STUDENTS' PERSPECTIVES ON SYNCHRONOUS VS. ASYNCHRONOUS DISTANCE LEARNING IN SECONDARY AND HIGHER EDUCATION

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ABSTRACT

We are living in a time of rapid technological advancement, and language learning is not immune to these changes. Educational systems must transform to keep pace with the evolving world, as physical classrooms are becoming less essential while virtual environments provide a wide variety of options. Distance education is expanding rapidly, and a key topic of academic debate is the distinction between synchronous learning, which is limited by time but can take place anywhere, and asynchronous learning, which offers complete flexibility in terms of time, place, and pace. This study examines the performance of English language learners in both types of distance education through the Online Self-Regulated Learning Questionnaire (OSLQ), which was modified into two separate questionnaires based on a 5-point Likert scale. The instrument examines the strategies students use across six sub-fields of self-regulated learning: environment structuring, goal setting, help-seeking, self-evaluation, task strategies, and time management. The sample included approximately 100 participants from both secondary and higher education. The findings reveal that both groups are moderate users of distance learning strategies, while also highlighting differences between secondary and university students regarding preferred learning modes, common challenges, and areas for improvement, thus contributing to the development of effective, learner-centered distance education practice.

Keywords: virtual classrooms, learning questionnaire, learners' opinions, learners' preferences

INTRODUCTION

The digital world around us has transformed every aspect of human life, including education. Although distance education is not a new concept—it first appeared at the beginning of the 20th century through mailed study materials—it is the expansion of the Internet that has enabled educational institutions worldwide to offer both traditional and distance education. However, the global shift to distance learning became inevitable during the COVID pandemic, when it was the only option to complete the ongoing school and academic years. Teachers and students around the world had to adopt technological tools to prevent disruptions in the educational process, ensuring its continuity despite numerous challenges. From today's perspective, we can conclude that the transition was largely successful; however, further studies are needed to assess its long-term effectiveness.

The importance of this study lies in its attempt to address the ongoing challenges faced by educators worldwide. It examines the differences between the two forms of distance education—synchronous and asynchronous—at both secondary and university levels. Although this topic has been widely researched, certain aspects remain unclear. This study builds upon experiences from two academic years during the pandemic, with the aim of deepening our understanding of the topic. Consequently, this research seeks to offer insights and potential solutions to the educational issues faced by contemporary educators. Considering that distance learning is constantly evolving, identifying differences and effective practices in both forms of distance education across educational levels is of utmost importance for future progress.

LITERATURE REVIEW

There is no doubt that we are living in a fully digital age. Although the concept of digital education has existed for more than a century, a complete shift from traditional classrooms to virtual learning environments did not occur until the recent pandemic. With technological advancements and widespread internet access, many secondary schools and universities now offer fully online education. Distance learning, already well explored in academic literature, continues to provide a solid foundation for new research directions.

Barnard et al. [1] highlighted the rising number of students choosing online and blended courses, stressing the need for reliable tools to assess self-regulation in digital environments. Their development of the Online Self-Regulated Learning Questionnaire (OSLQ) confirmed that many learners favor flexible, non-traditional instructional formats. Similarly, Kirmizi [4] analyzed self-regulation strategies among distance learners across six dimensions—goal setting, environment structuring, time management, help-seeking, self-evaluation, and metacognition. His findings showed that goal setting and metacognition ranked highest, pointing to their essential role in successful online learning.

Bernard et al. [2] offered a broad evaluation of quantitative distance education research from 1985 to 2002, distinguishing between synchronous formats, which require real-time interaction, and asynchronous formats, which allow learners to work independently. Their results revealed that asynchronous learning often produced stronger academic outcomes, though it also carried higher dropout rates.

Murphy et al. [6] further observed that Canadian high school students tended to favor asynchronous tools because of their flexibility and support for independent learning. Building on this, Nilles [7] examined student satisfaction and concluded that effective course design—not technology itself—is the primary determinant of success in distance education. Perveen [8] argued that combining synchronous and asynchronous methods yields the best results for language learning, while Lyn and Gao [5] noted that asynchronous environments tend to foster a stronger sense of community. Clouse [3] similarly suggested that hybrid approaches can maximize both performance and satisfaction.

