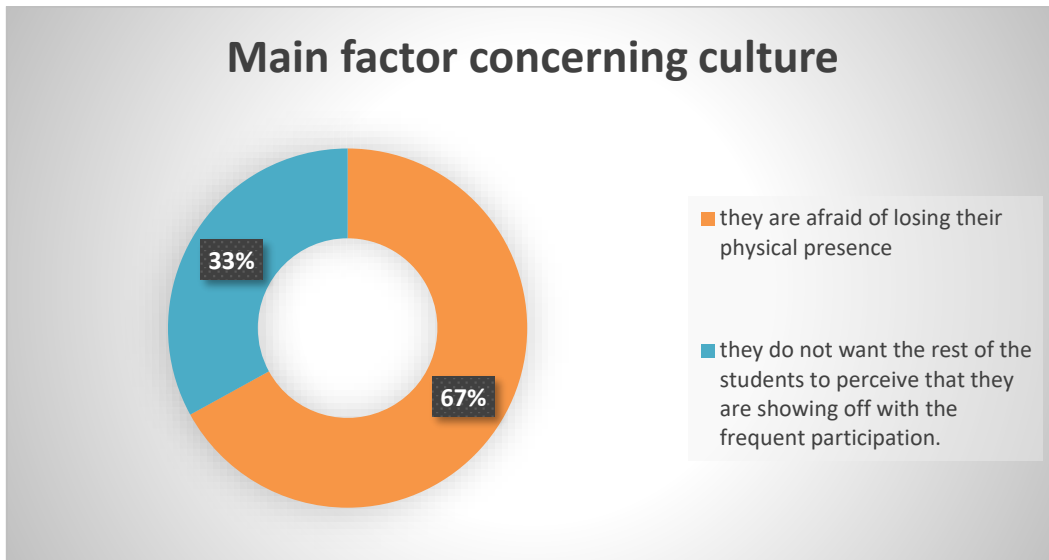
**Figure 1** Main factor concerning students

Due to the responses, the main factor related to educators, as indicated by 32% of the participants, is the weakness of the teacher in online teaching (Figure 1). Additionally, 27% of respondents attributed the issue to the bad relationship between teacher and student. Only a mere 25% reported that the main reason is the teacher's inability to make students understand, while 16% argue that they are not given equal opportunities or time to respond.



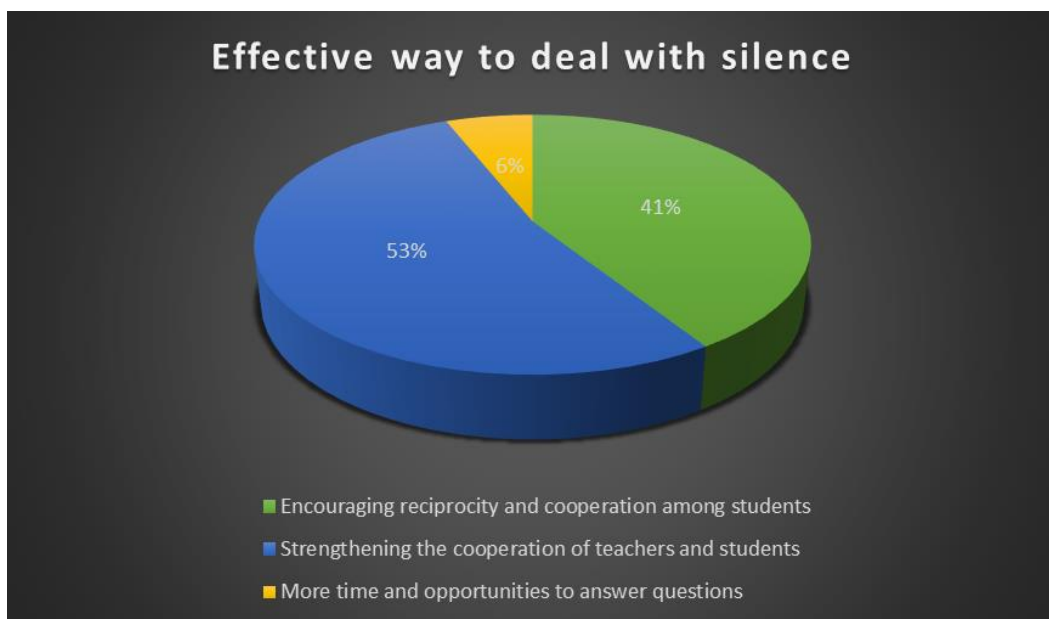
**Figure 2** Main factor concerning teachers

According to the student's opinion, the main factor related to cultural factors, as reflected by 67% of the sample (Figure 3), is their fear of losing their physical presence. The above graph also depicts that a total of 33% admitted that they avoid frequent participation to prevent the rest of the students from perceiving it as showing off.