In conclusion, the field of distance education continues to evolve rapidly, shaped by technological progress and shifting learner expectations. The reviewed studies collectively underscore the importance of self-regulation, thoughtful instructional design, and the balanced integration of synchronous and asynchronous tools. This

research aims to contribute to a deeper academic understanding of digital learning and support educators in navigating its ongoing transformation.

METHODOLOGY OF THE RESEARCH WORK

AIMS OF THE RESEARCH

The purpose of this research is to contribute to the expanding body of knowledge on distance education, which has posed challenges for educators and academics globally over the COVID period of two years. Specifically, the study aims to gather comprehensive data on both synchronous and asynchronous forms of distance learning at the secondary and higher education levels. By analyzing questionnaire responses from students in both educational stages, we aim to determine whether one method of distance education is more effective or preferred, or if both formats lead to similar outcomes across the two levels. The results will be compared to identify any differences in student behavior and engagement between secondary and higher education. Based on these findings, we will draw conclusions about the most effective approach or combination of approaches. Although traditional classroom learning has resumed, distance education is still relevant. Therefore, the study will also offer recommendations for how education can be structured moving forward in a way that integrates the benefits of digital learning.

RESEARCH QUESTIONS

As mentioned earlier, this paper aims to address several research questions relevant to those affected by the current and future state of education, with a particular focus on secondary level students and university students specializing in English language studies. Accordingly, the study seeks to explore the following questions:

1. Which type of distance education—synchronous or asynchronous—is favoured by students in secondary education?
2. Which type of distance education—synchronous or asynchronous—is favoured by students in higher education specializing in English language studies?
3. Which subfields of self-regulated learning strategies are preferred by high school and university students?

PARTICIPANTS

This research aims to conduct a quantitative analysis of data collected from secondary and university students regarding their experiences with distance learning during the 2021–2022 academic year. The focus is on English language classes for secondary school students and university students enrolled in English language and literature programmes at two universities in the Republic of North Macedonia and one university in the Republic of Srpska. The goal is to gather comprehensive information about their experiences and to identify best practices for the future development of English language teaching at the secondary level and English language and literature programs at the university level. A total of 184 students participated in this research: 90 secondary students from the High School "Slavco Stojmenski" in Stip and 94 university students, with approximately thirty participants from each of the three universities—Sinergija University in the Republic of Srpska (Sinergia), South East European University in

Tetovo (SEEU), and Goce Delcev University in Stip (UGD). All participants completed modified questionnaires, and their responses form the basis of the quantitative analysis.

ISTRUMENTS

The study is based on the Online Self-Regulated Learning Questionnaire (OSLQ) developed by Barnard et al. [1], which was adapted and divided into two separate questionnaires designed to assess both synchronous and asynchronous forms of distance education. Using a 5-point Likert scale (ranging from 1 – never to 5 – always), students evaluated the frequency and effectiveness of their use of various learning strategies. Results below 2.5 indicate low usage, between 2.5 and 3.5 indicate moderate usage, and above 3.5 indicate high usage of specific strategies, subfields, and overall questionnaire scores. The questionnaires cover six self-regulated learning subfields: Goal Setting (setting assignment standards and managing study time), Environment Structuring (choosing distraction-free, efficient study locations), Task Strategies (note-taking, reading aloud, preparing discussion questions), Time Management (allocating extra study time, maintaining fixed schedules), Help-Seeking (consulting knowledgeable individuals, sharing problems with classmates and instructors), and Self-Evaluation (summarizing learning, comparing approaches with classmates). These instruments enabled the identification of self-regulation patterns and comparison across educational levels and distance learning modes.

PROCEDURE

This research utilized a single instrument from which two questionnaires were developed to assess the synchronous and asynchronous forms of distance education separately. Secondary students from the High School "Slavco Stojmenski" in Stip, Republic of North Macedonia, and university students from the Department of English Language and Literature at Goce Delcev University received printed versions of the questionnaires, while students from the other two universities completed online versions using Google Forms. After data collection, mean values for each strategy, subfield, and form of distance education were calculated, enabling a comparison between secondary and university students from the three institutions, providing insights into students' perceptions regarding both forms of distance education.

RESULTS

Table 1 shows the results of the secondary school students. The table is a shortened version, as it shows only the mean values for each subfield, for each type of distance education. From the results, we can conclude that the subfield of Environmental Structuring has the highest mean scores of all six subfields for both forms of DE, above 3.5, which means that the participants are high users of the strategies for that subfield. “Finding a comfortable study place” ranks first in the synchronous form (56%) and second in the asynchronous form (57%), while “knowing the most efficient study place” ranks second for synchronous and first for asynchronous DE. This confirms that the study environment is most important to students for feeling comfortable and focused in both forms of DE. In addition to Environmental Structuring, the subfields of Help-Seeking and Self-Evaluation also scored above 3.5. On the other hand, Time Management has the lowest mean score for synchronous learning, while Task Strategies and Help-Seeking scored lowest for asynchronous learning, indicating moderate usage.

However, as none of the mean scores are below 2.5, we can conclude that secondary students are either moderate or high users of these strategies across all subfields.

Table 1. Results of the Online Self-Regulated Learning Questionnaire [1] for the secondary school students

	Synchronous mode Means	Asynchronous mode Means
Goal Setting	3.36	3.46
Environment structuring	4.14	3.89
Task Strategies	3.43	3.06
Time Management	3.13	3.16
Help-Seeking	3.74	3.54
Self-Evaluation	3.68	3.48
Total	3.56	3.41

The following two tables show the results of the university students, also displaying only the mean values for each subfield, university, and overall DE mode.

Table 2. Results of the Online Self-Regulated Synchronous Learning Questionnaire [1] for university students

	UGD	SEEU	Sinergia	Total
Goal Setting	3.34	3.57	3.52	3.48
Environment structuring	4.19	4.06	3.73	4
Task Strategies	3.09	3.42	3.1	3.2
Time Management	3.03	3.59	3.33	3.32
Help-Seeking	3.53	3.26	3.15	3.3
Self-Evaluation	3.64	3.58	3.09	3.42
Total				3.45

From the table on the synchronous form of DE, we can conclude that the subfield of Environmental Structuring has the highest mean scores among all six subfields, with values above 3.5 for all three universities, indicating that participants are high users of the strategies within this subfield. The strategy "Finding a comfortable place to study" ranks first with 52%, followed by "Choosing a study location to avoid distractions" with 51%. On the other hand, the subfield of Task Strategies has the lowest mean score—below 3.5 for all three universities—showing that participants are moderate users of these strategies. The least-used individual strategy belongs to the Self-Evaluation subfield, with "Communicating with classmates to see if they are studying differently" used by only 13%, suggesting that university students tend to avoid consulting their peers about study methods or progress. Another important observation is that none of the scores for any university—individually or combined—fall below 2.5, meaning that learners are not low users in any of the subfields.

Moreover, individual university differences emerge: Goce Delcev University students are high users of Help-Seeking and Self-Evaluation strategies; Sinergia University

students of Goal Setting, Time Management, and Self-Evaluation strategies; and South East European University students of Goal Setting strategies. However, the summative results remain most important for meaningful comparison between secondary and university-level students.

Table 3. Results of the Online Self-Regulated Asynchronous Learning Questionnaire [1] for university students

	UGD Mean	SEEU Mean	Sinergia Mean	Total mean
Goal Setting	3.38	3.7	3.27	3.45
Environment structuring	4.04	4.09	3.72	3.95
Task Strategies	3.29	3.63	3.24	3.39
Time Management	3.03	3.69	3.12	3.28
Help-Seeking	3.36	3.27	3.42	3.35
Self-Evaluation	3.77	3.63	3.34	3.58
Total mean score				3.5

For asynchronous DE, Environment Structuring again scored highest (above 3.5 across all universities), indicating high strategy usage. "Choosing a study location to avoid distractions" ranks first (50%), followed by "Knowing the most efficient asynchronous studying place" (49%), confirming the study environment's importance for avoiding distractions. Self-Evaluation also scored above 3.5, including strategies for summarizing learning, asking questions, and communicating with peers about coping with online classes and different learning approaches. Time Management scored lowest (below 3.5 for all universities), showing moderate usage. "Communicating with classmates to see if they are studying differently" was least used (11%), similar to arranging face-to-face meetings, suggesting university students prefer independent study.