**Figure 3** Main factor concerning culture

Regarding the approaches that teachers can use to effectively address the teaching and learning needs of quiet students, the survey showed that 53% of respondents argued strengthening the cooperation of teachers and students is an effective method. Additionally, 41% of the sample answered that encouraging reciprocity and cooperation among students is another suitable strategy. Only 6% of participants claimed that increasing time and opportunities for students to respond could be an appropriate means of effectively improving teaching and learning (Figure 4).



**Figure 4** Effective way to deal with silence



## CONCLUSIONS

The principal goal of this study was to explore students' silence in online classes during the pandemic season. The outcomes reveal that this phenomenon is a common problem at Patras University and demonstrate that different factors are responsible for students' non-verbal participation. The fact that students are engaged in various activities during the lesson is the main obstacle to not participating in class. Meanwhile, teachers' weakness in online teaching proved to be the most important factor not conducive to classroom interaction. Cultural factors play a decisive role in the way students behave during the lesson. With the help of statistical analysis, we obtain the following pedagogical information regarding the improvement of students' attitudes and performance during these courses by strengthening the cooperation between teacher and student. Educators need to consider the specific needs of the class and employ these approaches accordingly to develop a fruitful and dynamic environment.

Therefore, the main contribution of this study is to help scholars, educators, academic staff and college management departments to better understand the state of the phenomenon and the cause of students' silence in online classrooms. The findings provide practical insights into the interpretation and early diagnosis of students' silence during online courses since such courses have started to gain popularity globally. However, this study has its limitations. The participants were only 100. It would be interesting, to measure the opinions of the other party in e-class discourse such as the teachers, lecturers, and instructors to provide more in-depth knowledge of the issue under study. Also, obtaining data from different higher education institutions could provide better comparative outcomes to comprehend students' behavior.

## References

1. BEYARI, H. (2022). Predicting the Saudi Student Perception of Benefits of Online Classes during the Covid-19 Pandemic using Artificial Neural Network Modelling. 22, 145–152. <https://doi.org/10.22937/IJCSNS.2022.22.2.19>
2. BISTA, K. (2012). Silence in Teaching and Learning: Perspectives of a Nepalese Graduate Student. *College Teaching*, 60(2), 76–82. <https://doi.org/10.1080/87567555.2011.633943>
3. BOSACKI, S. (2021). *The Culture of Classroom Silence*. Peter Lang Verlag. <https://www.peterlang.com/document/1100252>
4. CHATTA, S. B., HAQUE, M. I., & RAO, M. M. S. (2022). Perceptions of University Faculty of Saudi Arabia towards Online Classes Conducted During the Covid-19 Pandemic. *Arab World English Journal*, 2, 258–280. <https://doi.org/10.24093/awej/covid2.17>
5. DENG, Y. (2022). Investigating Silence in Online EFL Classes Among University Students in China during COVID-19 pandemic. 1–20. <https://doi.org/10.21203/rs.3.rs-2114613/v1>
6. FRAGKOULIS, I., & ARMAKOLAS, S. (2020). The contribution of distance learning in the field of University Pedagogy aiming at quality assurance. *10th International Conference in Open & Distance Learning - November 2019, Athens, Greece*, 10(3A), 1. <https://doi.org/10.12681/icodl.2038>
7. GUPTA, M. M. (2021). Impact of Coronavirus Disease (COVID-19) pandemic on classroom teaching: Challenges of online classes and solutions. *Journal of Education and Health Promotion*, 10. [https://doi.org/10.4103/jehp.jehp\\_1104\\_20](https://doi.org/10.4103/jehp.jehp_1104_20)
8. HO, D. G. E., SA'ADI, M., HE, D., & HOON, C. Y. (2023). Silence over the wire: student verbal participation and the virtual classroom in the digital era. *Asia Pacific Education Review*, 2020. <https://doi.org/10.1007/s12564-023-09834-4>
9. KALMAN, M. Y. (2008). Silence in online education: The invisible component. In Y. Eshet-