However, no subfield scored below 2.5 in either DE form, demonstrating that university students, like secondary students, are moderate to high strategy users, which indicates that all participants are aware of self-regulated strategies and use them frequently in online learning.

DISCUSSION

Distance education has been present in the field of education for a very long time—ever since postal services made it possible. Nevertheless, due to technological expansion, distance education has transformed into a norm—something common and constantly used alongside traditional education. We conducted this research to determine how successful distance education is, especially regarding its two forms—synchronous and asynchronous—at two levels of education: secondary and higher.

First, we examine the results from the questionnaire administered at the high school Slavco Stojmenski. A clear difference emerges between the use of strategies in synchronous and asynchronous distance education. The total mean score for strategy use in synchronous DE is 3.56, classifying secondary students as high users of strategies. In contrast, the mean score for asynchronous DE is 3.41, placing them in the moderate-use category.

Across subfields, Environment Structuring holds the highest score in both formats, exceeding 3.5. These findings indicate that younger learners place strong emphasis on creating a comfortable and efficient study environment, which appears to support engagement and motivation in remote learning. The least used strategies fall under Task Strategies and Help-Seeking. For instance, “Reading instructional materials aloud and fighting distractions” (11%) in synchronous DE and “Preparing questions before discussion forums” (12%) in asynchronous DE are the least practiced. This implies that secondary students may not yet have developed advanced self-regulatory or proactive learning habits.

Turning to university-level participants, the difference between strategy use in synchronous and asynchronous DE is minimal. No significant differences were found among the three universities either, though there is a slight preference for asynchronous learning (mean 3.51) over synchronous (mean 3.45). Once again, Environment Structuring dominates across both formats, with scores above 3.5. This suggests that as students mature, their approach to environmental control becomes more intentional—moving from simply seeking comfort to actively minimizing distractions. Thus, the subfield remains central at both levels but reflects different developmental priorities. At the university level, the least used strategies fall mostly within the Self-Evaluation subfield. Although university students are generally more independent, these results indicate that they may overlook practices such as peer communication or collaborative reflection, which could further enhance their learning.

Regarding the first research question—which form of DE is favored by secondary students—the findings clearly show a preference for synchronous learning. This suggests that younger learners value real-time interaction with peers and teachers more than studying independently, a result that aligns with expectations.

When we compare our research to other similar studies, we can draw comparable conclusions that align with our findings. Kirmizi [4] found that students are moderate users of strategies in most subfields, while Bernard et al. [2], Murphy et al. [6], and Lyn and Gao [5] confirmed that university students perform better in and prefer the asynchronous form of DE due to its flexibility, independence, and self-paced nature. Perveen [8] and Clouse [3] demonstrated that the best approach to distance education is a combination of synchronous and asynchronous forms, as each format offers distinct advantages—asynchronous for written work and discussions, synchronous for oral interaction and immediate feedback—which aligns with our findings that secondary students preferred synchronous DE while university students preferred asynchronous DE. Nilles [7] confirmed overall satisfaction with distance education, particularly among part-time students who can balance employment and academic progress, while emphasizing that synchronous DE provides valuable real-time contact with professors and peers—an essential element in any educational experience.

CONCLUSION

Our everyday life is constantly changing, and in order to keep pace with modern living, with all the challenges as well as the opportunities it brings, we need to know how to adapt to these changes and make the most of them. Education is the driving force of society; therefore, teachers bear the greatest responsibility for creating capable individuals, as today's students represent our future and that of the next generations. The transition from traditional brick-and-mortar classrooms to virtual ones was an additional

challenge for teachers. What remains clear is that distance learning is here to stay. Being able to learn without the constraints of space—and sometimes time—seems particularly appealing to new generations of students. Modern times call for modern forms of education, and it is up to teachers to decide whether to accept the challenge and progress or to remain resistant to change. We live in a versatile society where technology has advanced to offer countless opportunities. Education has not been immune to these technological developments—from enhancing traditional lessons to organizing education without temporal and geographical constraints. We may return to brick-and-mortar classrooms, but distance education, in one form or another, is here to stay. We must prepare ourselves for the generations of digital natives—perhaps this form of education truly represents our future.

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