- Alkalai, A. Caspi, & N. Geri (Eds.), *Proceedings of the Chais Conference on Instructional Technologies Research: Learning in the Technological Era, Israel: The Open University*, 53–58. <https://docplayer.net/730662-Silence-in-online-education-the-invisible-component.html>
10. KANG, Y. J., & KIM, D.-H. (2021). Pre-clerkship students' perception and learning behavior of online classes during coronavirus disease 2019 pandemic. *Korean J Med Educ*, 33(2), 125–131. <https://doi.org/10.3946/kjme.2021.194>
  11. KHAN, M. A., VIVEK, NABI, M. K., KHOJAH, M., & TAHIR, M. (2021). Students' perception towards e-learning during covid-19 pandemic in India: An empirical study. *Sustainability (Switzerland)*, 13(1), 1–14. <https://doi.org/10.3390/su13010057>
  12. LV, Q., WANG, X., & YING, W. (2021). A case study on classroom interaction and “Silence” behavior of live broadcast teaching under the epidemic situation. *China's Educational Informatization*, 11, 58–61.
  13. MEDAILLE, A., & USINGER, J. (2019). Engaging Quiet Students in the College Classroom. *College Teaching*, 67(2), 130–137. <https://doi.org/10.1080/87567555.2019.1579701>
  14. MURPHY, M. P. A. (2020). COVID-19 and emergency eLearning: Consequences of the securitization of higher education for post-pandemic pedagogy. *Contemporary Security Policy*, 41(3), 492–505. <https://doi.org/10.1080/13523260.2020.1761749>
  15. PRASETYANTO, D., RIZKI, M., & SUNITIYOSO, Y. (2022). Online Learning Participation Intention after COVID-19 Pandemic in Indonesia: Do Students Still Make Trips for Online Class? *Sustainability (Switzerland)*, 14(4). <https://doi.org/10.3390/su14041982>
  16. REALYVÁSQUEZ-VARGAS, A., MALDONADO-MACÍAS, A. A., ARREDONDO-SOTO, K. C., BAEZ-LOPEZ, Y., CARRILLO-GUTIÉRREZ, T., & HERNÁNDEZ-ESCOBEDO, G. (2020). The impact of environmental factors on academic performance of university students taking online classes during the COVID-19 pandemic in Mexico. *Sustainability (Switzerland)*, 12(21), 1–22. <https://doi.org/10.3390/su12219194>
  17. SARKAR, S. S., DAS, P., RAHMAN, M. M., & ZOBAER, M. S. (2021). Perceptions of Public University Students Towards Online Classes During COVID-19 Pandemic in Bangladesh. In *Frontiers in Education* (Vol. 6). <https://www.frontiersin.org/articles/10.3389/feduc.2021.703723>
  18. SHEHZADI, S., NISAR, Q. A., HUSSAIN, M. S., BASHEER, M. F., HAMEED, W. U., & CHAUDHRY, N. I. (2021). The role of digital learning toward students' satisfaction and university brand image at educational institutes of Pakistan: a post-effect of COVID-19. *Asian Education and Development Studies*, 10(2), 276–294. <https://doi.org/10.1108/AEDS-04-2020-0063>
  19. TESAR, M. (2020). Towards a Post-Covid-19 'New Normality?': Physical and Social Distancing, the Move to Online and Higher Education. *Policy Futures in Education*, 18(5), 556–559. <https://doi.org/10.1177/1478210320935671>
  20. WANG, S., MOSKAL, M., & SCHWEISFURTH, M. (2022). The social practice of silence in intercultural classrooms at a UK university. *Compare*, 52(4), 600–617. <https://doi.org/10.1080/03057925.2020.1798215>
  21. WEINER, M. (2020). Online college classes are disturbingly quiet. *The Boston Globe*. <https://www.bostonglobe.com/2020/09/18/opinion/online-college-classes-are-disturbingly-quiet/>
  22. XHAFERI, B., & XHAFFERRI, G. (2021). Students' Interaction in Online Classes During Covid 19 Pandemic in North Macedonia. *Folia Linguistica et Litteraria*, 12(36), 333–350. <https://doi.org/10.31902/flil.36.2021.19>
  23. ZAFEIROPOULOS, K. (2005). How is a scientific work done: scientific research and work

writing. *Criticism*.

24. ZEMBYLAS, M., & VRASIDAS, C. (2005). Levinas and the “Inter-Face”: the Ethical. *Educational Theory*, 55(1), 60–78.
25. ZHOU, X. (2021). Why Keep Silent Online? Voices from Stay-at-home Postgraduate Students. *International Journal of Social Science Studies*, 9(4), 7.  
<https://doi.org/10.11114/ijsss.v9i4.5249>

**Contact**

*Stefanos Armakolas MEd, PhD*  
*Laboratory Teaching Staff*  
*Department of Education and Social work*  
*University of Patras, Greece*  
*tel: +302610969734*  
*E-mail: stefarmak@upatras.gr*